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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM CA-1

APPLICATION FOR REGISTRATION OR FOR EXEMPTION FROM REGISTRATION AS A CLEARING AGENCY AND FOR AMENDMENT TO REGISTRATION PURSUANT TO THE SECURITIES EXCHANGE ACT OF 1934 ("the Act")

INSTRUCTIONS FOR USE OF FORM CA-1

I. General Instructions for Preparing and Filing Form CA-1

- 1. Form CA-1 is to be used by clearing agencies, as defined in Section 3(a)(23) of the Act, which perform the functions of a clearing agency with respect to any security other than an exempted security, as defined in Section 3(a)(12) of the Act, to apply for registration or for exemption from registration or to amend registration with the Securities and Exchange Commission (the "Commission"). As used hereinafter, the term "Form CA-1" includes the form and any required schedules, exhibits or attachments thereto.
- 2. Clearing agencies are required to file four completed copies of Form CA-1 with the Commission, 100 F Street, N.E., Washington, D.C. 20549. In addition, with respect to a clearing agency for which the Commission is not the appropriate regulatory agency, as defined in Section 3(a)(34)(B) of the Act, Section 17(c)(1) of the Act requires such clearing agency to file with the appropriate regulatory agency for such clearing agency a signed copy of any application, document or report filed with the Commission. Each clearing agency should retain an exact copy of Form CA-1 for the clearing agency's records.
- 3. The date on which a Form CA-1 is received by the Commission shall be the date of filing thereof if all the requirements with respect to filing have been complied with. A Form CA-1 which is not prepared and executed in compliance with applicable requirements may be returned as not acceptable for filing. However, acceptance of Form CA-1 shall not constitute a finding that it has been filed as required or that the information submitted is true, current or complete.
- 4. Copies of Form CA-1 and the schedules, exhibits and attachments thereto may be duplicated and are acceptable for filing provided an original, manual signature is affixed to the execution section of each copy. Form CA-1 and the schedules, exhibits and attachments thereto may be duplicated by any method producing legible copies, of type size identical to that in the Form, on good quality, unglazed, white paper.
- 5. If Form CA-1 is filed by a corporation, it shall be signed in the name of the corporation by a principal officer duly authorized; if it is filed other than by a corporation it shall be signed by a duly authorized principal of the organization filing the Form. As used in this Form, principal officer means the president, vice president, treasurer, secretary, comptroller or any other person performing a similar function.
- 6. If the space provided for the answers to items 1-9 of Form CA-1 is insufficient, the complete answer shall be prepared on Schedule A, which shall be attached to the Form.
- 7. Individuals' names, except for executing signatures, shall be given in full wherever required (last name, first name, middle name). The full middle name is required. Initials are not acceptable unless the individual legally has only an initial.
- 8. Unless the context otherwise requires, "registrant" means the entity on whose behalf Form CA-1 is filed, whether filed as a registration, as an application for exemption from registration or as an amendment to a previously filed Form CA-1.
- 9. Unless the context clearly indicates otherwise, the terms used in Form CA-1 have the meanings given in the Act.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

II. Instructions Relating to Filing Form CA-1 as a Registration Form or an Application for Exemption From Registration

- 10. If Form CA-1 is being filed as a registration form or an application for exemption from registration, all applicable items are required to be answered in full. If any item is not applicable, respond with "none" or "N/A" (not applicable), as appropriate.
- 11. If Form CA-1 is being filed as an application for exemption from registration, it must be accompanied by a statement demonstrating why the granting of an exemption from registration as a clearing agency would be consistent with the public interest, the protection of investors and the purposes of Section 17A of the Act.

III. Instructions Relating to Filing Form CA-1 as an Amendment to a Registration Form

- 12. Promptly following the date on which information reported at items 1-3 of Form CA-1 becomes inaccurate, incomplete or misleading, the registrant shall file an amendment on Form CA-1 correcting the inaccurate, incomplete or misleading information.
- 13. If an item is amended, the registrant must repeat all unamended items as they last appeared on the page on which the amended item appears and must file four copies of the new page, each with updated and properly completed cover and execution pages.

IV. Instructions as to SPECIFIC ITEMS on Form CA-1

- 14. Cover page—Indicate whether Form CA-1 is filed as a registration, an application for exemption from registration or an amendment. If the Form is filed as a registration, indicate whether the applicant requests the Commission to consider granting registration in accordance with paragraph (c)(1) of Rule 17Ab2-1.
- 15. Item I—Include a street address; a post office box alone is not acceptable.
- 16. In responding to, and furnishing the schedules required by, the items on Form CA-1, particularly items 5(c)(ii) and 5(d)(ii) and the exhibits required by items 20 and 21, the registrant may request that confidential treatment be accorded with respect to the information disclosed, by binding the responses, schedules and exhibits for which confidential treatment is sought separately from the balance of Form CA-1 and furnishing a statement requesting confidential treatment, specifying both the exemptive provision under the Freedom of Information Act (5 U.S.C. 552(b)) on which the request is based and the considerations which make the exemptive provision applicable to the information for which confidential treatment is requested.

V. Notice

17. Under Sections 17, 17A(b) and 23(a) of the Securities Exchange Act of 1934 and the rules and regulations thereunder, the Securities and Exchange Commission is authorized to solicit the information required to be supplied by this Form from applicants for registration or for exemption from registration as a clearing agency. Disclosure to the Commission of the information requested in Form CA-1 (except for the disclosure by an individual registrant of his Social Security number as an IRS Employee Identification Number, which is voluntary) is a prerequisite to the processing of applications for registration or for exemption from registration or an exemption from registration or institute proceedings to deny registration. Social Security numbers, if furnished, will be used only to assist the Commission in identifying applicants and, therefore, in promptly processing applications. Information supplied on this Form will be included routinely in the public files of the Commission. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a current valid control number.

FORM CA-1

FORM FOR REGISTRATION OR FOR EXEMPTION FROM REGISTRATION AS A CLEARING AGENCY AND FOR AMENDMENT TO REGISTRATION AS A CLEARING AGENCY PURSUANT TO THE SECURITIES EXCHANGE ACT OF 1934

GENERAL

Form CA-1 is to be used to apply for registration or for exemption from registration as a clearing agency and to amend registration as a clearing agency with the Securities and Exchange Commission pursuant to Section 17A of the Securities and Exchange Act of 1934. Read all instructions before preparing the Form. Please type or print all responses.

Euroclear Bank SA/NV
(Exact name of registrant as specified in charter)
1 Boulevard du Roi Albert II; B-1210 Brussels, Belgium
(Address of registrant's principal place of business)
This Form is filed as:
If filed as a registration, does registrant request the Commission to consider granting registration in accordance with paragraph (c)(1) of Rule 17Ab2-1 under the Act?
EXECUTION
The Registrant submitting this Form, its schedules, its exhibits and its attachments and the person by whom it is executed represent hereby that all information contained herein is true, current and complete. Submission of any amendment after registration has become effective represents that items 1-3 and any schedules, exhibits and attachments related to items 1-3 remain true, current and complete as previously submitted.
Registrant agrees and consents that the notice of any proceedings under Sections 17A or 19 of the Act involving registrant may be given by sending such notice by registered or certified mail or confirmed telegram to the person named, and at the address given, in response to item 2.
Dated the day of, <u>2016</u>
Euroclear Bank SA/NV
(Name of clearing agency))
tratione using
(Manual signature of Principal Officer or duly authorized Principal)
Chief Executive Officer
(Title)
ATTENTION: Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a)) GENERAL INFORMATION
1. Exact name, principal business address, mailing address (if different) and telephone number of registrant:

Name of registrant: Euroclear Bank SA/NV IRS Employee Identification No. 98-0235087

Name under which clearing agency activities are conducted, if different: N/A

If name of registrant is hereby amended, state name under which registered previously: N/A

If name under which clearing agency activities are conducted is hereby amended, state name given previously:_____

N/A			
Address of principal place of business:			
1 Boulevard du Roi Albert II	Brussels	BelgiumState	B-1210 Zip Code
Number and Street	City	State	Zip Code
Mailing address, if different:			
	<u>N/A</u>		
Number and Street	City	State	Zip Code
Telephone Number: +322	326-1211		
Area Code	Telephone Nu	mber	
	one number of person in charge of reginered in the security of	istrant's clearing agency act	ivities:
Name Title			
1 Boulevard du Roi Albert II	Brussels	Belgium	B-1210
Number and Street	City	State	Zip Code
Telephone Number: <u>+322</u>	326-1424		
Area Code	Telephone Nu	ımber	
3. (a) If registrant is a corporation or a jurisdiction in which incorporated	a national association: state date on v l or under which organized:	which registrant was incorp	porated or organized and
Date: May 15, 2000 Ju	urisdiction: Belgium		
	or a national association, describe on nd identify the jurisdiction in which reg		organization under which
4. Does registrant have any arrangement such other person processes, keeps, tra participants relating to clearing agency	insmits or maintains any securities, fu	nds, records or accounts of	registrant or registrant's
If answer is "yes," furnish [in] Schedule A person and a brief summary of each such arra		ll name and principal busin	ness address of the other

5. (a) With respect to clearing agency activities, please provide the following information regarding the type of insurance carried or provided:

Type of Insurance	Yes	No	Amount of Coverage	Amount of Deductible
1. Blanket Bond		\boxtimes	\$	\$
2. Fidelity			\$291 MM – third- party losses related to fraud/crime \$82 MM – Euroclear Bank's own losses related to fraud/crime	\$ 5.5 MM

3. Errors and [Omissions]		\$291 MM	\$5.5 MM
4.Mail Policy		\$5.5 MM for non- bearer securities \$2.2 MM for bearer securities	\$0
5. Air Courier		See response to 5(a)(4) above.	\$
6. Lost Instrument		\$55 MM related to physical securities	\$1.1 MM
7. Other (please specify on Schedule A)	\boxtimes	\$	\$

If yes, indicate on Schedule A the provisions made for self-insurance (e.g., accounting reserve or funded reserve) and the amount thereof.

- (c) (i) As a result of registrant's clearing agency activities, is registrant exposed to loss if a participant falls to perform its obligations to the clearing agency, any other participant or any other person?.....
 - (ii) If "yes," describe on Schedule A the operational, organizational or other rules, procedures or practices (citing rules if applicable) which result in registrant's exposure to loss.
- (d) (i) Does the registrant maintain a clearing or participants' fund, mark to the market open obligations involving the purchase or sale of securities or otherwise required participants to protect registrant against losses to which it may be exposed as a result of a participant's failure to perform its obligations to the clearing agency, any other participant or any other person?
 - (ii) If "yes," describe on Schedule A the operational, organizational or other rules, procedures or practices (citing rules if applicable) which are designed to protect registrant against any such losses.
- - (c) Fiscal year-end of registrant <u>31</u> / <u>12</u> (Day/Month)
- (a) What are registrant's internal policies and procedures for reconciling differences (including long and short stock record differences and dividend differences) in its clearing agency activities? See Schedule A
 - (b) State, as of September 30, 1975, the dollar amount of the potential exposure of registrant, if any, as a result of differences (without offsetting long differences against short differences and without offsetting any suspense account items) in its clearing agency activities not resolved after 20 business days. <u>N/A. See Schedule A</u>
- 8. (a) How many employees does registrant have engaged in clearing agency activities? See Schedule A
 - (b) How many years has registrant performed clearing agency activities? _____ See Schedule A

If yes, specify the name of the agency, state or political subdivision: See Schedule A

(b) Have the registrant's clearing agency activities been the subject of periodic examinations by any federal agency other than the Commission or by any state or political subdivision? □ Yes ⊠ No

If yes, specify the name of the agency, state or political subdivision: See Schedule A

SCHEDULE A OF FORM CA-1

1. Full name of Registrant as stated in Item 1 of Form CA-1

Euroclear Bank SA/NV

2. Included in this <u>Schedule A</u> are the supplementary responses of Euroclear Bank SA/NV ("Euroclear Bank") to Items 1 through 9 of Form CA-1. Each capitalized term used but not defined in this <u>Schedule A</u> has the meaning set forth in the attached responses to Exhibits A-S of Form CA-1.

	Item of Form (Identify)	Response
3(b).	Form of Organization; Jurisdiction.	Euroclear Bank is a company (a societe anonyme).
4.	List of Depositories.	The names and locations for depositories and cash correspondents used by Euroclear Bank are attached as <u>Exhibit I-1</u> . In addition, DTC will act as depository for U.S. Equity Securities in connection with the U.S. Equities Proposal. The address for DTC is included in <u>Exhibit I</u> .
7(a).	Reconciling Differences	See attached Item 7(a)-1.
7(b).	Potential Exposure on September 30, 1975	Euroclear Bank did not engage in any Clearing Agency Activities on or before September 30, 1975.
8(a).	Employees	Euroclear Bank employs approximately 1,500 employees.
8(b).	Employees	Euroclear Bank has performed Clearing Agency Activities for approximately 16 years. However, the Euroclear System, which is the clearing and settlement system operated by Euroclear Bank, has been in operation for approximately 47 years.
9(a).	Other Agencies.	Euroclear Bank's New York representative office is licensed as such by the Federal Reserve Bank of New York and the New York State Department of Financial Services. There are no Clearing Agency Activities performed at the New York representative office.
9(b).	Examinations.	Pursuant to the licenses described in response to Item 9(a) above, Euroclear Bank's New York representative office is subject to periodic examination by the Federal Reserve Bank of New York and the New York State Department of Financial Services.

EXHIBITS—BUSINESS ORGANIZATION

- 10. List in Exhibit A any person who either directly or indirectly, through agreement or otherwise, may control or direct the management or policies of registrant. For each person listed, provide the full name and address and attach a copy of each written agreement or, if the agreements are unwritten, describe the agreement or arrangement through which such person exercises or may exercise such control or direction.
- 11. List in Exhibit B the registrant's corporate officers, trust officers, managers or other persons occupying a similar status or performing similar functions who supervise, or are directly responsible for the conduct of, registrant's clearing agency activities, indicating for each:
 - (a) Name
 - (b) Title
 - (c) Area of responsibility
 - (d) A brief account of the business experience during the last five (5) years.
- 12. Attach as Exhibit C narrative and graphic descriptions of registrant's organizational structure. If clearing agency activities are conducted primarily by a division, subdivision, or other segregable entity within the registrant corporation or organization, identify the relationship of such entity to the registrant's overall organizational structure and limit the descriptions to the division, subdivision or other segregable entity which performs clearing agency activities.
- 13. Attach as Exhibit D a list of persons who directly or indirectly, through one or more intermediaries, are controlled by, or are under common control with, the clearing agency and indicate the nature of the control relationship.
- 14. Attach as Exhibit E a copy of the currently effective constitution, articles of incorporation or association, by-laws, rules, procedures and instruments corresponding thereto, of the registrant and a complete list of all dues, fees and other charges imposed by registrant for its clearing agency activities.
- 15. Attach as Exhibit F a brief description of any material pending legal proceeding, other than ordinary and routine litigation incidental to the business, to which the registrant or any of its subsidiaries is a party or to which any of its or their property is the subject. Include the name of the court or agency in which the proceeding is pending, the date instituted, and the principal parties thereto, a description of the factual basis alleged to underlie the proceeding and the relief sought. Include similar information as to any such proceeding known to be contemplated by governmental agencies.
- 16. Attach as Exhibit G copies of all contracts with any national securities exchange, national securities association or clearing agency or securities market for which the registrant acts as a clearing agency or performs clearing agency functions.

EXHIBITS—FINANCIAL INFORMATION

- 17. Attach as Exhibit H a balance sheet and statement of income and expenses, and all notes or schedules thereto of registrant, as of registrant's most recent fiscal year for which such information is available, certified by an independent accountant. (If certified financial information is not available, uncertified financial information should be submitted).
- 18. Attach as Exhibit I the addresses of all offices in which clearing agency activities are performed by registrant, or for registrant by any person listed in response to item 4, and identify the nature of the clearing activities performed in each office listed.

EXHIBITS—OPERATIONAL CAPACITY

- 19. Attach as Exhibit J narrative descriptions of each service or function performed by the registrant.
- 20. Attach as Exhibit K a description of the measures or procedures employed by registrant to provide for the security of any system which performs the functions of a clearing agency. Include a general description of any operational safeguards designed to prevent unauthorized access to the system (including unauthorized input or retrieval of information for which the primary record source is not hard copy). Identify any instances within the past year in which the described security measures or safeguards failed

to prevent unauthorized access to the system and describe any measures taken to prevent a recurrence of any such incident. Describe also any measures used to verify the accuracy of information received or disseminated by the system.

- 21. Attach as Exhibit L a description of the measures or procedures employed by registrant to provide for the safeguarding of securities and funds in its custody or control. Identify any instances within the past year in which the described security measures or safeguards failed to prevent any unauthorized access to securities or funds in possession of registrant and any measures taken to prevent a recurrence of any such incident.
- 22. If clearing agency functions are performed by automated facilities or systems, attach as Exhibit M a description of all backup systems or subsystems which are designed to prevent interruptions in the performance of any function as a result of technical or other malfunction. Include backups for input or output links to the system and precautions with respect to malfunctions in any areas external to the system.

EXHIBITS—ACCESS TO SERVICES

- 23. Attach as Exhibit N a list of the persons who currently participate, or who have applied for participation, in registrant's clearing agency activities (if registrant performs more than one activity, a columnar presentation may be utilized).
- 24. Attach as Exhibit O a description of any specifications, qualifications, or other criteria which limit, are interpreted to limit, or have the effect of limiting access to, or use of, any clearing agency service furnished by the registrant and state the reasons for imposing such specifications, qualifications, or other criteria.
- 25. Attach as Exhibit P copies of any form of contracts governing the terms on which persons may subscribe to clearing agency services provided by the registrant.
- 26. Attach as Exhibit Q a schedule of any prices, rates or fees fixed by registrant for services rendered by its participants.
- 27. Attach as Exhibit R a schedule of any prohibitions or limitations imposed by the clearing agency on access by any person to services offered by any participant.

EXHIBIT—APPLICATION FOR EXEMPTION

28. If this is an application for an exemption from registration as a clearing agency, attach as Exhibit S a statement demonstrating why the granting of an exemption from registration as a clearing agency would be consistent with the public interest, the protection of investors and the purposes of Section 17A of the Act, including the prompt and accurate clearance and settlement of securities transactions and the safeguarding of securities and funds.

FORM CA-1

"1998 Exemption Order" means Self-Regulatory Organizations; Morgan Guaranty Trust Company of New York, Brussels Office, as Operator of the Euroclear System; Order Approving Application for Exemption from Registration as a Clearing Agency, 63 Fed. Reg. 8232 (Feb. 18, 1998).

"**2001 Exemption Order**" means Self-Regulatory Organizations; Morgan Guaranty Trust Company, Brussels Office, as Operator of the Euroclear System and Euroclear Bank, S.A.; Order Approving Application to Modify an Existing Exemption from Clearing Agency Registration, 66 Fed. Reg. 819 (Jan. 4, 2001).

"**2005 Decree**" means the Belgian Royal Decree of September 26, 2005 regarding the status of settlement institutions assimilated thereto.

"2015 EB Disclosure Report" means Euroclear Bank's October 20, 2015 ISAE 3402 Report.

"**2015 Matching Exemption Orders**" means Bloomberg STP LLS; SS&C Technologies, Inc.; Order of the Commission Approving Applications for an Exemption from Registration as a Clearing Agency, 80 Fed. Reg. 75388, 75390 nn.10-12 (Nov. 24, 2015).

"ARP" means the Commission's Automation Review Policy.

"BCBS" means the Basel Committee on Banking Supervision.

"BCP" means business continuity plan.

"BIA" means business impact analysis.

"CBFA" means the Belgian Commission Bancaire, Financière et des Assurances.

"CCPs" means central counterparties.

"central securities depository services" has the meaning set forth in 17 C.F.R. 240.17Ad-22(a)(2).

"CEO" means Chief Executive Officer.

"CFTC" means the Commodity Futures Trading Commission.

"Clearing Agency Activities" means the combined scope of activities encompassed by the U.S. Equities Clearing Agency Activities and the U.S. Government Securities Clearing Agency Activities.

"Clearing Agency Standards Proposing Release" means Exchange Act Release No. 34-68080 (Oct. 22, 2012), 77 Fed. Reg. 66219 (Nov. 2, 2012).

GLOSSARY OF TERMS

"**Collateral Account**" means the EB Account of a collateral taker (which will be a segregated account only for holding collateral).

"Commission" means the Securities and Exchange Commission.

"Company" means Euroclear Bank SA/NV.

"COO" means Chief Operating Officer.

"COSO" means the Committee of Sponsoring Organizations of the Treadway Commission.

"CPMI" means the Committee on Payments and Market Infrastructure (the new name of CPSS).

"CPSS" means the Committee on Payment and Settlement Systems.

"CRO" means Chief Risk Officer.

"CSD" means central securities depository.

"CSDR" means the European Union's Central Securities Depositories Regulation.

"**Current Equities Restrictions**" means existing prohibitions that prevent U.S. Participants from using U.S. Equities for any purpose in EB Accounts.

"DEGCL" means DTCC-Euroclear Global Collateral Ltd.

"Described Entities" means national securities exchanges, national securities associations or clearing agencies or securities markets for which Euroclear Bank does not provide Clearing Agency Activities.

"DSSP" means designated settlement service provider.

"DTC" means The Depository Trust Company.

"DTCC" means The Depository Trust and Clearing Corporation.

"**DTC Participant**" means any entity that is an EB Participant and has a participant account at DTC.

"EB-CMS" means Euroclear Bank's collateral management services.

"EB-CMS Services Agreement" means an agreement between an EB Participant and Euroclear Bank for the provision of collateral management services.

"EB-CMS Users" means banks, brokers and dealers and treasury management functions of large qualified corporate entities that use EB-CMS.

"EB Accounts" means the securities accounts and current cash accounts of an EB Participant on the books of Euroclear Bank.

GLOSSARY OF TERMS-2

"EB Participant" means any entity that has a securities or cash account at Euroclear Bank.

"EBE" means Euroclear Belgium C.I.K. SA/NV.

"**EF**" means Euroclear France SA.

"EFi" means Euroclear Finland Oy.

"EI" means Euroclear Investments SA.

"Eligible U.S. Government Security" means the following: (i) "government securities" as defined in Section 3(a)(42) of the Exchange Act that are eligible for transfer or processing on Fedwire, except that it shall not include any foreign-targeted U.S. government or agency securities or securities issued or guaranteed by the International Bank for Reconstruction and Development or any other similar international organization; (ii) mortgage-backed pass-through securities that are guaranteed by the GMNA; and (iii) collateralized mortgage obligations whose underlying securities are Fedwire-eligible U.S. government securities or GMNA guaranteed mortgage-backed pass-through securities and which are depository eligible securities.

"ENL" means Euroclear Nederland.

"Eplc" means Euroclear plc.

"Equity Security" means an instrument that represents a direct ownership in a company, such as a stock, share, certificate of interest or participation in any profit sharing agreement, preorganization certificate of subscription, voting trust certificate or certificate of deposit for an equity security, limited partnership interest, interest in a joint venture, or certificate of interest in a business trust. However, the term "Equity Security" does not include interests in structured finance vehicles such as limited partnerships, business trusts or similar arrangements that have no independent operations and are used solely as special purpose financing vehicles.

"ERM" means the Euroclear Group's enterprise risk management framework.

"ES" means Euroclear Sweden AB.

"ESA" means Euroclear SA/NV.

"EUI" means Euroclear UK & Ireland Limited.

"Euroclear Bank" means Euroclear Bank SA/NV.

"Euroclear Group" means the Euroclear group of companies that provide critical market infrastructure by offering clearance, settlement and related services.

"Euroclear Group (I)CSDs" means, collectively, Euroclear Bank and the CSDs to domestic markets in Belgium, Netherlands, France, England and Ireland, Sweden and Finland.

"**Euroclear System**" means the securities settlement system that has been operated by Euroclear Bank or its predecessor since 1968, and the assets, means and rights related to such services. All services performed by Euroclear Bank that relate to securities settlement and custody are part of the "Euroclear System."

"Euroclear System Contracts" means the terms and conditions applicable to EB Accounts.

"Exchange Act" means the Securities Exchange Act of 1934.

"Existing Exemption" means the 2001 Exemption Order.

"Existing Exemption Order" means the 2001 Exemption Order.

"FSMA" means the Belgian Financial Services Market Authority.

"GNMA" means the Government National Mortgage Association.

"ICSD" means international central securities depository.

"IMS" means inventory management services.

"**IMS Linked Accounts**" means dedicated EB Accounts established for crediting IMS Securities on the books of Euroclear Bank, each of which will be designated by the EB Participant for JV-IMS related activity.

"**IMS Securities**" means securities that an IMS User wants to make available via the JV-IMS for mobilization as collateral through EB-CMS.

"IMS Users" means DTC participants that are users of IMS.

"IOSCO" means the International Organization of Securities Commissions.

"IT" means information technology.

"JV-CMS" means the collateral management services that DEGCL intends to offer.

"JV-IMS" means the inventory management services that DEGCL intends to offer.

"MGT-Brussels" means the Morgan Guaranty Trust Company of New York (Brussels Office).

"Modification Application" means Euroclear Bank's 2016 filing with the Commission to amend its Existing Exemption.

"**Modification Request**" means the proposed modification to the Existing Exemption Order set forth in the Modification Application.

"MOU" means Memorandum of Understanding.

GLOSSARY OF TERMS

"**non-U.S. Participants**" means EB Participants that did not qualify as "U.S. Participants" as defined by the Commission in the 1998 Exemption Order.

"NBB" means the National Bank of Belgium.

"New Banking Law" means the Belgian banking law, dated April 25, 2014, under which Euroclear Bank is authorized in Belgium.

"New Collateral Regulations" means new and enhanced regulations regarding the central clearing of derivative transactions that take effect in September 2016.

"OIS" means open inventory sourcing.

"Omgeo" means Omgeo Matching Services – U.S. LLC.

"Operating Procedures" means the Operating Procedures of the Euroclear System.

"OTC" means over-the-counter.

"PFMI Principles" means the principles contained in the PFMI Report.

"PFMI Report" means the Principles for Financial Market Infrastructures report.

"**Regulation SCI Adopting Release**" means Exchange Act Release No. 34-73639 (Nov. 19, 2014), 79 Fed. Reg. 72251 (Dec. 5, 2014).

"**Royal Decree No. 62**" means the coordinated Royal Decree No. 62, dated Nov. 10, 1967, on the Deposit of Fungible Financial Instruments and the Settlement of Transactions involving such Instruments.

"SCI Entity" means an entity subject to Regulation SCI.

"SCI entities" means entities that must comply with Regulation SCI's requirements with respect to automated systems that support the performance of their regulated activities.

"Securities Clearance Accounts" means the securities accounts that EB Participants are required to open and maintain in order to utilize Euroclear System services.

"Systems" means Euroclear Bank systems that support or are integrally related to the Clearing Agency Activities.

"Systems Event" means a disruption, compliance issue, or intrusion of the Systems that impacts, or is reasonably likely to impact, the Clearing Agency Activities.

"Terms and Conditions" means the Terms and Conditions Governing Use of Euroclear.

"U.S. Equities Clearing Agency Activities" means (i) Euroclear Bank's continued authority, pursuant to the 2001 Exemption Order, to provide clearance, settlement and collateral

management services for its U.S. Participants' transactions in Eligible U.S. Government Securities without registering as a clearing agency with the Commission on substantially the same conditions applicable to such U.S. Government Securities Clearing Agency Activities under the Existing Exemption Order, and (ii) the authority, pursuant to the Modification Request, to provide, through accounts held at Euroclear Bank, clearance, settlement and collateral management services for its U.S. Participants' use of U.S. Equity Securities in support of collateral obligations utilizing the collateral management services provided by Euroclear Bank, including U.S. Participants' receipt and delivery of U.S. Equity Securities through dedicated accounts at Euroclear Bank related to the provision of IMS by the joint venture with DEGCL.

"**U.S. Equities Proposal**" means Euroclear Bank's proposal to allow eligible U.S. Participants to receive U.S. Equity Securities into their Euroclear Bank accounts for collateral management purposes.

"U.S. Equities" means the Equity Securities of U.S. Issuers.

"U.S. Equity Securities" means the Equity Securities of U.S. Issuers.

"U.S. Government Securities Clearing Agency Activities" means the clearance, settlement and collateral management services for transactions in Eligible U.S. Government Securities by U.S. Participants that Euroclear Bank is allowed to engage in pursuant to the Existing Exemption.

"U.S. Issuer" means an issuer organized or incorporated under the laws of any state of the U.S., territory thereof, or the District of Columbia.

"**U.S. Participant**" means any Euroclear System participant having a U.S. residence, based upon the location of its executive office or principal place of business, including, without limitation, (i) a U.S. bank (as defined by Section 3(a)(6) of the Exchange Act), (ii) a foreign branch of a U.S. bank or U.S.-registered broker-dealer, and (iii) any broker-dealer registered as such with the Commission, even if such broker-dealer does not have a U.S. residence.

FORM CA-1

Through this application and pursuant to Section 17A of the Securities Exchange Act of 1934 (the "**Exchange Act**") and the regulations of the Securities and Exchange Commission (the "**Commission**") promulgated thereunder, Euroclear Bank SA/NV ("**Euroclear Bank**" or the "**Company**") hereby amends its previously filed Form CA-1¹ to apply for a modification of its existing exemption from registration as a "clearing agency," as that term is defined in Section 3(a)(23) of the Exchange Act.

The Commission previously issued an exemption from registration as a clearing agency to Euroclear Bank's predecessor, Morgan Guaranty Trust Company of New York (Brussels Office) ("**MGT-Brussels**"), as the operator of the Euroclear System.² The Commission subsequently modified the exemption to replace MGT-Brussels with Euroclear Bank as the successor operator of the Euroclear System (the exemption, as modified, the "**Existing Exemption**" or "**Existing Exemption Order**").³

Pursuant to the Existing Exemption, Euroclear Bank is permitted to provide clearance, settlement and collateral management services for transactions in Eligible U.S. Government Securities by U.S. Participants (the "U.S. Government Securities Clearing Agency Activities").⁴ The

¹ See Commission File No. 601-01.

 $[\]frac{2}{2}$ Self-Regulatory Organizations; Morgan Guaranty Trust Company of New York, Brussels Office, as Operator of the Euroclear System; Order Approving Application for Exemption from Registration as a Clearing Agency, 63 Fed. Reg. 8232 (Feb. 18, 1998) ("**1998 Exemption Order**"). As used herein, the term "**Euroclear System**" is used to describe the collection of securities settlement and related services that have been offered by Euroclear Bank or its predecessor since 1968, and the assets, means and rights related to such services. All services performed by Euroclear Bank that relate to securities settlement and custody are part of the "Euroclear System."

 $[\]frac{3}{2}$ Self-Regulatory Organizations; Morgan Guaranty Trust Company, Brussels Office, as Operator of the Euroclear System and Euroclear Bank, S.A.; Order Approving Application to Modify an Existing Exemption from Clearing Agency Registration, 66 Fed. Reg. 819 (Jan. 4, 2001) ("**2001 Exemption Order**"). On Dec. 31, 2000, the business and related assets and liabilities of the Euroclear System vested in Euroclear Bank and virtually all of the staff associated with the Euroclear System were transferred to Euroclear Bank.

 $[\]frac{4}{5}$ See 1998 Exemption Order, 63 Fed. Reg. at 8239. As used herein, the term "Eligible U.S. Government Security" refers to the following: (i) "government securities" as defined in Section 3(a)(42) of the Exchange Act that are eligible for transfer or processing on Fedwire, except that it shall not include any foreign-targeted U.S. government or agency securities or securities issued or guaranteed by the International Bank for Reconstruction and Development or any other similar international organization; (ii) mortgage-backed pass-through securities that are guaranteed by the Government National Mortgage Association ("GNMA") and (iii) collateralized mortgage obligations whose underlying securities are Fedwire-eligible U.S. government securities. As used herein, the term "U.S. Participant" refers to any Euroclear System participant having a U.S. residence, based upon the location of its executive office or principal place of business, including, without limitation, (i) a U.S. bank (as defined by Section 3(a)(6) of the Exchange Act), (ii) a foreign branch of a U.S. bank or U.S.-registered broker-dealer and (iii) any broker-dealer registered as such with the Commission even if such broker-dealer does not have a U.S. residence.

Existing Exemption covers only the offering of U.S. Government Securities Clearing Agency Activities, and does not relate to Euroclear Bank's activities in securities other than Eligible U.S. Government Securities or to the offering of services to participants that are not U.S. Participants.⁵ The Existing Exemption Order provides that Euroclear Bank may request that the exemption be broadened to perform clearing agency functions for securities other than Eligible U.S. Government Securities.⁶

Euroclear Bank requests that the Commission broaden Euroclear Bank's Existing Exemption to provide authority for Euroclear Bank to offer specified securities processing services for Equity Securities⁷ of U.S. Issuers⁸ ("U.S. Equity Securities"). As described in greater detail within the application, Euroclear Bank proposes to allow eligible U.S. Participants to receive and use U.S. Equity Securities in their Euroclear Bank accounts for collateral management purposes (the "U.S. Equities Proposal"). Accordingly, this Form CA-1 application describes Euroclear Bank's organization, governance and operations related to the U.S. Equities Proposal and the current U.S. Government Securities Clearing Agency Activities, where applicable.

Euroclear Bank therefore requests that the Commission, on the basis of this amended application:

- continue the authority granted to Euroclear Bank in the 2001 Exemption Order to provide clearance, settlement and collateral management services for its U.S. Participants' transactions in Eligible U.S. Government Securities without registering as a clearing agency with the Commission on substantially the same conditions applicable to such U.S. Government Securities Clearing Agency Activities under the Existing Exemption Order; and
- grant to Euroclear Bank the authority to provide, through accounts held at Euroclear Bank, clearing agency services (such as certain central securities depository services² and collateral management services) for its U.S. Participants' use of U.S. Equity Securities in support of collateral obligations utilizing the collateral management services provided by Euroclear Bank, including U.S. Participants' receipt and

⁵ See 62 Fed. Reg. 26833, 26835 n.16 (May 15, 1997); see also 1998 Exemption Order, 63 Fed. Reg. at 8234, 8239.

⁶ See 1998 Exemption Order, 63 Fed. Reg. at 8239.

² As used herein, the term "**Equity Security**" refers to an instrument that represents a direct ownership in a company, such as a stock, share, certificate of interest or participation in any profit sharing agreement, preorganization certificate of subscription, voting trust certificate or certificate of deposit for an equity security, limited partnership interest, interest in a joint venture or certificate of interest in a business trust. However, the term "Equity Security" does not include interests in structured finance vehicles such as limited partnerships, business trusts or similar arrangements that have no independent operations and are used solely as special purpose financing vehicles.

 $[\]frac{8}{2}$ As used herein, the term "U.S. Issuer" refers to an issuer organized or incorporated under the laws of any state of the U.S., territory thereof or the District of Columbia.

 $[\]frac{9}{2}$ As used herein, the term "**central securities depository services**" has the meaning set forth in 17 C.F.R. 240.17Ad-22(a)(2).

delivery of U.S. Equity Securities through dedicated accounts at Euroclear Bank related to the provision of inventory management services ("IMS") by the joint venture with DTCC-Euroclear Global Collateral Ltd. ("DEGCL") (collectively, the "U.S. Equities Clearing Agency Activities"), without registering as a clearing agency with the Commission and subject only to the conditions specified in Exhibit <u>S-1</u>.

Throughout the application, any references to the combined scope of activities included in the U.S. Equities Clearing Agency Activities and the U.S. Government Securities Clearing Agency Activities are generally referred to as the "Clearing Agency Activities."

FORM CA-1

List in **Exhibit** A any person who either directly or indirectly, through agreement or otherwise, may control or direct the management or policies of registrant. For each person listed, provide the full name and address and attach a copy of each written agreement or, if the agreements are unwritten, describe the agreement or arrangement through which such person exercises or may exercise such control or direction.

* * *

As constituted under Euroclear Bank's Articles of Association, the management and policies of Euroclear Bank are directly controlled by its Board of Directors and relevant management and Board committees. The members of Euroclear Bank's Board of Directors and its committees are listed in Exhibit B. Euroclear Bank's Articles of Association are attached as Exhibit E-2.

Euroclear Bank is part of the Euroclear group of companies that provide critical market infrastructure by offering clearance, settlement and related services (collectively, "**Euroclear Group**"). All control and direction of the Euroclear Group strategic decisions is vested in Euroclear SA/NV ("**ESA**"). ESA is an indirectly wholly owned subsidiary of Euroclear plc ("**Eplc**"), through Eplc's wholly owned subsidiary Euroclear Investments SA ("**EI**").¹ For reference, an organizational chart of Euroclear Group is attached as <u>Exhibit D-1</u>. A brief description of each of these entities is set forth below.

Eplc

Eplc, an unlisted public limited company incorporated under the laws of England and Wales, is the ultimate parent company of Euroclear Group. Eplc has approximately 150 shareholders (certain of which are Euroclear Bank participants), with the 20 largest shareholders holding approximately 61% of outstanding shares.

EI

EI, a wholly owned subsidiary of Eplc, is a Luxemburg incorporated "*société anonyme*". EI is the intermediary holding company through which Eplc holds its investments in various operating entities, including ESA. EI also provides various management and administrative services for the members of the Euroclear Group, such as entering into insurance policies and providing real estate management through its subsidiaries.

 $^{^{1}}$ EI owns 99.99% of ESA, with one share owned by Eplc. ESA owns 99.99% of Euroclear Bank, with one share owned by EI.

EXHIBIT A

<u>ESA</u>

ESA, an indirectly wholly owned subsidiary of Eplc, is a Belgian limited liability company ("*société anonyme/naamloze vennootschap*"). ESA is the parent company of Euroclear Bank and Euroclear Group's other entities that offer settlement and related services. ESA also provides centralized shared services to those entities, including centralized Euroclear Group technology services and technology infrastructure and corporate support services.

Euroclear Bank is authorized in Belgium as a Belgian credit institution under the Belgian New Banking Law of April 25, 2014, and is supervised by the National Bank of Belgium ("**NBB**") and the Belgian Financial Services Market Authority. Euroclear Bank is also recognized as a designated settlement system. As a parent company and service provider to Euroclear Bank, ESA is authorized in Belgium as a holding company of a regulated credit institution and also as an "institution assimilated to a securities settlement system" under the Belgian Royal Decree of September 26, 2005 (the "**2005 Decree**"). Pursuant to Article 20, § 2 of the 2005 Decree, institutions assimilated to a settlement institution may not have shareholdings in commercial companies without the prior approval of the NBB, unless the shareholding is taken in companies whose activities consist, in whole or in part, in activities in which a settlement institution or institution assimilated thereto may carry out.

As the immediate parent company of Euroclear Bank, ESA and its Board of Directors indirectly determine the general direction and strategy for Euroclear Bank. As such, the members of ESA's Board of Directors and Management Committee are set forth below. To help ensure fair representation of Euroclear Bank's participants in the administration and oversight of Euroclear Bank's affairs, members of the Board of Directors of ESA reflect the user governance framework of Euroclear Group with a majority of Board Directors being senior executives proposed by users/shareholders of Euroclear Group. Each of these affiliations is indicated below.

ESA Board of Directors

Marc Antoine Marie Hugues Autheman, Independent Director, Chairman

Michel Marie Clément Henri Berthezène (Caisse des Dépôts et Consignations; appointed by Sicovam Holding), Director

Ingeborg Johanna Dagny Laurent Boets, Independent Director

Cian David Burke (HSBC Holdings), Independent Director

Patrick Colle (BNP Paribas Securities Services; appointed by Sicovam Holding), Director

Stephen Arthur James Davies (Bank of America Merrill Lynch), Director

John Devine, Independent Director

EXHIBIT A

Mark Stephen Garvin (J.P. Morgan plc), Director

Frédéric Jean Noël Fernand Ghislain Hannequart, Executive Director and Chief Business Development Officer

Isabelle Hennebelle (Goldman Sachs International), Director

Toru Horie (Mizuho Trust & Banking S.A.), Director

Timothy John Howell, Executive Director and Chief Executive Officer

Thomas William David Isaac (Citigroup), Director

Masashi Kurabe (Mitsubishi UFJ Global Custody), Director

Francis Alfred Joseph La Salla (Bank of New York Mellon), Director

Xiaochi Liu (Kuri Atyak Investment Ltd.), Director

François Jean Marion (CACEIS; appointed by Sicovam Holding), Director

Godelieve Rachel Lucia Mostrey, Executive Director and Chief Technology and Services Officer

Nils-Fredrik Nyblaeus (SEB AB), Director

Franco Passacantando, Independent Director

Bruno Yves Jacki Prigent (Société Générale), Director

Satvinder Singh (Deutsche Bank AG), Director

Clare Eleanor Woodman (Morgan Stanley EMEA), Director

Eddy Omer Laurent Thérèse Wymeersch, Independent Director, Deputy Chairman

ESA Management Committee

Timothy John Howell, Chief Executive Officer

Frédéric Jean Noël Fernand Ghislain Hannequart, Chief Business Development Officer

Godelieve Rachel Lucia Mostrey, Chief Technology and Services Officer

Bernard Frenay, Chief Financial Officer

Yves Poullet, Head of Corporate Technology

Valérie Marie-Hélène Urbain, Chief Executive Officer, Euroclear Bank

EXHIBIT A

Luc Jan Camiel Vantomme, Chief Risk Officer

Joseph Marie Bertha René Van de Velde, Head of Product Management

ESA and the individuals listed in this Exhibit A may be reached at the following address:

Euroclear SA/NV c/o Company Secretary 1 Boulevard du Roi Albert II 1210 Brussels, Belgium

FORM CA-1

List in **Exhibit B** the registrant's corporate officers, trust officers, managers or other persons occupying a similar status or performing similar functions who supervise, or are directly responsible for the conduct of, registrant's clearing agency activities, indicating for each: (a) Name (b) Title (c) Area of responsibility (d) A brief account of the business experience during the last five (5) years.

* * *

Euroclear Bank's Clearing Agency Activities are not performed within a segregated specific geographic region or division within the Company. Therefore, listed below are the Directors, Officers and managers charged with overseeing and managing Euroclear Bank's overall operations, including its Clearing Agency Activities.

Frédéric Jean Noël Fernand Ghislain Hannequart

Mr. Hannequart has served as a Non-Executive Director and the Chairman of Euroclear Bank's Board of Directors since June 2007. He has also served as Chairman of its Remuneration Committee and its Nominations and Governance Committee since that date.

In addition to his role at Euroclear Bank, Mr. Hannequart is an Executive Director on ESA's Board of Directors, a member of ESA's Management Committee and Chairman of Euroclear UK & Ireland Limited's ("EUI") Board of Directors. He also serves as the Chief Business Development Officer of ESA.

Pierre Paul Jan Maria Berger

Mr. Berger is a Non-Executive Independent Director and Chair of Euroclear Bank's Audit and Risk Committees. Prior to serving on the Board of Euroclear Bank, Mr. Berger was a partner and qualified auditor at KPMG until September 2011.

James Michael Martin

Mr. Martin is a Non-Executive Independent Director and member of Euroclear Bank's Remuneration Committee and Nominations and Governance Committee. Since March 2012, he has served as the Chief Executive Officer ("**CEO**") of HedgeServ (UK) Limited. Prior to this position, Mr. Martin worked at HSBC from August 1998 to December 2011, holding various positions, including in the Funds Services and Securities Services Divisions.

EXHIBIT B

Godelieve Rachel Lucia Mostrey

Ms. Mostrey is a Non-Executive Director and member of Euroclear Bank's Audit and Risk Committees. In October 2010, Ms. Mostrey joined ESA as Chief Technology and Services Officer. Ms. Mostrey is a member of ESA's Management Committee and an Executive Director of ESA's Board of Directors. Ms. Mostrey serves as the Chairperson of the Board of Directors of Euroclear Sweden AB ("ES"), Euroclear Finland Oy ("EFi"), Euroclear Belgium C.I.K. SA/NV ("EBE"), Euroclear France SA ("EF") and Euroclear Nederland ("ENL"). In addition to her responsibilities within Euroclear, Ms. Mostrey is a non-executive Director and member of RealDolmen's Board of Directors and Audit Committee. She also serves as a member of the Board of Directors NV and chairs its Remuneration Committee.

Joseph Marie Bertha René Van de Velde

Mr. Van de Velde is a Non-Executive Director of Euroclear Bank's Board of Directors. In addition to his role at Euroclear Bank, Mr. Van de Velde has also served as the head of ESA's Product Management Division since 2008, and is a member of ESA's Management Committee. Mr. Van de Velde is also a Director of DEGCL.

Valérie Marie-Hélène Urbain

Ms. Urbain is an Executive Director and the Chairperson of Euroclear Bank's Management Committee. Ms. Urbain was appointed CEO of Euroclear Bank in February 2015. As CEO, Ms. Urbain is responsible for Euroclear Bank's worldwide Operations, Commercial, Client Service, Banking and Network Management Divisions. In addition to her role at Euroclear Bank, Ms. Urbain is a member of ESA's Management Committee. Between 2009 and 2015, Ms. Urbain served as the CEO of EBE, EF and ENL.

Pierre Yves Herman Victor Marie Goemans

Mr. Goemans is an Executive Director and member of Euroclear Bank's Management Committee. He has also served as a Managing Director and head of ESA's Commercial Division since August 2008. Mr. Goemans also is a Director of DEGCL.

Pierre Roger Fernand Robert Slechten

Mr. Slechten has served as an Executive Director and a member of Euroclear Bank's Management Committee, as well as Euroclear Bank's Chief Operating Officer ("**COO**") since April 2012. From January 2011 to March 2012, Mr. Slechten led Euroclear Bank's Asset Servicing and Transaction Processing operations, as well as Euroclear Bank's Asia operations.

Luc Jan Camiel Vantomme

Mr. Vantomme is an Executive Director and member of Euroclear Bank's Management Committee. In addition, he is the Chief Risk Officer ("**CRO**") of Euroclear Bank. He is also

EXHIBIT B

CRO and Chief Compliance Officer of ESA and a member of ESA's Management Committee. Previously, Mr. Vantomme served as a Managing Director and head of Euroclear Bank's Network Management and Banking Division from September 2007 to January 2011.

Stéphane Albert André Bernard

Mr. Bernard has served as head of Asset Servicing and Transactions Operations for Euroclear Bank since April 2012. In addition to his roles at Euroclear Bank, he is a member of the Board of Directors and the Audit Committees of EBE, EF and ENL. Prior to his current position with Euroclear Bank, Mr. Bernard served as a member of the Management Committee and COO for EBE, EF and ENL from January 2009 to April 2012.

<u>Inge Billiau</u>

Ms. Billiau has served as the head of Treasury, Credit and Network Management for Euroclear Bank since October 2015. Previously, Ms. Billiau served as head of the Network Management Department from May 2011 to October 2015, where she had responsibility for developing relationships and services with Euroclear Bank's network of agents and network providers.

FORM CA-1

Attach as **Exhibit C** narrative and graphic descriptions of registrant's organizational structure. If clearing agency activities are conducted primarily by a division, subdivision or other segregable entity within the registrant corporation or organization, identify the relationship of such entity to the registrant's overall organizational structure and limit the descriptions to the division, subdivision or other segregable entity which performs clearing agency activities.

* * *

As noted in <u>Exhibit B</u>, Euroclear Bank's Clearing Agency Activities are not limited to the responsibility of a specific division within the Company or other segregable entity or group. Accordingly, below is a description of Euroclear Bank's overall organizational structure, including its Board of Directors, committees and operations departments, which includes oversight of the Clearing Agency Activities.

Please find attached as <u>Exhibit C-1</u> a diagram outlining Euroclear Bank's operations departments.

Board of Directors

Euroclear Bank's Board of Directors is its ultimate decision-making body and is charged with setting the policies and strategy for the Company.

Board Committees

Euroclear Bank's Board of Directors has established a Management Committee in accordance with Belgian legal and regulatory requirements and has delegated to it the general management of the Company in accordance with the strategy and policies set by the Board of Directors. The Board of Directors also has established the following committees exclusively composed of non-executive directors: the Audit Committee, the Risk Committee, the Nominations and Governance Committee and the Remuneration Committee.

Each committee is composed of at least two directors. With the exception of the Management Committee, at least one member of each committee is deemed "independent" under applicable Belgian law.

Management Committee

The Management Committee has been entrusted with the general management of the Company, and acts in accordance with applicable law and the rules set out in Euroclear Bank's Articles of Association and under the supervision of the Board of Directors.

EXHIBIT C

The Management Committee reports directly to the Board of Directors and, as appropriate, to the specific committees which in turn report their analyses to the Board of Directors.

The Management Committee may delegate specific powers which may be exercised beyond the day-to-day management to one or more individuals. As provided in the Management Committee Terms of Reference, the Management Committee may delegate the following:

- specific powers to committees in all areas necessary or useful to the management of Euroclear Bank; and
- specific powers to senior management, in all areas necessary or useful to the management of Euroclear Bank insofar as they fall within the remit of their respective divisions.

However, certain powers are exclusive to the Management Committee and may not be delegated by the Management Committee. Such powers include:

- decisions on the reporting process to the Board of Directors (content and frequency of reporting obligations);
- strategic recommendations to the Board of Directors;
- decisions effecting a material change to the global internal organizational structure of Euroclear Bank; and
- decisions that involve a material reputational, material financial or material legal risk to Euroclear Bank.

Euroclear Bank Divisions - Operating Services

Euroclear Bank is organized into the operating divisions and departments described below, with each division headed by the COO or a division head. In certain instances, the personnel and other resources for a division or department are provided pursuant to intercompany services agreements between Euroclear Bank and ESA or other Euroclear Group affiliates, and references in this Exhibit C to activities performed by a division or department are, where applicable, to activities that are supplied to Euroclear Bank pursuant to the intercompany services agreements. The intercompany services agreements are attached hereto as Exhibit C-2 and Exhibit C-3.

Asset Servicing and Transactions Operations Division

The Asset Servicing and Transactions Operations Division is responsible for the execution of all asset servicing, settlement and cash services functions and related client support functions. Some of these services may also be provided by the Euroclear Bank Hong Kong and Kraków branches.

Collateral Management and Funds and Strategic Program Support Operations Division

The Collateral Management and Funds Operations is responsible for the following services and related client support functions: collateral management, securities lending and investment funds operations.

The Strategic Program Support Operations supports the Euroclear Bank branch in Kraków and the development of a dual operations center between Belgium and Kraków.

This division also covers the Euroclear Bank services provided by the Euroclear Bank Hong Kong and Kraków branches.

Treasury, Credit and Network Management Division

The Network Management Department is responsible for the creation, development and maintenance of market links and the selection and management of domestic and international securities custodians and agents, cash correspondents and funds transfer agents.

The Treasury and Credit Team combines the treasury, liquidity and credit management functions of Euroclear Bank. The Treasury Department is responsible for implementing the market and liquidity framework. The Treasury Department also manages Euroclear Bank's balance sheet, investment book and the management of day-to-day liquidity and buy-ins. The Credit Department is responsible for evaluating the creditworthiness of Euroclear Bank counterparties with a credit arrangement, setting the credit limits, negotiating the recourse, valuating a participant's collateral in Euroclear Bank and implementing the required credit documentation. Credit needs and usage are managed and monitored on a daily basis. The Middle Office, Data Management and Banking Solutions Department provides "middle office" support to Euroclear Bank's Treasury and Credit Departments and is responsible for the management and regulatory reporting regarding credit, market and liquidity risks.

Commercial

The Commercial Division provides operational and technical support to its participants, opens and closes participant accounts according to Euroclear Bank policies and verifies the authenticity of contracts, operational documents and manual instructions. The Commercial Division also provides support through representative offices located in New York, Beijing, Dubai, Frankfurt, Singapore and Tokyo. The representative offices also provide relationship management support.

Technology and Support Services

ESA acts as the group service company providing shared services to Euroclear Bank and other Euroclear Group companies in services arrangements with each group company. Services provided by ESA to Euroclear Bank are: information technology ("**IT**") production and development; human resources; audit; legal; financial; risk management; compliance; sales and relationship management; product management; strategy; and public affairs.

Euroclear Bank Structure

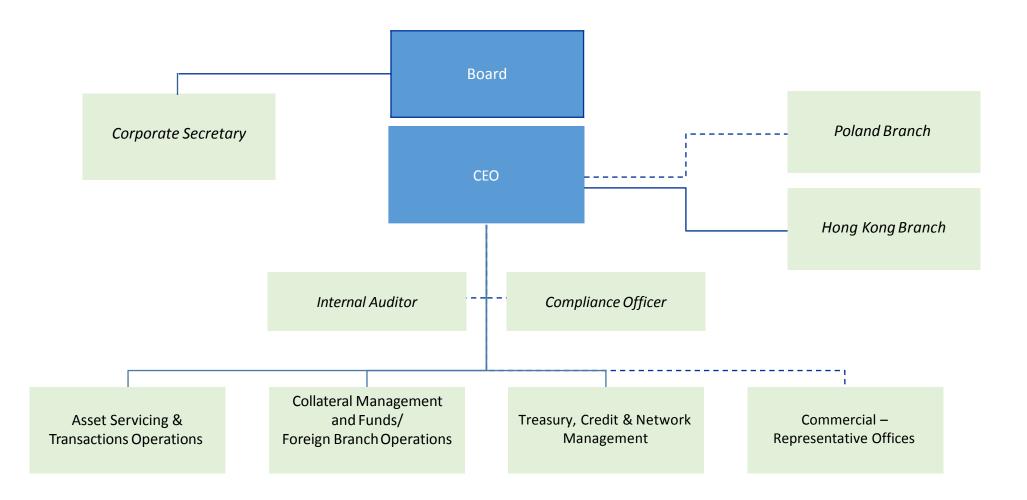
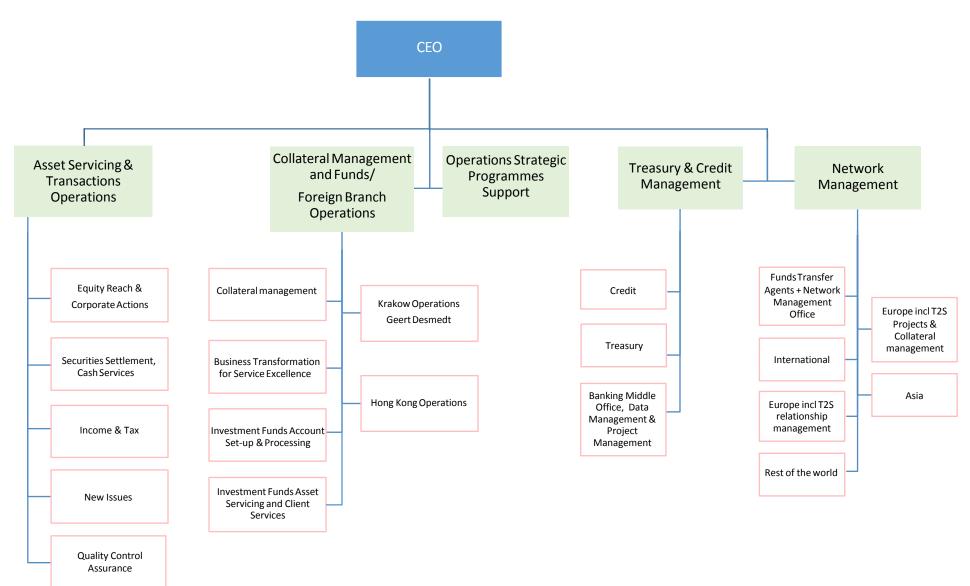


Exhibit C-1

Euroclear Bank



FORM CA-1

Attach as **Exhibit** D a list of persons who directly or indirectly, through one or more intermediaries, are controlled by, or are under common control with, the clearing agency and indicate the nature of the control relationship.

* * *

Below is an explanation of the nature of the control relationships among Euroclear Bank and other members of Euroclear Group that are under the control of ESA, Euroclear Bank's immediate parent company. Please find attached as <u>Exhibit D-1</u> a diagram outlining the common control relationship between Euroclear Bank and other Euroclear Group entities.

Operating Affiliates of Euroclear Bank

The following active¹ Euroclear Group companies provide clearance, settlement and related services or other post-trade processing services and are owned in whole or in part by ESA.

DEGCL

DEGCL is a joint venture between The Depository Trust & Clearing Corporation ("**DTCC**") and ESA, formed for the purpose of offering collateral management services to support market participants in meeting their risk management and regulatory requirements. As described further in <u>Exhibit S-1</u>, DEGCL will provide an IMS to its customers, which will permit entities that are participants in both Euroclear Bank and DTC to transfer assets from certain accounts at DTC to certain accounts of the same legal entities at Euroclear Bank. The U.S. Equities Proposal is related to the offering of the IMS to Euroclear Bank participants.

<u>EBE</u>

EBE is the commercial name of "*Caisse Interprofessionnelle de Dépôts et de Virements de Titres SA/Interprofessionele Effectendeposito-en Girokas NV (C.I.K.)*", a Belgian incorporated "*société anonyme*". EBE is a central securities depository ("**CSD**") in Belgium for equities and a range of other securities. EBE also is a securities settlement system that settles Euronext stock exchange transactions (with LCH.Clearnet S.A. as central counterparty) and over-the-counter ("**OTC**") transactions. In addition, EBE provides custody and other services to financial institutions and issuers.

 $^{^{1}}$ EMX Company Limited and Euroclear International Services Limited are wholly owned subsidiaries of ESA that are dormant.

EXHIBIT D

<u>ENL</u>

ENL is the registered commercial name of "*Nederlands Centraal Instituut voor Giraal Effectenverkeer B.V. (NECIGEF)*", a Dutch incorporated "*besloten vennootschap*". ENL is the CSD of the Netherlands, appointed by the Minister of Finance as the Centraal Instituut under the Dutch Securities Giro Act. ENL also is a securities settlement system that settles Euronext stock exchange transactions (with LCH.Clearnet S.A. as central counterparty) and OTC transactions, and provides custody and other services to its financial institutions and issuers.

EF

EF, a French incorporated "*société anonyme*", is the CSD of France and a securities settlement system that settles Euronext stock exchange transactions (with LCH.Clearnet S.A. as central counterparty) and OTC transactions, and provides custody and other services to financial institutions and issuers. EF is wholly owned by ESA, apart from seven shares that are owned by individual shareholders.

EUI

EUI, an English incorporated limited company, owns and operates the CREST system, which is the CSD of the United Kingdom and the Republic of Ireland. The CREST system provides real-time settlement for a range of corporate and government securities and money market instruments traded on the London Stock Exchange, the Irish Stock Exchange and various multilateral trading facilities. Such securities and instruments are held in electronic form as balances in the CREST system. EUI also owns and operates the EMX Funds Order Routing Service that provides the electronic messaging used for automating the purchase, sale, valuation, reconciliation and registration of funds.

EUI also is the parent company to the following subsidiaries: CIN (Belgium) Limited; CREST Client Tax Nominee (No. 1) Limited; CREST Depository Limited; CREST International Nominees Limited; CREST Stamp Nominee (No. 1) Limited; CREST Stamp Nominee (No. 2) Limited; CRESTCo Limited; and Trinity Nominees Limited.

<u>ES</u>

ES, a private limited liability company (*Aktiebolag*) incorporated in Sweden, is the CSD of Sweden. ES provides registrar services for Swedish and foreign securities, clearance and settlement services in addition to certain back-office services.

<u>EFi</u>

EFi, a private limited liability company (*Osakeyhtiö*) incorporated in Finland, is the CSD of Finland. EFi provides clearance and settlement as well as registrar services for Finnish and foreign securities, in addition to other related back-office services.

EXHIBIT D

Subsidiaries of Euroclear Bank

As shown on <u>Exhibit D-1</u>, Euroclear Bank owns the following five nominee companies: EC Nominees Limited; EOC Equity Limited; Euroclear Nominees Limited; Euroclear Treasury Nominee Limited; and FundSettle EOC Nominees Limited. The nominee companies are used to receive securities deposited with Euroclear Bank to hold in local markets and for Euroclear Bank's treasury activities.

Euroclear Bank also owns one other subsidiary, Calar Belgium SA/NV, a *société anonyme/naamloze vennootschap* that owns real estate used by Euroclear Bank in its operations.²

Sister Companies of ESA

EI is the intermediary holding company of ESA and sister companies of ESA that are not operating as CSDs (*i.e.*, Euroclear Market Solutions Limited, Euroclear Properties France SAS, Euroclear Re SA and Taskize Ltd). These sister companies provide various services to Euroclear Group companies and clients, including reinsurance, software services, operational support and real estate management.

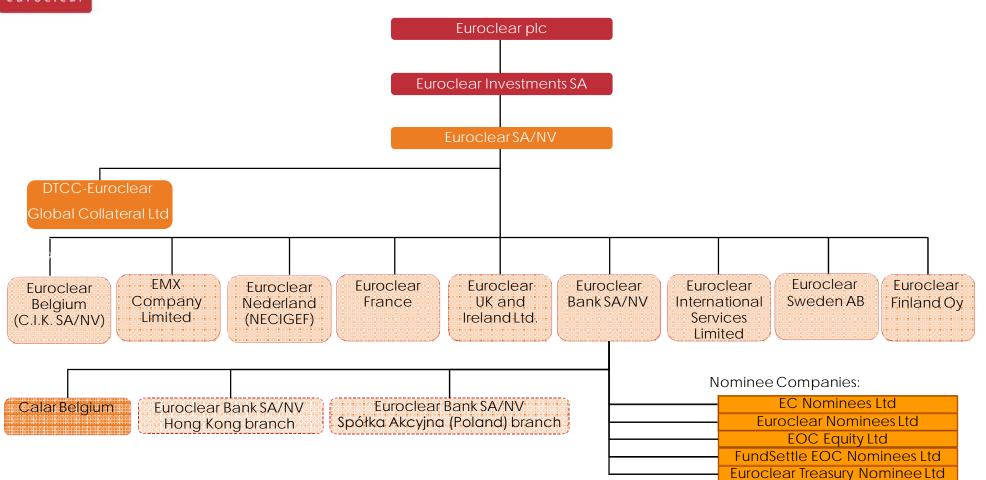
 $^{^{2}}$ Euroclear Finance 2 SA, a former subsidiary of Euroclear Bank, was liquidated and dissolved in 2015.

Exhibit D-1

January 2016



Euroclear group structure



FORM CA-1

Attach as **Exhibit** E a copy of the currently effective constitution, articles of incorporation or association, by-laws, rules, procedures and instruments corresponding thereto, of the registrant and a complete list of all dues, fees and other charges imposed by registrant for its clearing agency activities.

* * *

Attached to this <u>Exhibit E</u> are Euroclear Bank's organizational documents. Also attached to this <u>Exhibit E</u> are the rules, procedures and other documentation generally governing the Euroclear System (including the Clearing Agency Activities), together with the fees imposed by Euroclear Bank for its activities, including the Clearing Agency Activities.

Exhibit E-1	Certificate of Incorporation for Euroclear Bank					
<u>Exhibit E-2</u>	Articles of Association for Euroclear Bank					
Exhibit E-3	April 2014 Terms and Conditions Governing Use of Euroclear					
<u>Exhibit E-4</u>	October 2010 Supplementary Terms and Conditions Governing the Lending and Borrowing of Securities through Euroclear					
<u>Exhibit E-5</u>	February 2016 Operating Procedures of the Euroclear System					
<u>Exhibit E-6</u>	February 2016 Euroclear Bank General Fees Brochure					

Euroclear Bank currently intends to charge for the U.S. Equities Clearing Agency Activities in alignment with its existing fee structure, as reflected in Exhibit E-6. Euroclear Bank generally does not charge Participants different fees on the basis of whether the Participant is a U.S. Participant. The level of any particular fee charged by Euroclear Bank within its fee structure may differ depending on a variety of factors reflecting service differences, costs and other pricing considerations. For example, the level of fees charged for receipt of securities through one Euroclear Bank link may differ from the same type of fee charged for receipt of securities through a different link. It is therefore possible that the levels of fees associated with the U.S. Equities Proposal may differ from the level of fees for similar services relating to different markets or structures. Euroclear Bank notes that as an enterprise located and doing business within the European Union, it must comply with relevant EU competition law principles with respect to its pricing policies.

Additional agreements related to the U.S. Equities Proposal are attached as <u>Exhibit P-1</u> through <u>Exhibit P-14</u>.

EUROCLEAR BANK SA/NV

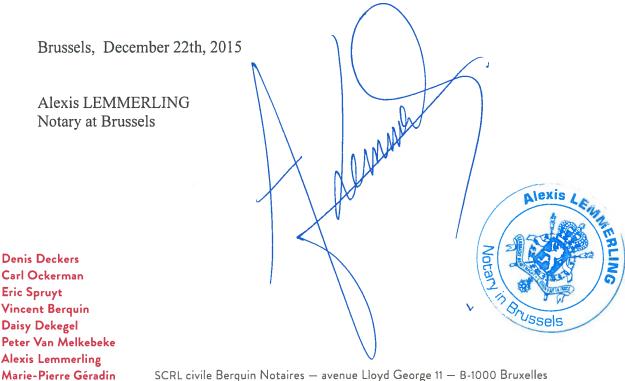
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NOTAIRES
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BERQUIN
NOTARISSEN

notaires associés

CERTIFICATE

I, the undersigned Alexis LEMMERLING, associated notary, member of the civil company incorporated under the form of a cooperative company with limited liability "Berquin Notarissen", having its registered office at 1000 Brussels, Avenue Lloyd George, 11, and registered with the Crossroads Business Databank under number 0474073840, hereby certify that:

- The Belgian limited liability company (société anonyme) "EUROCLEAR BANK" has been incorporated under the name "EUROCLEAR CLEARANCE SYSTEM SOCIETE COOPERATIVE" by deed signed on the 21th of November 1986, published in the annexe to the Belgiann Official Gazetta (Moniteur belge) on the 20th of December 1986 number 861220-219;
- 2) By notarial deed signed before notary Eric Spruyt, at Brussels, on the 15th of May 2000, the company has changed his name in the actual one and became a limited liability company (société anonyme), published in the annexe to the Belgian Official Gazetta (Moniteur belge) on the 28th of June 2000 number 20000628-232;
- 3) The company is registered in the company register of Brussels under number the 0429.875.591 and that its VAT-number is BE 429.875.591.



SCRL civile Berquin Notaires — avenue Lloyd George 11 — B-1000 Bruxelles TVA BE 0474 073 840 — RPM Bruxelles — www.berquinnotaires.be — Parking dans l'immeuble

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	a repulsation der ontersennt	Lemmerling, Alexis	JE MAR STRAIN
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Te/A /In :	Brussel/Bruxelles/Bri	issel ANDSE Op/Le/Am: 22	/12/2015
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EUROCLEAR BANK Société Anonyme 1 Boulevard du Roi Albert II 1210 Brussels Register of Legal Entities No. 0429.875.591

	<i>Notary</i> Date of meeting	Official State Gazette	Number
Incorporation LCC	21/11/1986	20/12/1986	219
Transformation SA	E. Spruyt 15/05/2000	28/06/2000	232
GM	E. Spruyt 13/12/2000	09/01/2001	558
GM	E. Spruyt 10/01/2001	14/03/2001	509
GM	E. Spruyt 07/02/2002	22/03/2002	100
GM	D. Deckers 30/04/2002	30/05/2002	454
GM	E. Spruyt 14/08/2002	12/09/2002	0114922
GM	C. Ockerman 29/11/2002	27/12/2002	0153918
GM	E. Spruyt 27/05/2003	07/07/2003	03076798
GM	C. Ockerman 27/05/2004	24/08/2004	0123108
GM	E. Spruyt 30/12/2004	24/01/2005	05015006
GM	D. Deckers 26/05/2005	20/06/2005	05086436
GM	P. Van Melkebeke 5/11/2007	29/11/2007	0171703
GM	P. Van Melkebeke 19/05/2011	03/06/2011	11082726

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GM	P. Van Melkebeke 16/01/2014	19/02/2014	14045435
GM	P. Van Melkebeke 24/04/2014	26/05/2014	14106239
GМ	P. Van Melkebeke 08/05/2015	Publication pending	Publication pending

CHAPTER ONE - NAME - REGISTERED OFFICE - OBJECT - DURATION

ARTICLE 1 - NAME

The Company is a limited liability company ("naamloze vennootschap"/"société anonyme").

It is named "EUROCLEAR BANK".

ARTICLE 2 - REGISTERED OFFICE

The registered office is located at 1210 Brussels, 1 Boulevard du Roi Albert II.

It may be transferred, by decision of the Board of Directors, to any other location in Belgium.

The Company may establish, by decision of the Board of Directors, additional offices, operations, branches, agencies or subsidiaries, both in Belgium and abroad.

ARTICLE 3 - OBJECT

The object of the Company is to carry out for its own account and for the account of third parties, banking activities and securities-related activities in their broadest meaning, as well as all other activities currently or in the future authorised for banks.

Such activities include, in particular, the operation of one or more clearance and settlement systems for securities and other transferable rights of all kinds issued or dealt with in any part of the world, the operation of multilateral netting and novation systems for transactions in such securities and rights, the operation of any activity directly or indirectly linked to servicing transactions in such securities and rights, or directly or indirectly linked to asset servicing, the receipt of, and carrying out of, transactions in, cash and/or securities, the granting of loans and of credit in cash and/or securities and other transferable rights; within the limits authorised by law, the effectuation of any transactions on stock exchanges, any foreign exchange transactions, and any issuing, underwriting, brokerage, agency and other financial transactions whatsoever.

The Company may, within the limits authorised by law, manage, supervise, and control all affiliated companies and all companies in which it holds an interest of any kind, and may, within the same limits, grant loans, in whatsoever form and for whatsoever duration, to such companies. It may, within the limits authorised by law, participate by contribution in cash or in kind, by merger, subscription, participation, financial intervention or otherwise, in any companies or firms, existing or to be formed in or outside Belgium, with a corporate object identical, similar or related to, or useful for developments of its own corporate object. This list is not exhaustive.

The Company may do anything, which directly or indirectly can contribute to the realisation of its object in the broadest sense.

ARTICLE 4 - DURATION

The Company shall have an unlimited duration.

CHAPTER TWO - CAPITAL

ARTICLE 5 - CAPITAL

The registered capital is two hundred and eighty-five million four hundred and ninetyseven thousand three hundred and three Euros and seventy-five cents (EUR 285,497,303.75). It has been entirely subscribed and is fully paid-up. It is represented by seventy thousand eight hundred and thirty eight (70,838) shares without par value, each share representing an equal part of the capital of the Company.

Without prejudice to the provisions of Article 6 of these Articles of Association, the capital may be increased or decreased, from time to time, by decision of the General Meeting, in accordance with the conditions set by law.

In the event of the existence of an issuance premium on the new shares, this must be paid up in full upon subscription.

Upon every capital increase, the shares subscribed to in cash must first be offered to the existing shareholders, in proportion to that part of the capital represented by their shares, during a period of at least fifteen days from the day subscriptions are opened. This preferential right can be cancelled or suspended in the interest of the Company by the General Meeting upon due observance of the relevant legal provisions.

ARTICLE 5bis – PROFIT-SHARING CERTIFICATES

Pursuant to a resolution of the extraordinary shareholders' meeting of the Company held on 26 May 2005, it was decided, if and when this will be required under the conditions set forth below, to issue profit-sharing certificates ("Profit Sharing Certificates A") by way of contribution of claims in respect of the sum of (i) the aggregate principal amount of the 6,000 Subordinated Guaranteed Non-Cumulative Perpetual Securities (the "Securities") issued by Euroclear Finance 2 S.A., (ii) accrued but unpaid interest, if any, with respect to the current Interest Period (as defined in the Trust Deed) accrued on a daily basis to (but excluding) the Mandatory Date (as defined in the Trust Deed) and (iii) Additional Amounts (as defined in the Trust Deed), if any.

The Profit Sharing Certificates A shall be issued on the condition precedent of (i) the occurrence of one of the events defined hereafter affecting the Securities (a "Mandatory Conversion Event"), on the Company giving not less than 30 nor more than 60 days' notice to the holders of Securities in accordance with Condition 15 (Notices) (as set out in the Trust Deed) of the Securities and (ii) the contribution of the outstanding Securities and all outstanding rights attached thereto, without the need for further consent or action by the Securityholders for such contribution. The Securities will be issued by Euroclear Finance 2 S.A. on or about 10 June 2005 pursuant to a Trust Deed executed on the same date between Euroclear Finance 2 S.A., the Company and The Law Debenture Trust Corporation p.l.c. (in its capacity of Trustee).

A Mandatory Conversion Event, upon which the Profit-Sharing Certificates A will be issued, will be deemed to occur if (i) the amount of total regulatory capital (fonds propres/eigen vermogen) of the Company on a solo or consolidated basis falls below the minimum

amount required by solvency requirements for credit institutions as provided by the current and future European banking regulations and Basel guidelines, as currently translated by Article 82 §1,3° of the Decree of 5 December 1995 of the CBFA on the regulation of the own funds of the credit institutions (the "1995 Decree"; references to the 1995 Decree and the provisions thereof will be deemed to refer to the same as may be amended from time to time or replaced by other laws, regulations or provisions), (ii) the amount of core tier 1 regulatory capital of the Company on a solo or consolidated basis declines below 5/8 of the amount of total regulatory capital as required from time to time by Article 82 § 1,3° of the 1995 Decree, (iii) Article 633 of the Belgian Companies Code becomes applicable by virtue of the Company's Net Assets declining to less than 50 per cent. of its corporate capital, (iv) Article 23 of the Belgian law of 22 March 1993 on the status and supervision of credit institutions (the "Law of 22 March 1993") applies by virtue of the Company's capital falling below the amount mentioned in Article 16 of the Law of 22 March 1993 (which is currently fixed at EUR 6.2 million), (v) at the discretion of the CBFA, Article 57 §1 of the Law of 22 March 1993 becomes applicable due to the special measures imposed by the CBFA in application thereof or (vi) any event occurs resulting in a general concursus creditorum on the assets of the Company.

The Profit Sharing Certificates A are subject to the conditions set out in article 42 of the articles of association of the Company.

ARTICLE 6 - AUTHORISED CAPITAL

The Board of Directors is authorised to increase the capital by notarial deed from time to time by a maximum amount of three hundred fifty million Euro (350,000,000 Euro).

This increase may be realised by contributions in cash or in kind within the limits set forth by the Company Laws. It may also be made by incorporation of reserve funds, with or without creation of new shares. New shares so created may be voting or non-voting shares.

If, when it resolves to increase the capital, the Board of Directors requests the payment of a share premium, this share premium will be recorded in the company's books in an unavailable account titled "share premiums" which will constitute a security for third parties to the same extent as the company's share capital and which will only be disposed of, except the possibility of conversion into capital, in accordance with the conditions set forth by the Company Code for amending the Articles of Association.

The Board of Directors can exercise this power for a period of five years as from the publication of the amendment of the Articles of Association by the General Meeting of 24 April 2014. This authorisation can be renewed in accordance with the Company Code.

The Board of Directors may in the interest of the Company, within the limitations of and in accordance with the rules set forth by the applicable legal provisions, limit or cancel the preferential subscription right of the existing shareholders on the occasion of a capital increase within the framework of the authorised capital as mentioned in this article. This limitation or cancellation can be realised for the benefit of one or more specified persons.

The Board of Directors is empowered, with the right to substitute, to adapt the Articles of Association to the new situation of the capital and of the shares after each capital increase within the framework of the authorised capital.

ARTICLE 7 - NATURE OF SHARES

The shares are and shall remain registered shares.

Registered shares shall be recorded in the register of shareholders, which is kept at the registered office of the Company.

ARTICLE 8 - INDIVISIBILITY OF THE SHARES

The shares are indivisible and the Company recognises only one owner per share for the exercise of the rights attached to the shares.

If there are several owners of one share, the Company shall have the right to suspend the exercise of the rights resulting therefrom, until only one person is designated as being, towards the Company, owner of the share.

If a person has the usufruct of a share and another has the ownership thereof without usufruct, only the person having the usufruct will receive notices of annual and extraordinary General Meetings, and only that person will be authorised to exercise the rights attached to the share.

ARTICLE 9 - BONDS

The Company may at any time, by simple decision of the Board of Directors, create and issue bonds, mortgaged bonds or other forms of debt instrument.

Two directors will validly sign bearer bonds.

Stamps may replace these signatures.

CHAPTER THREE - ADMINISTRATION AND SUPERVISION

ARTICLE 10 - COMPOSITION OF THE BOARD OF DIRECTORS

The Company is managed by a Board of Directors comprising at least 3 Directors, who need not be shareholders, appointed by the General Meeting of shareholders.

The General Meeting at any time may dismiss any Director. Each Director may resign at any time by notice in writing delivered to the Company or tendered at a meeting of the Board.

Directors are appointed for a term of not more than three years, or such longer period as is necessary to have such term expire at the end of the Annual General Meeting immediately succeeding such three-year term. The Directors can be re-elected.

The term of office of any Director who is not re-elected expires immediately after the General Meeting, which decides on his replacement or decides not to replace him.

ARTICLE 11 - VACANCY

In case of vacancy of the seat of a Director resulting from resignation, death, removal or any other reason, the remaining Directors may elect another person to replace him until the next Annual General Meeting, at which such person shall be eligible for re-election.

Without limiting the foregoing, for the purposes of this Article, there will be a vacancy of the seat of a Director if:

 he is or has been suffering from mental ill health or becomes a patient for any purpose of any statute relating to mental health and the Board of Directors resolves that his office is vacated; or

- (ii) he is absent without the permission of the Board of Directors from meetings of the Board of Directors for six consecutive months and the Board resolves that his office is vacated; or
- (iii) he becomes bankrupt or compounds with his creditors generally; or
- (iv) he is prohibited by law from being a Director.

ARTICLE 12 - CHAIRMANSHIP

Subject to the prior approval of the National Bank of Belgium, the Board may appoint a director to be the Chairman of the Board, and may at any time remove him from that office. The Board may also appoint a director to be a Deputy Chairman of the Board, and may at any time remove him from that office. The Chairman or failing him a Deputy Chairman shall act as chairman at every meeting of the Board. If more than one Deputy Chairman is present they shall agree amongst themselves who is to take the chair, or if they cannot agree, the Deputy Chairman or Deputy Chairman is appointed, or if at any meeting neither the Chairman nor any Deputy Chairman is present within five minutes after the time appointed for holding the meeting, the directors present may choose one of their number to be chairman of the Board will attend (such director to be appointed as the chairman of the Board will attend may also, in his absolute the Chairman of the Board will attend (such director to be appointed as the chairman of the Board were not present at such meeting).

ARTICLE 13 - MEETINGS

The Board shall meet whenever the interest of the Company requires it or whenever one Director has asked for it.

Each meeting shall be held at the place, either in Belgium or from time to time abroad, indicated in the notice convening the meeting. However, Directors may attend and participate in the meeting and its decisions (and be counted in the quorum and for majority purposes) by conference call or video conferencing and the meeting shall be treated as validly held, provided at least two Directors are present either at the location of the meeting or by conference call or video conferencing.

Notice of each meeting shall be given by letter sent to each Director at the latest 6 days before the meeting or by means of telefax or e-mail sent to each Director at least 2 days before the meeting. Any notice of meeting by letter sent abroad shall be sent by airmail.

In exceptional circumstances, where the above notice periods are not appropriate, shorter notice may be given. If necessary, notice may be given by telephone in addition to the means provided for in the preceding paragraph.

The notices of meeting shall be given to the last known address of each Director given to the Company for that purpose or, failing this, to the registered office of the Company. Such notice shall mention the date, hour, place (and, if available, the details regarding the organisation of the conference call) and agenda of the meeting. In the exceptional circumstances mentioned in the preceding paragraph, additional matters may be added to the agenda after the notice of the meeting has been given.

A meeting of the Board of Directors may validly be held without notice if all Directors are present or represented and agree to deliberate on the issues that have been put on the agenda at the beginning of the meeting. In exceptional circumstances, duly justified by the urgency of the matter and its corporate interest, the decisions of the Board of Directors may be taken by unanimous written consent of the Directors. This procedure may not be used for the approval of the annual accounts or the authorised capital procedure.

The Board of Directors may appoint honorary directors or directors emeriti if it sees fit, and invite them to attend all or some of the meetings of the Board of Directors. Honorary directors and directors emeriti are not Directors; they shall have the right to speak but not to vote at the meetings of the Board of Directors to which they are invited.

ARTICLE 14 - DELIBERATIONS

The Board of Directors may only deliberate and adopt resolutions if at least more than half of its members, of whom a majority must be non-members of the Management Committee, are present (in accordance with the second paragraph of Article 13). Any Director who ceases to be a Director at a Board meeting may continue to be present and to act as a Director and be counted in the quorum until the termination of the Board meeting if no other Director objects and if otherwise a quorum of Directors would not be present.

Decisions on issues not appearing on the agenda can only be taken if all members are present or represented, or in the exceptional circumstances mentioned in the fourth and fifth paragraphs of Article 13.

All resolutions are adopted by a simple majority of the votes cast, provided the Board has been validly convened and the required quorum is satisfied. In the case of a tie, the chairman of the meeting has the casting vote.

Any Director who is unable to attend a meeting of the Board may authorise in writing, by letter, telefax or e-mail, one of his fellow Directors to represent him at the meeting and to vote for him in his place. A Director may represent more than one of his fellow Directors and may cast, in addition to his own vote, as many votes as the number of fellow Directors he represents.

Any Director who, directly or indirectly, has an interest of a patrimonial nature, which conflicts or may conflict with a decision or transaction pertaining to the Board of Directors, has to conform to the legal provisions applicable in case of conflict of interests. If several Directors are in this situation, and the legislation in force prohibits them from participating in the deliberations and votes on this matter, the resolution can validly be adopted by the remaining Directors.

ARTICLE 15 - SECRETARY

The Board of Directors may appoint a Secretary and shall determine his function and remuneration. Only the Board of Directors may remove the Secretary.

The Secretary shall, in the name of the Board of Directors and under its authority, convene the General Meetings and the meetings of the Board of Directors and shall act as Secretary of these meetings.

ARTICLE 16 - MINUTES

The resolutions of the Board of Directors shall be recorded in Minutes signed by the Chairman of the meeting and by the members who wish to do so.

These Minutes shall be entered into a special register.

Authorisations given for a meeting pursuant to Article 14 shall be annexed to the Minutes of such meeting.

Copies or extracts of the Minutes to be produced in legal proceedings or otherwise, including those extracts to be published in the annexes to the Belgian State Gazette, are validly authenticated if signed by a Director or the Secretary.

ARTICLE 17 - POWERS

The Board of Directors has the authority to carry out all acts that are useful or serve to achieve the object of the Company, with the exception of those that according to law or the Articles of Association are reserved for the General Meeting.

The powers of the Board of Directors include, but are not limited to, the following:

- appointment of the Chairman of the Board of Directors
- Confirmation of the remuneration of directors non-members of the Management Committee
- appointment and removal of members of the Management Committee
- remuneration and other employment contract terms of the members of the Management Committeee;
- setting the company's strategy;
- setting pricing and rebate policy;
- recommendations with respect to dividends;
- setting membership policies for Participants to join the Euroclear System;
- setting policies for contracting with major suppliers of services;
- approving annual or longer-term plans and budgets,
- recommendations with respect to the raising of capital and the confirmation of major financing facilities;
- setting risk management policies and monitoring their implementation by the Management Committee;
- determination of a code of ethics and business practice
- reviewing of internal controls and reports by the Audit Committee
- establishment, determination of membership, and terms of reference of Board committees;
- reviewing matters referred to the Board by its committees
- if applicable, determination and follow-up of the company's pension schemes and appointment of the company's representatives to appropriate bodies;
- approval of annual and interim reports, accounts and accounting policies
- approval of any prospectus to be issued by the company.

ARTICLE 18 - BOARD COMMITTEES

The Board of Directors may appoint committees, including without limitation the Management Committee, composed of Directors or other persons to the extent permitted under Belgian law. The Board of Directors determines the powers of these committees. These committees determine their operating procedures, except to the extent inconsistent with these Articles of Association or the operating procedures laid down by the Board of Directors, which shall prevail. The members of each such standing committee shall be

named in the annual report and accounts of the Company. Without limiting the foregoing, the Board shall appoint an Audit Committee with such powers as the Board shall determine in accordance with this paragraph.

ARTICLE 19 - MANAGEMENT COMMITTEE

The Board of Directors shall establish a Management Committee in accordance with Article 24 of the Act of 25 April 2014 relating to the status and the supervision of credit institutions and with Article 524bis of the Company Code, and shall grant power to the Management Committee to carry out all or some of the acts referred to in Article 522 of the Company Code and Article 17 of these Articles of Association. Such delegation of powers cannot, however, relate to the determination of the general policy of the Company or to the powers that are reserved to the Board of Directors by other legal provisions or by these Articles.

The Management Committee will be composed of as many members as the Board of Directors may decide from time to time, who form a board.

The Board of Directors shall appoint the Chairman of the Management Committee, upon the proposal of the Management Committee and after having obtained the approval of the National Bank of Belgium.

The members of the Management Committee are appointed and dismissed by the Board of Directors.

The Board of Directors will determine the age limit of the members of the Management Committee.

The Management Committee may, in the course of its duties, confer special powers on one or several persons of its choice. It may, in particular, delegate upon due observance of these articles of association the day-to-day management of the Company, as well as the representation of the Company in connection with this management, to one or several delegates, whether a Director or not. The Management Committee of the Company remains fully responsible for the acts and omissions of these delegates. It may revoke the delegations so conferred. The Management Committee shall determine the powers and responsibilities of the persons referred to in this paragraph and it shall determine the remuneration or expenses if they are not Directors. It will inform the Board on how it has implemented this delegation.

The resolutions of the Management Committee shall be recorded in Minutes signed by the chairman of the meeting and by the members of the Management Committee who wish to do so. The Minutes shall be circulated to the other members of the Board of Directors.

Copies or extracts of the Minutes to be produced in legal proceedings or otherwise are validly authenticated if signed either by the Chairman of the Management Committee or by two members of the Management Committee or by the Secretary.

ARTICLE 20 - SUPERVISION

The General Meeting shall appoint one or more Auditors approved by the National Bank of Belgium and shall determine their remuneration in accordance with the applicable legal provisions.

ARTICLE 21 - REMUNERATION

The Directors collectively shall receive such remuneration as the Company in General Meeting may decide, for division among them in such manner as the Board of Directors may decide.

Each Director may be paid his/her reasonable travel, hotel and incidental expenses incurred to attend and return from meetings of the Board of Directors or committees or General Meetings and shall be paid all expenses properly and reasonably incurred by him/her in the conduct of the Company's business or in the discharge of his duties as a Director. Any Director who, by request, goes or resides abroad for any purposes of the Company or who performs services which in the opinion of the Board of Directors go beyond the ordinary duties of a Director may be paid such extra remuneration (whether by way of salary, commission, participation in profits or otherwise) as the Board of Directors may determine, subject to ratification by the General Meeting, and such extra remuneration shall be in addition to any remuneration provided for by or pursuant to the other provisions of these Articles. In particular, the participation to a committee may give rise to such extra-remuneration.

The Board of Directors shall determine the remuneration of the members of the Management Committee.

The Board of Directors may remunerate the honorary directors and directors emeriti if it sees fit. The Board of Directors shall determine the amount and the payment terms of this remuneration.

ARTICLE 22 - REPRESENTATION

The Company is validly represented in all legal proceedings and in all instruments, including those for which the assistance of a public official or a notary is required, by two members of the Board of Directors acting jointly, of whom one at least is a member of the Management Committee. For acts within the limits of their specific powers, the Company is also validly represented by special representatives.

The Company may be represented in foreign countries by any person acting pursuant to a specific mandate by the Board of Directors or, within the limits of its powers, the Management Committee.

CHAPTER FOUR - GENERAL MEETING

ARTICLE 23 - COMPOSITION AND POWERS

The properly constituted General Meeting represents all the shareholders.

All shareholders who have the right to vote may attend the General Meeting, either themselves or through proxies, subject to compliance with applicable legal provisions and the provisions of these Articles. Decisions of the General Meeting are binding on all shareholders, including absent or dissenting shareholders.

ARTICLE 24 - MEETINGS

The Annual General Meeting shall be held on the last Thursday of the month of April at 11:30 hours or at the time specified in the notice of meeting.

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If this day is an official holiday, the Meeting shall be held on the Tuesday preceding the last Thursday of the month of April.

Extraordinary General Meetings may be convened at each such time as the Company's interests may require. It must be convened if requested by shareholders representing one fifth of the capital.

Annual and Extraordinary General Meetings shall be held at the place and time indicated in the notices of meeting.

ARTICLE 25 - NOTICES OF MEETING

General Meetings, both Annual and Extraordinary, shall meet upon being convened by the Board of Directors, represented by the Secretary as the case may be, or by the Statutory Auditor(s).

The notices of meeting shall contain the agenda and shall be sent in accordance with the applicable legal provisions.

ARTICLE 26 - REPRESENTATION

Any shareholder may be represented at the General Meeting by a proxyholder, whether a shareholder or not. Proxies shall be granted by means of a signed letter, a telefax or e-mail. A proxyholder may represent more than one shareholder.

ARTICLE 27 - PROCEEDINGS OF THE MEETING

The Chairman of the Board of Directors shall chair every General Meeting. If at any meeting the Chairman is not present within 5 minutes after the time appointed for holding the Meeting, or if he is not willing to act as chairman, the persons present and entitled to vote shall elect as chairman of the meeting any Director present who is willing to act as such or, if none, any other person present who is willing to act as such.

In case of absence of the Secretary, the chairman of the meeting shall designate a secretary for that particular meeting.

Each Director shall be entitled to attend and speak at any General Meeting of the Company.

ARTICLE 28 - QUORUM AND PROROGATION

The quorum for an Annual or Extraordinary Meeting of the Company shall be persons, present in person or by proxy, entitled to exercise not less than fifty per cent of the total number of votes attached to all the shares of the Company.

If within half an hour after the time appointed for any such meeting a quorum is not present, the meeting shall be adjourned for three weeks and notice of such adjourned meeting shall be given in accordance with Article 25 above. At such adjourned meeting, no special quorum requirements shall apply.

Any Annual or Extraordinary General Meeting may be adjourned for a period of up to three weeks by vote of the majority of the Directors present, except if the meeting has been convened at the request of one or more shareholders representing one fifth of the capital or (one of) the Auditor(s).

ARTICLE 29- NUMBER OF VOTES - EXERCISE OF VOTING RIGHTS

Each share shall confer one vote.

No votes can be cast by letter, telefax or e-mail.

ARTICLE 30 - RESOLUTIONS

No General Meeting may pass resolutions on subjects, which are not on the agenda unless all shareholders are present, and with their unanimous consent.

Except in the cases provided by the applicable legal provisions, decisions shall be taken, whatever the number of shares represented at the General Meeting, by simple majority of the votes cast.

The votes shall be cast by show of hands or by calling out the shareholders' names, except if the General Meeting decides otherwise.

An attendance list indicating the names of the shareholders and the number of shares held by them shall be signed by each of them or by their proxyholders before entering the General Meeting.

ARTICLE 31 - MINUTES

Minutes of each General Meeting shall be signed by the chairman of that meeting and by those shareholders that wish to do so.

Copies or extracts of the minutes to be produced in legal proceedings or otherwise, including those extracts to be published in the annexes to the Belgian State Gazette, are validly authenticated if signed by a Director.

CHAPTER FIVE - INVENTORIES AND ANNUAL ACCOUNTS - DISTRIBUTION

ARTICLE 32 - INVENTORY AND ANNUAL ACCOUNTS

The business year of the Company commences on January 1 and ends on December 31 of each year.

Each year, the Board of Directors drafts an inventory and the annual accounts, in accordance with the applicable legal provisions.

The annual accounts shall comprise the Balance Sheet, the Income Statement and the notes thereto, and shall form a whole.

These documents shall be established in accordance with the law relating to accounting and annual accounts of credit institutions and its implementing decrees.

ARTICLE 33 - VOTING ON THE ANNUAL ACCOUNTS

The Annual General Meeting shall hear the report of the Directors and the report of the Auditor(s) and shall discuss the annual accounts.

The Directors shall answer the questions put to them by the shareholders in connection with their report or the matters included in the agenda.

The Auditor(s) shall answer the questions put to him (them) by the shareholders in connection with their report.

The Annual Meeting shall vote the adoption of the annual accounts.

After the adoption of the annual accounts, the General Meeting shall take a separate vote on the discharge of the Directors and Auditor(s) of their duties.

Such discharge shall only be valid if the annual accounts do not contain any omission or false indication concealing the real condition of the Company and, as regards the actions taken outside of these Articles, only if they have been mentioned in the notice of the meeting.

ARTICLE 34 - DISTRIBUTIONS

Each year, 5 percent of the net profits mentioned in the annual accounts shall be allocated to the formation of a reserve fund. This allocation shall cease to be compulsory when the reserve fund has reached one tenth of the capital.

The rest shall be placed at the disposal of the General Meeting.

ARTICLE 35 - PAYMENT OF DIVIDENDS

The payment of dividends shall be made at the time and at the place indicated by the Board of Directors.

The Board of Directors may, however, decide to pay an interim dividend out of the profits of the then current year and set the time of its payment.

<u>CHAPTER SIX - WINDING-UP - GATHERING OF ALL SHARES IN ONE HAND -</u> <u>LIQUIDATION</u>

ARTICLE 36 - ANTICIPATED WINDING-UP

If, following losses, the net assets of the Company are reduced to an amount less than half of the capital, a General Meeting must be convened within a time period not exceeding two months as from the date on which the loss has been established or should have been established by virtue of the legal obligations or these Articles, in order to vote on the possible winding-up of the Company in accordance with the conditions set for amendment to the Articles or on other measures.

The Board of Directors shall justify its proposals in a special report placed at the disposal of the shareholders at the registered office of the Company fifteen days before the Meeting.

If, following losses, the net assets of the Company are reduced to an amount less than a quarter of the capital, the winding-up will take place if it is approved by a quarter of the votes cast at the General Meeting.

If the net assets of the Company are reduced to an amount less than the legal minimum capital, any interested party may ask in court for the winding-up of the Company.

ARTICLE 37 - GATHERING OF ALL SHARES IN ONE HAND

The gathering of all shares in the hands of one person does not trigger either the automatic or the judicial winding-up of the Company.

If within one year no new shareholder has entered the Company, and if the Company has not been validly wound up, the sole shareholder is deemed to be the joint and several guarantor of all obligations of the Company undertaken after the gathering of all shares in

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his hand until the entry of a new shareholder in the Company or the publication of its winding-up.

ARTICLE 38 - LIQUIDATION

In case of the winding-up of the Company for any reason and at any time, the liquidation shall be carried out by Liquidators appointed by the General Meeting and, failing such an appointment, the liquidation will be carried out by the Board of Directors in office at that time, acting as a liquidating committee.

The Liquidators shall have for this purpose the most extensive powers conferred by law.

The General Meeting shall determine the remuneration of the Liquidators.

ARTICLE 39 - DISTRIBUTION ON LIQUIDATION

After repayment of all debts, charges and costs of liquidation, the balance shall be used first for the repayment of the paid-up portion of the ordinary shares and Profit-Sharing Certificates A, it being understood that the nominal value of the Profit-Sharing Certificates A shall be repaid first before any repayment of the ordinary shares. The Profit-Sharing Certificates A will not be entitled to share in further liquidation proceeds of the company.

CHAPTER SEVEN - GENERAL PROVISIONS

ARTICLE 40 - GENERAL PRINCIPLES

Items not specifically set out in these Articles shall be determined in accordance with the applicable provisions of the Company Code.

Therefore, all applicable provisions of the Company Code are incorporated by reference into these Articles. Where the provisions of Company Code and the provisions specifically set out in these Articles do not agree, the provisions specifically set out in these Articles shall prevail except where these provisions conflict with public policy or mandatory provisions of the Company Code.

ARTICLE 41 - JURISDICTION

All disputes with shareholders, Directors and/or Auditors are to be exclusively settled before the Courts of Brussels.

CHAPTER EIGHT - PROFIT-SHARING CERTIFICATES

ARTICLE 42 – PROFIT SHARING CERTIFICATES A

The Profit Sharing Certificates A issued in accordance with article 5*bis* of the articles of association are subject to the following terms and conditions:

1. Definitions

Terms used in these Conditions in relation to the Securities referred to below will have the meaning defined in the Terms and Conditions of those Securities. In addition, in these Conditions the following expressions have the following meanings:

"Additional Amounts" shall have the meaning set out in Condition 7.

"Applicable Banking Regulations" means at any time the capital adequacy regulations then in effect of the CBFA or other regulatory authority in Belgium (or, if the Bank becomes domiciled in a jurisdiction other than Belgium, such other jurisdiction) having primary bank supervisory authority with respect to the Bank.

"Bank Ordinary Shares" means ordinary shares of the Bank or any ordinary share equivalent that may replace or be substituted for the ordinary shares of the Bank.

"Base Redemption Price" shall have the meaning set out in Condition 8(e).

"Deed Poll" means the deed poll dated on or about 10 June 2005 made by the Parent Company in favour of, *inter alios*, the Holders of the Profit-Sharing Certificates A in relation to certain covenants.

"Distribution Date" means a Fixed Distribution Payment Date or a Floating Distribution Payment Date, as defined in Conditions 4(b) and 4(c).

"Distribution Period" means a Floating Distribution Period or a Fixed Distribution Period, as defined in Conditions 4(b) and 4(c).

"Dividend Deferral Notice" shall have the meaning set out in Condition 4(e).

"Euro Interbank Offered Rate" means, in respect of any period, the offered rate in the Euro-zone interbank market for euro deposits for such period, as determined by the Calculation Agent in accordance with the provisions of the Agency Agreement.

"Exchange Upper Tier 2 Instruments" means instruments issued directly by the Bank constituting "upper tier 2" regulatory capital of the Bank on a solo basis under Applicable Banking Regulations having the same material terms as the Profit-Sharing Certificates A, as determined by an independent investment bank appointed by and at the expense of the Bank, except that each such instrument will (i) be a perpetual security issued by the Bank with cumulative interest, (ii) rank pari passu with any other "upper tier 2" capital securities issued by the Bank, (iii) not be redeemable upon a Tier 1 Disqualification Event, and (iv) be subject to such terms and conditions as may be required under the Applicable Banking Regulations to be capable of constituting "upper tier 2" regulatory capital of the Bank on a solo basis. For the avoidance of doubt, with respect to the Profit-Sharing Certificates A, any distribution entitlements outstanding but not yet declared at the time of exchange into Exchange Upper Tier 2 Instruments shall become outstanding cumulative interest payments for the purposes of the Exchange Upper Tier 2 Instruments. The terms of such Exchange Upper Tier 2 Instruments will be documented by the Bank and may be reflected in one or more agency agreements or in an agency agreement supplemental to the Agency Agreement, without the consent of the Holders of Profit-Sharing Certificates A, at the time of exchange.

"First Call Date" shall have the meaning set out in Condition 8(c).

"Fixed Distribution Payment Date" shall have the meaning set out in Condition 4(b).

"Fixed Distribution Period" shall have the meaning set out in Condition 4(b).

"Floating Distribution Payment Date" shall have the meaning set out in Condition 4(c).

"Floating Distribution Period" shall have the meaning set out in Condition 4(c).

"Floating Distribution Rate" shall have the meaning set out in Condition 4(c).

"Junior Securities" means, with respect to the Bank or the Parent Company, as the case may be, (i) Bank Ordinary Shares or the Parent Company Ordinary Shares, (ii) profit-

sharing certificates (parts bénéficiaires/winstbewijzen) of the Bank or the Parent Company ranking junior to the Parity Securities of the Bank or the Parent Company, as the case may be, or (iii) any other securities or obligations of the Bank or the Parent Company ranking or expressed to rank junior to the Parity Securities of the Bank or the Parent Company, as the case may be, issued directly by the Bank or the Parent Company (together with such securities as are mentioned in (i) and (ii), "Junior Shares") and (iv) any other securities or obligations of the Bank or the Parent Company ranking or expressed to rank junior to the Parity Securities of the Bank or the Parent Company, as the case may be and issued by any subsidiary of the Bank or the Parent Company ranking or expressed to rank junior to the Parent from the Bank or the Parent Company ranking or expressed to rank junior to the Profit-Sharing Certificates A ("Junior Guarantees").

"Make-Whole Price" shall have the meaning set out in Condition 8(e).

"Mandatory Distribution" means a distribution on the Profit-Sharing Certificates A which is mandatorily payable pursuant to Condition 6.

"Net Assets" means (subject to any change in Article 617 of the Belgian Company Code that may occur after the date of issuance of the Profit-Sharing Certificates A) the total assets of the Bank as they appear in the non-consolidated balance sheet of the Bank after deduction of provisions, debts (including for the avoidance of doubt, the Profit-Sharing Certificates A), formation expenses not yet written off and research and development costs not yet written off.

"Net Assets Deficiency Event" means (a) a decline in the Net Assets of the Bank to below the sum of its paid-in capital (or called-up capital if the latter is bigger) and nondistributable reserves, as determined in accordance with Article 617 of the Belgian Companies Code in relation to the distribution of dividends, or (b) a decline in the amount of total regulatory capital (*fonds propres/ eigen vermogen*) of the Bank on a solo or consolidated basis to below the minimum amount required by solvency requirements for credit institutions as provided by the current and future European banking regulations and Basel guidelines, as currently implemented by Article 82 §1,3° of the Decree of 5 December 1995 of the CBFA on the regulation of the own funds of the credit institutions (the "1995 Decree"). For the purposes hereof, references to the 1995 Decree and the provisions thereof will be deemed to refer to the same as may be amended from time to time or replaced by other laws, regulations or provisions.

"Parent Company" means Euroclear plc.

"Parent Company Ordinary Shares" means ordinary shares of the Parent Company or any ordinary share equivalent that may replace or be substituted for the ordinary shares of the Parent Company.

"Parity Securities" means, with respect to the Bank or the Parent Company, as the case may be, (i) the most senior ranking preferred or preference shares or profit-sharing certificates (*parts bénéficiaires/winstbewijzen*) ("Parity Shares") of the Bank or the Parent Company, if any, and (ii) guarantees by the Bank or the Parent Company (whether through an agreement or instrument labelled as a guarantee, as a support agreement, or with some other name but with an effect similar to a guarantee or support agreement) of preferred securities or preferred or preference shares issued by any of the Bank's or the Parent Company's respective subsidiaries, effectively ranking or expressed to rank *pari passu* with the Bank's or the Parent Company's respective Parity Shares ("Parity Guarantees"), if any.

"Permitted Share Acquisition" means an acquisition of Junior Securities, Parity Shares or other securities benefiting from a Parity Guarantee (i) by simultaneous replacement with other Junior Securities, Parity Shares or other such securities, as the case may be, of the same aggregate principal amount and the same or lower ranking, (ii) in connection with

transactions effected for the account of customers of the Bank or any of its subsidiaries or in connection with the distribution, trading or market-making in respect of such securities, or (iii) in connection with the satisfaction by the Bank or the Parent Company or any of the Parent Company's Subsidiaries of its obligations under any employee benefit plans or similar arrangements with or for the benefit of employees, officers, directors or consultants. For the avoidance of doubt, Set Rate Parity Securities may be replaced with new Set Rate Parity Securities, in accordance with (i) above, but Parity Securities that are not Set Rate Parity Securities may not be replaced by Set Rate Parity Securities.

"Relevant Date" shall have the meaning set out in Condition 7.

"Relevant Period" shall have the meaning set out in Condition 6(c).

"Relevant Tax" shall have the meaning set out in Condition 7.

"Securities" means the €300,000,000 Fixed/Floating Rate Subordinated Guaranteed Non-Cumulative Perpetual Securities issued by Euroclear Finance 2 SA and guaranteed by the Bank on or about 10 June 2005.

"Set Rate Parity Securities" means Parity Securities carrying a right to a set level of distribution (whether by reference to a fixed or floating rate or otherwise), as opposed to a right to a distribution the amount of which, subject to the availability of profits, is not set by reference to a fixed or floating rate or otherwise.

"Subsidiary" in relation to the Parent Company, shall have the meaning given in Section 736 of the Companies Act 1985.

"TARGET" means the Trans-European Automated Real-Time Gross Settlement Express Transfer System.

"TARGET Business Day" means a day on which TARGET is operating.

"Tier 1 Disqualification Event" shall have the meaning set out in Condition 8(d).

2. Nominal Amount

The Profit-Sharing Certificates A will be issued with a total nominal value in Euros equal to the sum of (i) the aggregate principal amount of the outstanding Securities, (ii) accrued but unpaid interest, if any, with respect to the current Interest Period accrued on a daily basis to (but excluding) the date of the Mandatory Conversion and (iii) Additional Amounts, if any.

3. Nature, Denomination, Form and Status

(a) Nature

The Profit-Sharing Certificates A constitute *parts bénéficiaires/winstbewijzen* as described under Article 483 of the Belgian Companies Code.

(b) Denomination

The denomination of each Profit-Sharing Certificate A is equal to the total nominal value issued in accordance with Condition 2, divided by the number of outstanding Securities contributed in consideration for their issuance. The denomination of the Profit-Sharing Certificates A will be expressed in Euros.

(c) Form

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The board of directors or executive committee of the Bank may determine that Profit-Sharing Certificates A will be issued in registered form or in the form of a global bearer certificate, in either case capable of being cleared through CIK (*Caisse interprofessionnelle de dépôts et de virements de titres/Interprofessionele effectendeposito- en girokas*), Euroclear and/or Clearstream, Luxembourg or their respective successors. If the Profit Sharing Certificates A are to be issued in registered form, the Bank shall procure that the register shall be kept in respect of them.

(d) Status

The Profit-Sharing Certificates A constitute direct, unsecured and subordinated obligations of the Bank and will rank at all times *pari passu* and without any preference among themselves. In the event of a general *concursus creditorum* (*concours des créanciers/samenloop van schuldeisers*) on the entire assets of the Bank, the rights of the Holders of Profit-Sharing Certificates A will rank behind those of all creditors of the Bank, including subordinated creditors (other than those, if any, whose claims are capable of constituting tier 1 regulatory capital of the Bank), and their payment will be subject to the condition precedent that all such creditors of the Bank will have been paid in full. The Profit-Sharing Certificates A will rank equally with the Parity Securities of the Bank, the Holders of Profit-Sharing Certificates A will be entitled to the repayment of the nominal value of the Profit-Sharing Certificates A, subject to the above ranking provisions, but will not be entitled to share in further liquidation proceeds of the Bank.

4. Distributions

(a) Conditional entitlement

The Holders of Profit-Sharing Certificates A are entitled to the distributions set out in this Condition 4, subject only to the availability of distributable profits in accordance with Article 617 of the Belgian Companies Code and to the condition set out in Condition 4(e). Those distributions will be made in priority to any distribution on the Junior Securities of the Bank. Distributions will be calculated and paid in Euros.

(b) Fixed distributions

If the Profit-Sharing Certificates A are issued before 15 June 2015, the distribution entitlement until (but excluding) that date will be calculated at the rate of 4.235 per cent. per annum on their nominal amount, payable in arrear on 15 June in each year (each, a "Fixed Distribution Payment Date"). On the first Fixed Distribution Payment Date following the date of issue of the Profit-Sharing Certificates A, the amount of the distribution will be calculated *pro rata temporis; provided that* no distribution will accrue on that first Fixed Distribution Payment Date on the part of the nominal value of the Profit-Sharing Certificates A which is referred to in item (ii) of Condition 2. For the purposes hereof and of Condition 8(e), *pro rata* accruals will be calculated on the basis of the actual number of days elapsed and the actual number of days in the Fixed Distribution Period. "Fixed Distribution Period" means each period from (and including) the issue date of the Profit-Sharing Certificates A or any Fixed Distribution Payment Date to (but excluding) the next Fixed Distribution Payment Date.

(c) Floating distributions

After 15 June 2015, the distribution entitlement will be calculated at the Floating Distribution Rate and will be payable quarterly in arrear on 15 September, 15 December, 15 March and 15 June in each year (each, a "Floating Distribution Payment Date"). If any Floating Distribution Payment Date would otherwise fall on a date which is not a TARGET Business Day, it will be postponed to the next TARGET Business Day unless it would thereby fall into the next calendar month, in which case it will be brought forward to the preceding TARGET Business Day. Each period beginning on (and including) 15 June 2015 or the issue date of the Profit-Sharing Certificates A (whichever is later) or any Floating Distribution Payment Date and ending on (but excluding) the next Floating Distribution Payment Date is herein called a "Floating Distribution Period".

The floating distribution rate from time to time in respect of the Profit-Sharing Certificates A (the "Floating Distribution Rate") will be determined by the Calculation Agent on the following basis:

- (1) On the second TARGET Business Day before the beginning of each Floating Distribution Period (the "Distribution Determination Date"), the Calculation Agent will determine the offered rate for three-month Euro deposits for the Floating Distribution Period concerned as at 11.00 a.m. (Central European Time) on the Distribution Determination Date in question. Such offered rate will be that which appears on the display designated as page "248" on the Telerate Service (or such other page or service as may replace it for the purpose of displaying Euro-zone interbank offered rates of major banks for three-month Euro deposits). The Floating Distribution Rate for such Floating Distribution Period shall be the aggregate of 1.83 per cent. per annum and the rate which so appears, as determined by the Calculation Agent.
- (2) If the offered rate so appearing is replaced by the corresponding rates of more than one bank, then Condition 4(c)(1) shall be applied, with any necessary consequential changes, to the arithmetic mean (rounded, if necessary, up to the nearest 1/16 per cent.) of the rates (being at least two) which so appear, as determined by the Calculation Agent. If for any reason such offered rates do not so appear, or if the relevant page is unavailable, the Calculation Agent will request each of the banks whose offered rates would have been used for the purposes of the relevant page if the event leading to the application of this Condition 4(c)(2) had not happened or any duly appointed substitute reference bank, acting in each case through its principal Euro-zone office (each a "Reference Bank"), to provide the Calculation Agent with its offered quotation to leading banks for three-month Euro deposits in the Euro-zone for the Floating Distribution Period concerned as at 11.00 a.m. (Central European Time) on the Distribution Determination Date in question. The Floating Distribution Rate for such Floating Distribution Period shall be the aggregate of 1.83 per cent. per annum and the arithmetic mean (rounded, if necessary, up to the nearest 1/16 per cent.) of such quotations (or of such of them, being at least two, as are so provided), as determined by the Calculation Agent.
- (3) If on any Distribution Determination Date such offered rate does not so appear on page "248" on the Telerate Service (or such other page or service as aforesaid) and the Calculation Agent is not able to obtain quotations from two or more Reference Banks, the Floating Distribution Rate shall be the Floating Distribution Rate in effect for the last preceding Floating Distribution Period to which one of Conditions 4(c) (1), (2) or (3), shall have applied.

If the Profit-Sharing Certificates A are issued after 15 June 2015, then, for the first Floating Distribution Period following the date of issue, the amount of the distribution will be calculated *pro rata temporis*; *provided that* no distribution will accrue on that first Floating Distribution Payment Date on the part of the nominal value of the Profit-Sharing Certificates A which is referred to in item (ii) of Condition 2 and, unless the Profit-Sharing Distribution Rate will be the same as the Floating Rate of Interest applicable to the Securities at the time of issuance of the Profit-Sharing Certificates A. For the purposes hereof and of Condition 8(e), *pro rata* accruals will be calculated on the basis of the actual number of days elapsed in the Floating Distribution Period and a year of 360 days.

(d) Calculations and notification

The amount of distribution payable on each Floating Distribution Payment Date will be calculated by the Calculation Agent, and such amount and each Floating Distribution Rate will be notified by the Calculation Agent, in accordance with the provisions of the Agency Agreement and notified by the Calculation Agent, as soon as practicable after such determination, to each listing authority, stock exchange and/or quotation system (if any) by which the Profit-Sharing Certificates A have been admitted to listing, trading and/or quotation.

(e) Net assets deficiency

If, and to the extent that, before or as a result of paying any distribution on the Profit-Sharing Certificates A, a Net Assets Deficiency Event has occurred and is continuing or would occur with respect to the Bank, the Bank will not declare or pay any such distribution (subject to Condition 6) and shall, not later than 10 TARGET Business Days prior to the relevant Distribution Date, give notice (a "Dividend Deferral Notice") thereof.

(f) Distributions not cumulative

Any distribution missed by reason of the application of Condition 4(e) or of insufficiency of distributable profits in accordance with Article 617 of the Belgian Companies Code will be definitively forgone, and the Holders of Profit-Sharing Certificates A will not be entitled to any carry forward of such missed distribution.

5. Dividend Stopper and Undertaking

(a) Bank

If a full distribution has not been paid on the Profit-Sharing Certificates A on any Distribution Date, then the Bank shall, for a period of 12 months after such Distribution Date, (i) not propose to its shareholders and, to the fullest extent permitted by applicable law, otherwise act to prevent the declaration or payment of any dividend or other payment in respect of its Junior Securities or Parity Securities and (ii) not redeem, repurchase or otherwise acquire any of its Junior Securities, Parity Shares or other securities having the benefit of a Parity Guarantee (other than pursuant to a Permitted Share Acquisition).

(b) Parent Company

The Parent Company has agreed in the Deed Poll that, if a full distribution has not been paid on the Profit-Sharing Certificates A on any Distribution Date, then for a period of 12 months after such Distribution Date (A) it (i) shall not declare or pay any dividend or other payment in respect of its Junior Securities or Parity Securities, and (ii) shall not redeem, repurchase or otherwise acquire any of its Junior Securities, Parity Shares or other securities having the benefit of a Parity Guarantee (other than pursuant to a Permitted Share Acquisition), and (B) it will not vote, and shall procure that no vote is cast by any of its Subsidiaries, in favour of any of the actions of the Bank described in Condition 5(a).

(c) Partial distributions

If a partial distribution is paid on the Profit-Sharing Certificates A on any Distribution Date, Conditions 5(a) and 5(b) will not prevent the distribution of a partial dividend by the Bank or the Parent Company, in the same proportion, on any Set Rate Parity Securities during the period beginning on such Distribution Date and ending before the next succeeding Distribution Date. For the avoidance of doubt, any part of any accrued and unpaid interest otherwise due in respect of Securities and forming part of the aggregate nominal amount of the Profit-Sharing Certificates A on issue shall not represent a corresponding part of the distribution which has not been paid on the Profit-Sharing Certificates A.

(d) Exchange Upper Tier 2 Instruments

The Bank agrees and the Parent Company has agreed in the Deed Poll that the provisions hereof relating to the dividend stopper described in this Condition 5 will, after the conversion of all (but not part) of the Profit-Sharing Certificates A into Exchange Upper Tier 2 Instruments in accordance with Condition 8(d), continue to apply *mutatis mutandis* by reference to the deferral of interest payments due under the Exchange Upper Tier 2 Instruments.

(e) Undertakings

The Bank undertakes and the Parent Company has undertaken in the Deed Poll that neither of them will authorise, nor propose to their respective shareholders for authorisation, the issue of any Junior Securities, Parity Shares or other securities having the benefit of a Parity Guarantee unless such Junior Securities, Parity Shares or other securities having the benefit of a Parity Guarantee, as the case may be, are subject to the terms of this Condition 5.

The Bank undertakes to use its best endeavours to procure and thereafter maintain a listing of the Profit-Sharing Certificates A on an EU-regulated exchange as soon as practicable after their issue.

6. Mandatory Distributions

(a) Circumstances

Notwithstanding Condition 4(e), but subject always to the availability of distributable profits in accordance with Article 617 of the Belgian Companies Code at the time of the declaration of the Distribution, if the Bank (A) pays any dividend or other payment in respect of any of its Junior Securities or Parity Securities or (B) redeems, repurchases or otherwise acquires any of its Junior Securities, Parity Shares or other securities having the benefit of a Parity Guarantee (other than pursuant to a Permitted Share Acquisition), then the distributions payable on each Distribution Date occurring during the Relevant Period (as defined below) will be mandatorily payable on each such date.

(b) Partial distributions

If a partial distribution is paid on any Set Rate Parity Securities, Condition 6(a) will only render mandatory the payment of a partial distribution, in the same proportion, on the Profit- Sharing Certificates A during the Relevant Period.

(c) Relevant Period

For the purposes of the foregoing, "Relevant Period" means:

- (i) for any Relevant Period commencing on or before 15 June 2015, one year; *provided that*, if such Relevant Period commences after 15 June 2014, it will end on and include 15 June 2015; and
- (ii) for any Relevant Period commencing after 15 June 2015:
 - (1) one year, in the case of (A) any dividend or other payment in respect of Junior Securities or Parity Securities that have annual scheduled payments or have no scheduled payment dates, or (B) any redemption, repurchase or other acquisition of Junior Securities, Parity Shares or other securities having the benefit of a Parity Guarantee,
 - (2) six months, in the case of any dividend or other payment in respect of Junior Securities or Parity Securities that have semi-annual scheduled payments, and
 - (3) three months, in the case of any dividend or other payment in respect of Junior Securities or Parity Securities that have quarterly (or more frequent) scheduled payments,

provided in each case that such Relevant Period (unless it commences after 15 June 2014 and ends on and includes 15 June 2015) will commence on and include the day of the

relevant dividend or redemption, repurchase or other acquisition but will not include the corresponding day of the third, sixth or twelfth month thereafter, as the case may be.

7. Taxation

All distribution payments in respect of the Profit-Sharing Certificates A by or on behalf of the Bank will be made free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of the Kingdom of Belgium or any political subdivision thereof or any authority therein or thereof having power to tax, unless the withholding or deduction of such taxes, duties, assessments or governmental charges (the "Relevant Tax") is required by law. In that event, the Bank will pay such additional amounts (the "Additional Amounts") as will result in receipt by the Holders of Profit-Sharing Certificates A after such withholding or deduction of such amounts as would have been received by them had no such withholding or deduction been required, except that no such Additional Amounts will be payable in respect of any Profit-Sharing Certificate A:

- (a) held or presented for payment by or on behalf of a Holder who is liable to such Relevant Tax solely by reason of his having some connection with the Kingdom of Belgium other than the mere holding of the Profit-Sharing Certificate A; or
- (b) presented for payment more than 30 days after the Relevant Date except to the extent that the Holder of such Profit-Sharing Certificate A would have been able to avoid such Relevant Tax by presenting such Profit-Sharing Certificate A for payment on the last day of such period of 30 days.

In these Conditions, "Relevant Date" means whichever is the later of (1) the date on which the payment in question first becomes due and (2) if the full amount payable has not been received by the Fiscal Agent on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Holders of Profit-Sharing Certificates A.

Any reference in these Conditions to distributions will be deemed to include any Additional Amounts which may be payable under this Condition 7.

8. Redemption

(a) No fixed redemption date

The Profit-Sharing Certificates A do not have a fixed redemption date.

(b) No redemption at the option of the Holders

The Profit-Sharing Certificates A are not redeemable at the option of the Holders.

(c) Redemption at the option of the Bank

The Profit-Sharing Certificates A may be redeemed at the option of the Bank, in whole (but not in part), on 15 June 2015 (the "First Call Date") or on any subsequent Distribution Date at the Base Redemption Price; *provided that* the Bank will give notice in accordance with Condition 14 (which shall be irrevocable) to the Holders of Profit-Sharing Certificates A not less than 60 days but not more than 90 days prior to any such redemption on the First Call Date and not less than 30 days but not more than 60 days prior to any such redemption on any subsequent Distribution Date.

(d) Redemption upon Tier 1 Disqualification Event

Upon the occurrence of a Tier 1 Disqualification Event, the Bank will have the right by giving not less than 30 nor more than 60 days' notice to the Holders of Profit-Sharing Certificates A in accordance with Condition 14 (which shall be irrevocable), (i) at any time before the First Call Date, to redeem the Profit-Sharing Certificates A in whole (but not in part) at a redemption price equal to the greater of (x) the Make-Whole Price and (y) the Base Redemption Price, (ii) on the First Call Date or on any subsequent Distribution Date, to redeem the Profit-Sharing Certificates A in whole (but not in part) at the Base Redemption Price, or (iii) at any time, to convert the Profit-Sharing Certificates A in whole (but not in part) into Exchange Upper Tier 2 Instruments. For the purposes of the foregoing, "Tier 1 Disqualification Event" means the receipt by the Bank of an opinion or declaration, rule or decree of the CBFA to the effect that there has been either (i) a change in law or regulation or (ii) a change in the official interpretation thereof, resulting in the Profit-Sharing Certificates A (or any portion thereof) no longer being capable of constituting tier 1 capital of the Bank on a solo basis or no longer being capable of constituting tier 1 capital of the Bank on a consolidated basis, in either case, under Applicable Banking Regulations.

(e) Redemption price

For the purposes of the foregoing, "Base Redemption Price" means an amount equal to the aggregate of (i) the aggregate nominal value of the Profit-Sharing Certificates A and (ii) an amount equal to pro rata unpaid distributions, if any, with respect to the current Distribution Period accrued up to the date fixed for redemption, and (iii) Additional Amounts, if any, in accordance with Condition 7; and "Make-Whole Price" means the price determined by the Calculation Agent, which is calculated by discounting at a rate of the Bund Yield plus 0.25 per cent., the nominal amount and distributions that are due after the value date for which the redemption has been exercised up to and including the First Call Date (assuming full payment of each and redemption of the Profit-Sharing Certificates A in whole thereon). For this purpose, the Bund Yield shall be the offer yield, as determined by the Calculation Agent, on the second day on which the TARGET System is operating before the relevant date for redemption, on an annual Actual/Actual basis, of the "on the run" German government bond that is displayed on the Bloomberg German Government Pricing Monitor for reference Bund bonds, page PXGB (or such other page or service as may replace it for the purpose of displaying reference Bund bonds), and that has a maturity closest to the First Call Date. The Base Redemption Price and the Make- Whole Price will be expressed in Euros.

(f) Conditions and procedure

Any redemption or exchange of Profit-Sharing Certificates A is subject to compliance with all applicable regulatory requirements, including the prior approval of the CBFA. In any event, no redemption of Profit-Sharing Certificates A will be permitted if, before or as a result of paying any distribution (including such redemption or exchange) on the Profit-Sharing Certificates A, a Net Assets Deficiency Event has occurred and is continuing or would occur with respect to the Bank. Any redemption of Profit-Sharing Certificates A will further be subject to the conditions and procedures set out in Articles 612, 613 and 620 of the Belgian Companies Code; for the avoidance of doubt, any redemption or exchange effected in accordance with this Condition 8 will not constitute a modification of the respective rights of the Holders of Profit-Sharing Certificates A compared to the rights of the holders of any shares or other profit-sharing certificates of the Bank for the purposes of Article 560 of the Belgian Companies Code, and the Holders of Profit-Sharing Certificates A will not be entitled to vote on any decision made in accordance with Articles 612 and 620 of the Belgian Companies Code.

(g) No further rights

Upon redemption of the Profit-Sharing Certificates A, their Holders will cease to be entitled to any subsequent distribution or other rights.

9. Voting and Preference Rights

(a) Voting rights

The Holders of Profit-Sharing Certificates A will have no voting rights, save in the cases mandatorily provided for by the Belgian Companies Code. They will not be entitled to attend shareholders meetings, save when they are entitled to vote.

(b) Preference rights

The Holders of Profit-Sharing Certificates A will have no preference rights in respect of any subsequent issuance of shares, profit-sharing certificates (*parts bénéficiaires/winstbewijzen*) or other securities by the Bank.

10. Reduction by Way of Absorption of Losses

The reserve constituted by contributions made in consideration for the issuance of the Profit-Sharing Certificates A may only be reduced in accordance with Articles 612 to 614 of the Belgian Companies Code. This reserve may be reduced by way of absorption of losses in accordance with Article 614 of the Belgian Companies Code. However, the entitlement of the Holders of Profit-Sharing Certificates A to distributions in accordance with these Conditions will continue irrespective of any such reduction even if it results in the cancellation of the entire reserve representing the Profit-Sharing Certificates A.

11. Amendments

These Conditions may be amended without the consent of the Holders of Profit-Sharing Certificates A to correct a manifest error. The rights attached to the Profit-Sharing Certificates A and these Conditions may be amended in accordance with the rules applicable to modifications to the by-laws of the Bank, taking into account Article 560 of the Belgian Companies Code if applicable. The parties to the Agency Agreement may agree to modify any provision thereof, but the Bank will not agree, without the consent of the Holders of Profit-Sharing Certificates A granted in a general meeting with the same conditions of quorum and majority as those required for modifications to the statutes, to any such modification unless it is of a formal, minor or technical nature, it is made to correct a manifest error or it is, in the opinion of such parties, not materially prejudicial to the interests of the Holders of Profit-Sharing Certificates A.

12. Transferability

The transferability of Profit-Sharing Certificates A is subject to the provisions of Article 508 of the Belgian Companies Code (which provides that: "Profit-sharing certificates ... are transferable from the tenth day after the filing of the second annual accounts that follows their issuance. Until the end of that period their transfer may only be operated by public deed or by written agreement, notified to the company within a month of the transfer, all this under sanction of nullity –. The nullity may only be invoked by the purchaser"), to the extent applicable.

In accordance with Articles 463, 465 and 508 of the Belgian Companies Code, the register of Profit-Sharing Certificates A, any certificates evidencing inscriptions in the register of Profit-Sharing Certificates A, and any certificate of deposit (*depositobewijs/certificat de dépôt*) in respect of Profit-Sharing Certificates A in bearer form shall mention the transferability conditions set out in this Condition 12.

13. Further Issues

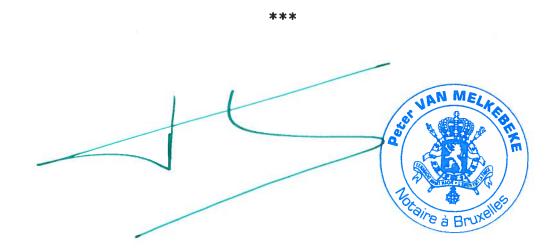
The Bank may from time to time, without the consent of the Holders of Profit-Sharing Certificates A, unless required by applicable law, create and issue further securities having the same terms and conditions as the Profit-Sharing Certificates A in all respects (or in all respects except for the first distribution) so as to form a single series with the Profit-Sharing Certificates A.

14. Notices

Without prejudice to the applicable provisions of the Belgian Companies Code, notices to the Holders of Profit-Sharing Certificates A will be published in a leading English newspaper in London (which is expected to be the *Financial Times*) and, so long as the Profit-Sharing Certificates A are listed on the Luxembourg Stock Exchange and its rules so require, a leading newspaper having general circulation in Luxembourg (which is expected to be *d'Wort*). If and so long as the Profit-Sharing Certificates A are deposited with a settlement system, notices may also be published through such system. Any such notice will be deemed to have been given on the date of first publication.

15. Governing Law and Jurisdiction

The Profit-Sharing Certificates A will be governed by and construed in accordance with Belgian law. Any dispute in connection therewith will be subject to the exclusive jurisdiction of the courts of the jurisdiction in which the Bank has its registered office.



EUROCLEAR BANK SA/NV



April 2014

Terms and Conditions governing use of Euroclear

The clearance and settlement system for internationally traded securities



Post-trade made easy

The Euroclear System is operated under contract by: Euroclear Bank SA/NV

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Euroclear Bank is a banking corporation organised under the laws of the Kingdom of Belgium

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Exhibit E-3

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The following Terms and Conditions govern your use of the Euroclear System.

1. Definitions

The following definitions apply when used in this document, unless the context requires otherwise:

Account – any account opened by us in your name as described in the Terms and Conditions, including, without limitation, Securities Clearance Accounts, Cash Accounts and Non-Deposit Accounts.

Business Day – a day when Euroclear Bank is open for business.

Cash Account – a current account (which may be divided into a number of sub-accounts, denominated in any Settlement Currency as permitted by the Operating Procedures) opened in connection with the Euroclear System by us on our books in your name.

Depository – a financial institution at which securities are held in custody in accordance with Section 4(b)(i) or, as required, any custody agent or other service provider, including a common service provider, appointed by us to service securities.

Euroclear Bank - we, Euroclear Bank, a société anonyme incorporated under Belgian law.

ESA – Euroclear SA/NV, a société anonyme incorporated under Belgian law.

Euroclear System – the clearance and settlement system for internationally traded securities operated by or for us under contract. This includes all services we offer in respect of securities held or recorded in any Account as set forth in the Terms and Conditions.

New Global Note – a security issued in the form of a global certificate which refers to our records and/or the records of Clearstream Banking S.A. ('Clearstream') to determine the total remaining indebtedness of the issuer as determined from time to time (the issue outstanding amount).

New Safekeeping Structure – a security where the relevant certificate is held in our vaults and/or the vaults of Clearstream as safekeeper and where the registered owner is our nominee company or a Clearstream nominee.

Non-Deposit Account – a memorandum account that we maintain in your name for the purpose of recording information and providing services in respect of entitlements that are not held in the Euroclear System and that may be registered or recorded in your, or your designee's, name or otherwise held directly by you or your designee.

Operating Procedures – the operating procedures established by us in accordance with Section 3 as may be amended or supplemented from time to time.

Other Settlement System – any entity operating a system for the holding of securities or the settlement of securities transactions.

Participant – you and any other entity, which has entered into an agreement to participate in the Euroclear System as a Participant under the Terms and Conditions and which has provided other documentation in the form required by us, including those in connection with the operation of its Securities Clearance Account and Cash Account.

The term 'Participant' shall also include those using the Euroclear System on a temporary basis in accordance with the Operating Procedures ('Temporary Participants'), but only for the period during which (and the circumstances under which) they are permitted by the Operating Procedures to use the Euroclear System.

Securities Clearance Account – a securities account opened in connection with the Euroclear System by us, on our books, in your name.

Securities **'held in the Euroclear System'** – refers to securities credited to a Securities Clearance Account or otherwise held in the Euroclear System pursuant to Section 4(e).

Securities Loss – has the meaning as described in Section 17(a).

Settlement Currency - has the meaning as described in Section 16(d).

Specialised Depository – has the meaning as described in Section 4(c).

Terms and Conditions – these Terms and Conditions as supplemented by the Operating Procedures, as the same may be amended or supplemented pursuant to Section 19.

Transit Account – an account opened in connection with the Euroclear System by us on our books in your name, as further described in the Operating Procedures.

2. Securities Clearance Accounts and Cash Accounts

Except as otherwise agreed in writing between you and us, we will open a Securities Clearance Account and a related Cash Account for you. You may open additional Securities Clearance Accounts and related Cash Accounts with our consent.

It is our and your intention that Securities Clearance Accounts are:

- i. at all times located and maintained for all purposes at our registered office in Belgium
- ii. governed by the Terms and Conditions
- iii. governed solely by Belgian law for all purposes including, without limitation, asset protection.

You acknowledge that we may from time to time receive operational support from one or more of our offices outside Belgium. Such support does not change in any way the location of any Securities Clearance Account.

3. **Operating Procedures**

The Operating Procedures have been established for the Euroclear System. The Operating Procedures, which are supplemental to and constitute an integral part of the Terms and Conditions, set forth detailed rules and procedures for the functioning of the Euroclear System.

In the event of any conflict between the Operating Procedures and these Terms and Conditions, the latter shall prevail.

4. Holding of securities; terms of custody

(a) **Belgian Law** – The following Belgian legal texts apply to the extent applicable to securities held in the Euroclear System:

- i. the coordinated Royal Decree No. 62 dated November 10, 1967 on the Deposit of Fungible Financial Instruments and the Settlement of Transactions involving such Instruments (the 'Royal Decree')
- ii. the Law dated January 2, 1991 related to the Belgian public debt
- iii. the Law dated July 22, 1991 related to commercial papers and certificates of deposit
- iv. the Companies Code
- v. other applicable Belgian legislation providing for a regime of fungibility, as the case may be and as the same may be amended, supplemented or superseded from time to time.

The Terms and Conditions have effect as supplemented by the provisions of the Royal Decree and other applicable Belgian legislation.

Each Participant agrees that securities of any issue held in the Euroclear System on its behalf may be treated by us as fungible with all other securities of the same issue which are on deposit with us subject to the Royal Decree and other applicable Belgian legislation.

You have no right to any specific securities certificates for securities held in the Euroclear System, but are, instead, entitled, subject to the Terms and Conditions, to transfer (by book entry), to deliver or to repossess from us an amount

of securities of the issue equivalent to the amount credited to your Securities Clearance Account, without regard to the certificate numbers of the securities certificates.

Our obligation to you with respect to such securities will be limited to effecting such a transfer, delivery or repossession.

(b) Where we hold securities - Securities held in the Euroclear System will be held with us except that:

- i. we may hold securities with any Depository in accordance with arrangements requiring such Depository to hold such securities either:
 - (y) in its own vaults
 - (z) with any subcustodian in conformity with the practice of such Depository or, directly or indirectly through such a subcustodian, with any Other Settlement System (such subcustodian or Other Settlement System to be approved by us) and upon such terms and conditions as may be customary for such subcustodian or Other Settlement System (or upon such other terms and conditions as may be approved by us), it being understood that any securities so deposited or held by us are to be carried in a customers' securities account of us with such Depository.
- ii. any Other Settlement System with which securities are held may, in turn, redeposit or hold securities with one or more subcustodians or Depositories used by it without the requirement of our approval
- iii. securities may from time to time be in transit in connection with the operations of the Euroclear System.

(c) **Designation of Depositories** – We may, with respect to any issue of securities, designate one or more Depositories for securities of such issue held in the Euroclear System, and may terminate any such designation.

So long as a Depository is so acting with respect to any such issue of securities, it will be a 'Specialised Depository' for such issue. The designation of a Depository as a Specialised Depository will not preclude securities from being held with any subcustodian or Other Settlement System pursuant to Section 4(b)(i) or (ii).

We will give periodic notices to you of any Specialised Depositories for the various issues of securities.

(d) Securities held in the Euroclear System – Unless otherwise provided in the Operating Procedures:

- i. a security will be deemed to be held in the Euroclear System if it is either:
 - (w) credited to a Securities Clearance Account
 - (x) physically received by a Depository for credit to a Securities Clearance Account, unless it may be refused by the Depository initially receiving the security for deposit, as not being in the form, or for not satisfying any of the prescribed conditions
 - (y) tendered to us by an Other Settlement System for credit to a Securities Clearance Account and the prescribed conditions, with respect to the acceptance of such tender by us, have been satisfied
 - (z) debited from a Securities Clearance Account pending physical delivery unless the risk of loss with respect to such delivery has passed to the intended recipient in accordance with the Operating Procedures.
- ii. a security held in the Euroclear System will (subject to any adjustments contemplated by the Operating Procedures) be deemed to be held by the holder of the Securities Clearance Account:
 - (v) to which it is credited
 - (w) for the credit to which it was physically received by a Depository unless it may be refused
 - (x) for the credit to which it was tendered to us by an Other Settlement System
 - (y) from which it was debited pending physical delivery until the risk of loss with respect to such physical delivery has passed to the intended recipient in accordance with the Operating Procedures
 - (z) from which it was debited pending the tender of such security to an Other Settlement System.

(e) **Securities held in Non-Deposit Accounts** – We may offer services in relation to securities in respect of which information is recorded on a Non-Deposit Account as described in the Operating Procedures.

For the avoidance of doubt, securities in respect of which information is recorded on a Non-Deposit Account are not securities 'held in the Euroclear System' within the meaning of the Terms and Conditions.

You will not have any right to receive from us securities in respect of which information is recorded on a Non-Deposit Account and we will have no obligation to effect the transfer or delivery of such securities except, insofar as may be set forth in the Operating Procedures, an obligation to relay instructions with respect to such transfer or delivery, and we will have no liability with respect thereto.

5. Payments with respect to securities

(a) All payments of principal, premium, interest or dividends we receive with respect to securities credited to any Securities Clearance Accounts will be distributed to the holders of such Securities Clearance Accounts on the basis of the amounts of such securities credited thereto, in the manner and on such dates as may be specified in the Operating Procedures.

(b) We will take the steps as described in the Operating Procedures to have notice of any due date of any payment with respect to:

- i. any security credited to any Securities Clearance Account upon such security's maturity
- ii. any coupons pertaining to any such security.

If we have such notice, we will instruct each Depository to take such steps as are required to receive such payment.

(c) We will take such steps as described in the Operating Procedures to have notice of any call for redemption in whole or in part of any issue of securities credited to any Securities Clearance Account. In such a case, we will (except as otherwise provided in the Operating Procedures):

- i. for a redemption in part, in such manner as we deem fair and appropriate, determine to which Securities Clearance Accounts, and in what amounts, such securities to be so redeemed will be allocated
- ii. notify each holder of such a Securities Clearance Account of the amount of securities standing to such Account's credit which are to be redeemed
- iii. unless contrary instructions are received from the holder of such a Securities Clearance Account in accordance with the Operating Procedures, subject to rules and practices of any Other Settlement System, take such steps (or instruct a Depository to take such steps) as are required to receive such payment.

(d) We will take such steps as may be specified in the Operating Procedures with respect to payments in relation to securities in respect of which information is recorded on a Non-Deposit Account.

6. Effecting transactions

(a) Transactions between Participants, and transactions between Participants and non-Participants, will be effected in accordance with the Terms and Conditions, subject, in all events, to:

- i. sufficient securities standing to the credit of any Securities Clearance Account being available for any debit to be made to such Securities Clearance Account
- ii. sufficient funds or provision for such funds in any Cash Account being available for any debit to be made to such Cash Account.

(b) If the available securities standing to the credit of a Securities Clearance Account or the available funds or provision for such funds in a Cash Account to which any debits are to be made in accordance with the Terms and Conditions are sufficient to permit the carrying out of some but less than all such debits, then, except as otherwise specified in the Operating Procedures, we may determine, in our sole discretion without liability to any Participant, which debits are to be so made.

7. Limitation on effecting transactions

We are not required to effect any transaction (or take any other action) at your demand or upon your instructions pursuant to the Terms and Conditions:

- i. to the extent that the same would either:
 - (y) violate any applicable law, decree, regulation or order of any government or governmental body or international regulatory authority (including any court or tribunal)
 - (z) be contrary to any agreement made between you and us
- ii. in such other circumstances as may be specified in the Operating Procedures.

We will not have any liability for any loss or damage suffered by you as a result of the operation of the foregoing.

8. Receipt of securities

In the case of any receipt at a Depository of securities to be held in the Euroclear System, we will instruct any Depository to use reasonable efforts not to accept any securities which are not in the form, or which do not satisfy the conditions, prescribed by the Operating Procedures.

Subject to the foregoing, we accept no liability for losses incurred by you or any other person as a result of the receipt or acceptance of fraudulent, forged or invalid securities (or securities which are otherwise not freely transferable or deliverable without encumbrance in any relevant market) for credit to a Securities Clearance Account.

9. Reversal of entries

We reserve the right to reverse any erroneous credit to, or debit from, any Account and to reverse any conditional credit or debit if the relevant conditions should not be fulfilled.

10. Statements to be rendered by Euroclear Bank

We will send to you statements of your operations, at such times and under such conditions and in such ways as may be specified in the Operating Procedures.

It is your responsibility to reconcile your records with such statements and to inform us and provide evidence of any error or omission in any statement of (or any accompanying advice with respect to) any Securities Clearance Account or Cash Account in your name delivered to you pursuant to this section. Failure to do so within 30 calendar days of receipt of any such statement shall be evidence of your approval of such statement.

11. Depositories; Other Settlement Systems

(a) We may, from time to time:

- i. appoint banks or legal entities (other than Euroclear Bank) as additional depositories ('Depositories') for securities held in the Euroclear System
- ii. determine the terms and conditions upon which any Depository shall act
- iii. terminate the appointment of any Depository.

(b) We may, from time to time:

- i. enter into direct arrangements with Other Settlement Systems under which members of such Other Settlement Systems may effect transfers by book entry (without physical delivery) to you and you may effect transfers by book entry (without physical delivery) to members of such Other Settlement Systems
- ii. determine the terms and conditions of such arrangements
- iii. terminate any such arrangement at any time.

(c) We will have the sole right, to the exclusion of any Participant, to exercise or assert any rights or claims in respect of the actions or omissions of, or the bankruptcy or insolvency of, any Depository or any Other Settlement System with which we hold or deposit securities held in the Euroclear System and from whom we receive any securities held in the

Euroclear System, and deposited therewith or held thereby, and any amounts received by such Depository or Other Settlement System in respect of such securities.

(d) We will provide you with notice of the appointment or termination of any Depository or Other Settlement System, and of the designation, location or change in location of any Depository or Other Settlement System.

12. Duties and liabilities of Euroclear Bank

(a) **Duties we undertake to perform** – We undertake to perform such duties and only such duties as are specifically set forth in the Terms and Conditions.

In the absence of negligence or wilful misconduct on our part, we are not liable towards you, whether for contractual liability (responsabilité contractuelle/contractuele aansprakelijkheid) or liability in tort (responsabilité extracontractuelle/buitencontractuele aansprakelijkheid), with respect to any action taken or omitted to be taken by us when providing the services contemplated in the Terms and Conditions.

In addition, in the absence of gross negligence or wilful misconduct on our part, we are not liable towards you, whether for contractual liability (responsabilité contractuelle/contractuele aansprakelijkheid) or liability in tort (responsabilité extra-contractuelle/buitencontractuele aansprakelijkheid), for indirect losses such as, but not limited to, loss of business or loss of profit or for unforeseeable losses.

ESA may from time to time provide us with certain services in accordance with arrangements between us and ESA. We remain solely responsible towards you for the acts of ESA. You agree that ESA does not owe you any duty of care in relation to the operation of the arrangements, and, accordingly, agree that you will not take any action against ESA (or any person for whom ESA is liable) to recover damages, compensation or payment or remedy of any other nature in respect of any acts or omissions or events which occur while such arrangements are in operation. Furthermore, you agree that you have no other rights against ESA in connection with such arrangements.

(b) **Authenticity of instructions** – We will take action, as set forth in the Operating Procedures, to verify the authenticity of any instructions given to us by you or any other person in connection with the Euroclear System. Our actions or omissions as regards any instruction, document or other instrument, the authenticity of which has been so verified or which we believe to be genuine, are considered as duly performed by us and ratified by you. You expressly waive any claims whatsoever towards us in connection with such actions or omissions.

(c) Force Majeure – We are not liable for any action taken, or any omission to take any action required to be taken hereunder or otherwise to fulfil our obligations hereunder (including without limitation the failure to receive or deliver securities or the failure to receive or make any payment), in the event and to the extent that the taking of such action or such omission arises out of, or is caused by, war, insurrection, riot, civil commotion, act of God, accident, fire, water damage, explosion, mechanical breakdown, computer or system failure or other failure of equipment, failure or malfunctioning of any communications media for whatever reason (whether or not such media are made available to you by us), interruption (whether partial or total) of power supplies or other utility or service, strike or other stoppage (whether partial or total) of labour, any law, decree, regulation or order of any government or governmental body or international regulatory authority (including any court or tribunal) or any other cause (whether similar or dissimilar to any of the foregoing) whatsoever beyond our reasonable control.

(d) Additional limitations of liability – Without limiting the generality of the foregoing but without prejudice to our obligations under Section 17, we are not liable for the acts or omissions of (or the bankruptcy or insolvency of) any Depository or subcustodian or any Other Settlement System or any carrier transporting securities (provided we selected such carrier with due care and that the appropriate insurance has been obtained in respect of securities in possession of such carrier).

If, however, as a result of any act or omission of, or the bankruptcy or insolvency of, any Depository or subcustodian or any Other Settlement System or any carrier transporting securities selected by us, you in the capacity as holder of a Securities Clearance Account suffer any loss or liability, we will take such steps in order to effect a recovery as we deem appropriate under all the circumstances (including without limitation the bringing and settling of legal proceedings). Unless we are liable for such loss or liability by virtue of our negligence or wilful misconduct, we will charge to you the amount of any cost or expense in effecting, or attempting to effect, such recovery.

Notwithstanding the above, we are liable towards Eurosystem member national central banks for the acts or omissions of the agents which might operate our accounts opened directly with Other Settlement Systems, but only to the extent

that such acts or omissions cause Eurosystem member national central banks to suffer any loss or liability linked to securities that they hold for purposes of monetary policy operations or intra-day credit operations.

(e) We make no investigation with respect to and are not liable for any of the following:

- i. the acts and omissions of (or the bankruptcy, insolvency, creditworthiness or status of) any issuer, any entity acting for such issuer, or any guarantor of securities made eligible for services within the Euroclear System
- ii. the validity or binding effect of any such security or any guarantee thereof or any related document
- iii. any other similar matter.

(f) We are not liable for any loss resulting from any of the following:

- i. a failure by you, another Participant or any other person to comply with any procedures or requirements specified in the Terms and Conditions
- ii. actions we take in accordance with the Terms and Conditions.

(g) Where you request physical delivery of securities credited to a Securities Clearance Account maintained for you, our responsibility in respect of the delivery of such securities is as set forth in the Operating Procedures.

(h) We are authorised to sign on your behalf any declaration, affidavit or certificate of ownership, to the extent we may legally do so, which may be required from time to time and in doing so, to rely fully upon any information regarding you or the ownership of such securities which may have been provided to us by you or on your behalf.

(i) We may be a Participant and, in that capacity, we will have the same rights, duties and liabilities as if we were not the operator of the Euroclear System.

13. Fees and expenses

You will be charged such fees, and for such expenses and disbursements, as shall be specified from time to time in accordance with the Operating Procedures. Such charged amounts will be debited from your Cash Account(s).

14. Termination of participation; resignation of Participants

(a) We may at any time terminate your participation in the Euroclear System by giving you at least 30 calendar days notice, provided that we may effect such termination upon notice effective immediately either if:

- i. any of the following events shall occur:
 - (w) your liquidation or bankruptcy or initiation of any proceedings with respect thereto
 - (x) your application for composition with your creditors, whether in or out of court, or for deferment of your debts
 - (y) attachment or execution upon or against any of your assets or property
- ii. you no longer meet any of the admission criteria set out in the Operating Procedures and your continued participation in the Euroclear System could be materially prejudicial to the interests of the Euroclear System, Euroclear Bank or other Participants generally.

(b) You may resign from the Euroclear System by giving us notice. Such resignation will be effective upon the date upon which all your transactions with respect to any Account have been settled, provided that from and after the time that we receive such notice we may decline to accept any instruction or give effect to any transaction which would result in any credit to any Account in your name.

(c) The participation of any Temporary Participant in the Euroclear System shall, in addition, terminate as provided in the Operating Procedures.

(d) Upon the effectiveness of any termination or resignation, or as soon thereafter as is reasonably practicable, we will effect the return to you of the amounts you hold in your Cash Account(s) and securities credited to your Securities Clearance Account(s), provided, however, that we, without affecting any other rights we may have, have the right to:

- i. set off against or retain from such amounts to be so returned any amounts which are due to, or which may become due to, us from you
- ii. retain securities held in such Securities Clearance Account(s) to provide for the payment in full of any amounts which are due to, or which may become due to, us from you.

No such termination or resignation shall affect any right or liability arising out of events (including any Securities Loss) occurring, or securities delivered, prior to its effectiveness.

(e) We are not liable to you or any other person as a result of any termination or any other action taken pursuant to this Section 14.

15. Certain responsibilities and liabilities of Participants

(a) You must:

- i. comply with any law, decree, regulation, or order of any government or governmental body or international regulatory authority (including any court or tribunal) applicable to you or your participation in the Euroclear System and any contract, agreement or other instrument binding upon you
- ii. indemnify us upon demand against any loss, claim, liability or expense, including reasonable legal and accountancy fees, asserted against or imposed upon us (other than any such loss, claim, liability or expense caused by our negligence or wilful misconduct) as a result of either:
 - (v) the use of services provided in respect of a Non-Deposit Account, and arising out of or caused by the operation of any law, decree, regulation or order of any government or governmental body or international regulatory authority (including any court or tribunal)
 - (w) the violation or breach by you of any such law, decree, regulation, order, contract, agreement or other instrument
 - (x) your negligence, wilful misconduct or fraud
 - (y) the holding by you of any securities in the Euroclear System (or the receipt of payments or the effecting of any transaction with respect thereto) and arising out of or caused by the operation of any law, decree, regulation or order of any government or governmental body or international regulatory authority (including any court or tribunal)
 - (z) any actions, proceedings, claims or demands (including any legal actions) being taken or asserted against any Depository or Other Settlement System as a result of us providing the services to you pursuant to the Terms and Conditions.

(b) You are liable if any security received at any Depository or through an Other Settlement System for credit to any of your Securities Clearance Account(s) or Transit Account(s) is proven at any time to be forged, fraudulent or invalid (or otherwise not freely transferable and deliverable without encumbrance in any market which we determine to be relevant under the circumstances).

We shall, upon notice to you, debit from such Securities Clearance Account or Transit Account (as applicable, if the securities have not at the time been credited to such Securities Clearance Account or Transit Account), an amount of securities of the same issue upon discovery that securities so received are forged, fraudulent or invalid (or are not freely transferable and deliverable without encumbrance in any such market).

Our records as to which Securities Clearance Account or Transit Account securities received were initially to be credited will be sufficient evidence of the matters referred to therein in the event of controversy.

(c) Debit balances or overdrafts in Securities Clearance Accounts are prohibited in the Euroclear System.

If a shortfall of securities is recorded, at any time, with respect to securities of any issue in your Securities Clearance Account you must immediately deliver for credit (or otherwise cause to be credited) a sufficient amount of securities of such issue to such Securities Clearance Account to eliminate such shortfall.

If within 7 Business Days, or a lesser time as may be necessary, you do not deliver (or cause to be credited) such securities, we may (but, in our discretion, need not) purchase, for your account and at your sole expense, such amount of such securities for credit to such Securities Clearance Account, such purchase to be in such markets, in such manner and for such consideration as we shall reasonably determine.

(d) You are responsible for notifying us in writing, with appropriate supporting documents, of any change in your legal capacity or in the scope or validity of the signing authorities of your representatives. We have no obligation to make any inquiry or investigation with respect to such changes.

(e) Part III of the Operating Procedures (Rights and Responsibilities) further describes certain other rights and liabilities which apply to you when participating in the Euroclear System.

16. Special rules applicable to Cash Accounts

(a) **Unity of account and right of set off** – Except as otherwise provided by law or otherwise agreed in writing between you and us with respect to any specified account, all Cash Accounts and other current accounts with us in Belgium opened in your name are part of one single and indivisible current account of which they are mere subdivisions for bookkeeping purposes.

This is the case even if:

- i. such subdivisions are maintained in different currencies, earn credit interest or are charged debit interest at different rates
- ii. the transactions therein are reported in different statements of account.

Consequently, we have the option, among others, of transferring the balance of any subdivision of your current account that is in credit to any subdivision that is in debit or vice versa, at any time and without prior notice.

Transfers under this Section 16(a) between subdivisions of your current account denominated in different currencies will, unless provided otherwise in the Operating Procedures, be effected on the basis of either:

- i. the rate of exchange of the relevant currencies in relation to the Euro established at the daily fixing by the European Central Bank on the last Business Day prior to the transfer
- ii. if the rate of exchange of a currency in relation to the Euro is not fixed by the European Central Bank as aforesaid, on the basis of a quote obtained from a source we consider reliable.

(b) Except as otherwise provided by law or otherwise agreed between you and us in writing with respect to any specified account, the overall credit balance of your single and indivisible current account may be set off by us at any time and without prior notice against your debts to us that have not been paid when due.

(c) We will carry out instructions to make payments for your account in accordance with the Operating Procedures.

(d) **Holding of different Settlement Currencies** – We may, following customary practice, hold any currency in which any subdivision of your current account is denominated, on deposit in and effect transactions relating thereto through an account with one of our offices or another bank in the country where such currency is the lawful currency or in other countries where such currency may be lawfully held on deposit ('Settlement Currency').

We are not liable for any loss or damage arising from the applicability of any law or regulation, now or in the future in effect, or from the occurrence of any event, which may affect the transferability, convertibility, or availability of a Settlement Currency in the countries where such accounts are maintained.

In no event are we obliged to substitute another currency for a Settlement Currency whose transferability, convertibility or availability has been affected by such law, regulation or event.

To the extent that any such law, regulation or event imposes a cost or charge upon us in relation to the transferability, convertibility or availability of any such Settlement Currency, such cost or charge will be for your account.

(e) Transactions in a Settlement Currency shall be subject to the regulations laid down by the relevant exchange control authorities.

(f) **Interest rates** – We determine the terms and rates of interest applicable to credit balances in the various subdivisions of your current account and the terms and rates of interest to be charged on debit balances in the various subdivisions of your current account, and shall have the right to modify such terms and rates at any time.

Unless otherwise agreed, debit balances in any subdivision of your current account and interest thereon will be required to be offset forthwith by a corresponding credit to such subdivision of such current account by you.

(g) **Delay in the processing of payment instructions** – Except in the case of negligence or wilful misconduct, we are not liable for delays in carrying out your payment instructions. Without limiting the generality of the foregoing, in the event that we use the services of another bank or Other Settlement System (whether or not selected by us) for carrying out payment instructions we receive from you, we are not liable to you if such payment instructions, although transmitted correctly to that other bank or Other Settlement System, are not carried out or are carried out incorrectly by the latter.

In the event that a delay in the carrying out of a payment instruction is caused by our negligence, our liability will not exceed an interest equivalent, determined in accordance with the Operating Procedures, for the period from the day when the payment should have been carried out, but for our negligence, until the day when it is actually carried out (excluding any portion of such period during which we cannot carry out such instructions as a result of any event referred to in Section 12(c) and (d)). This is provided, however, that if you fail to report the delay to us within 10 calendar days from the date when the payment should, but for our negligence, have been made, the relevant period shall not exceed 10 calendar days.

17. Securities losses

(a) Loss sharing – The following is without prejudice to our obligation to take action under Section 17(c) or 17(e) or to any liability that we may have to compensate you for negligence or wilful misconduct on our part.

If all or any portion of the securities of a particular issue held in the Euroclear System is lost or otherwise becomes unavailable for delivery (such loss or unavailability being referred to as a 'Securities Loss'), then, subject to the last sentence of this Section 17(a), the reduction in the amount of securities of such issue held in the Euroclear System arising therefrom will be shared by those holding such issue in the Euroclear System at the opening of the Business Day on which we will make a determination that such Securities Loss has occurred (or if such day is not a Business Day, at the opening of business on the immediately preceding Business Day).

Such sharing is to be in proportion with the amount of securities of such issue so held at the time of such determination and will be effected by means of debits from Securities Clearance Accounts to which securities of such issue are credited at such time. This is subject to appropriate adjustment in the event that any portion of the securities of such issue held in the Euroclear System is for any reason not then credited to Securities Clearance Accounts.

Notwithstanding the foregoing, any reduction in the amount of securities available for delivery arising solely from any Securities Loss with respect to securities held with any Depository or Other Settlement System shall be shared at the time as of which such reduction is attributed to us.

For the purpose of this subsection:

- i. securities of a particular issue called for redemption in part and allocated to Securities Clearance Accounts under Section 5(c)(i) shall be considered to be a separate issue
- ii. we may deem a security of a particular issue to be lost or unavailable for delivery either:
 - (v) if such security is mutilated, lost, stolen or destroyed (or if for any other reason cannot be delivered or is unavailable for delivery)
 - (w) if such security proves to be forged, fraudulent or invalid (in whole or in part)
 - (x) if such security is nationalised, expropriated or seized
 - (y) if for any reason such security is not freely transferable or deliverable without encumbrance in any market which we determine to be relevant under the circumstances
 - (z) to the extent of any shortfall which has not been resolved under Section 15(c).

Notwithstanding the foregoing, we will not effect any debits with respect to a Securities Loss so long as we determine that we will be able to replace or recover the securities which are the subject of such Securities Loss in sufficient time and in a manner to permit the efficient operation of the Euroclear System, it being understood that the foregoing shall not require us to take any action to replace any security.

(b) **Claims reflected in a Non-Deposit Account** – Simultaneously with any debit from your Securities Clearance Account under Section 17(a), we will establish a Non-Deposit Account in your favour to reflect any claims, contingent or otherwise, which you may have against us as a result of either:

- i. any possible recovery of securities or cash which we may effect under Section 17(c) or 17(e)
- ii. any other liability arising from the Securities Loss that we may have to you under the Terms and Conditions, it being understood that the establishment of any such Non-Deposit Account will not increase our liabilities under the Terms and Conditions.

We will from time to time report the status of such Non-Deposit Account to you together with a general description of any action that we have taken or propose to take, under Section 17(c) or 17(e). We will not be required to take instructions from you or any other entity to effect any transaction with respect to such Non-Deposit Account.

(c) **Recovery of securities** – In the case of any Securities Loss with respect to any issue of securities which arises under circumstances in which any Depository, any Participant, any Other Settlement System, any subcustodian, or any other person is or may be legally liable (or if any other remedy may be available for making good the Securities Loss), we will take such steps to recover the securities which are the subject of such Securities Loss or damages (or to obtain the benefits of any such other remedy) as we reasonably deem appropriate under all the circumstances (including without limitation the bringing and settling of legal proceedings).

Unless we are liable for such Securities Loss due to our negligence or wilful misconduct, we will charge those sharing the reduction in securities arising out of such Securities Loss (proportionately in accordance with the amount of such sharing) the amount of any cost or expense incurred in connection with any action taken under Section 17(c). This Section 17(c) is not intended to limit the generality of the last paragraph of Section 12(d).

(d) Any cash amounts or securities which we recover in respect of a Securities Loss relating to a particular issue of securities or for which we are liable in connection with a Securities Loss will be credited to the appropriate Cash Accounts or Securities Clearance Accounts of those sharing the reduction in the amount of securities of such issue arising from such Securities Loss under Section 17(a).

(e) **Securities loss due to mutilation, loss, theft or destruction** – If a Securities Loss arises due to the mutilation, loss, theft or destruction of securities and it is necessary in order to obtain the reissuance of such securities that we obtain and deliver a security, indemnity or other like instrument, then:

- we will obtain and deliver such security, indemnity or other like instrument and, unless we are liable for such Securities Loss by virtue of our negligence or wilful misconduct, we may charge any related cost or expense to Participants affected by such Securities Loss, proportionately in accordance with the amount of securities subject to such Securities Loss
- ii. if we do not elect to proceed under clause (i), we will:
 - (y) notify each Participant affected by such Securities Loss
 - (z) to the extent practicable and if so instructed by any such Participant, obtain and deliver on behalf of and, unless we are liable for such Securities Loss by virtue of our negligence or wilful misconduct, at the cost and expense of those giving such instructions (proportionately in accordance with the amounts of such securities), such security, indemnity or other instrument, but, unless we are liable as aforesaid, only upon receiving satisfactory security, indemnity or other like instrument with respect to the cost and our expenses arising therefrom.

Nothing in this Section 17(e) requires us to issue any security, indemnity or other like instrument.

(f) **Our management of a securities loss** – If as a result of the operation of Section 17(a) or 17(d) there stands to the credit of one or more Securities Clearance Accounts a fraction of the smallest deliverable definitive certificate of an issue, we are authorised, in order to avoid any fractional security being credited, to sell and debit from (or to purchase and credit to) such Securities Clearance Accounts securities of such issue in an amount sufficient to eliminate such fractions. Any such sale or purchase will be for the accounts of the holders of such Securities Clearance Accounts, proportionately with respective amounts of such debits or credits, and may be made in the markets, manner and for such consideration as we reasonably determine.

(g) If a Securities Loss results from a failure to properly maintain the Issuer Memorandum Account (as defined in the Operating Procedures) in accordance with Section 12(a) for securities eligible as collateral in the Eurosystem and issued in New Global Note form or held in the New Safekeeping Structure:

- each Eurosystem member national central bank is excluded from any sharing of the reduction in the amount of such securities under Section 17(a), but only to the extent that such a national central bank held such securities for purposes of monetary policy operations or intra-day credit operations
- ii. any sharing of the reduction in the amount of such securities under Section 17(a) will be proportionate to the amount of such securities held by those sharing such reduction after application of Section 17 (g)(i).

18. Entire agreement; benefit of Terms and Conditions

Except as may be otherwise provided in any separate written agreement with you, the Terms and Conditions set forth the entire agreement with you for the subject matter hereof.

No customer or other entity or individual for which you may be acting will, in that capacity, have or be entitled to assert any rights, claims or remedies against us.

19. Modifications; waivers

The Terms and Conditions including the Operating Procedures may be amended or supplemented at any time upon notice to you. You will, without prejudice to your rights under Section 14(b), be deemed to have accepted any such amendment and supplement either:

- i. effective immediately, in the case of any amendment or supplement not adversely affecting you
- ii. effective ten Business Days after you are notified, in the case of any other amendment or supplement.

No failure to exercise a right or power conferred by the Terms and Conditions shall constitute a waiver thereof.

20. Notices

All notices, requests, demands or other communications from us are deemed to have been received as specified in the Operating Procedures and sent to the address most recently specified by you as your address for such purpose. All notices, requests, demands or communications to us are deemed to have been duly given and made when received at the address, and through the means, set forth in the Operating Procedures.

21. Maintenance of records; limitation on actions

We accept no responsibility to maintain records with respect to instructions received or transactions carried out five years from the time such instructions are received or transactions are carried out. Any action, claim or counterclaim by a holder of an Account based upon any such instruction or transaction is barred upon the expiration of such period of five years. The running of such period is not to be interrupted or suspended for any reason.

22. Governing law; jurisdiction; evidence

(a) The Terms and Conditions, any non-contractual obligations arising out of or in connection with the Terms and Conditions and all disputes arising thereunder or in connection therewith are governed by and construed in accordance with the laws of Belgium.

For the purposes of the law of 28 April 1999 implementing Directive 98/26/EC on settlement finality in payment and securities settlement systems and the Royal Decree, the Euroclear System itself, the holding of securities in the Euroclear System and the transfer of securities and related cash transfers within the Euroclear System are governed solely by the laws of Belgium.

(b) You submit to the nonexclusive jurisdiction of the competent courts of Brussels for the purposes of any dispute arising under the Terms and Conditions.

To the extent that you are prohibited by law or regulation to submit to the jurisdiction of a foreign court, a dispute arising out of or in connection with the Terms and Conditions may be finally settled under the Rules of Arbitration of the International Chamber of Commerce by an arbitral tribunal consisting of three arbitrators appointed in accordance with such Rules.

The place of any such arbitration shall be Brussels, Belgium and the arbitral proceedings shall be in the English language.

The award of the arbitrators shall be final and enforceable. You waive to the fullest extent permitted under the applicable law all immunity, whether on the basis of sovereignty or otherwise, in any proceeding hereunder and in any proceeding to recognise or enforce any judgement or award made by any foreign court or foreign arbitral tribunal in such a proceeding.

(c) Our own books and records (regardless of the media in, or upon, such books and records are maintained) are deemed to constitute sufficient evidence of any of your obligations to us and of any facts and events relied upon by us.

Exhibit E-3



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Euroclear is a carbon neutral company – PAS2060 certified in 2014

www.euroclear.com

EUROCLEAR BANK SA/NV

Exhibit E-4



October 2010

Supplementary Terms and Conditions governing the Lending and Borrowing of Securities through Euroclear

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www.euroclear.com

Notice:

Certain Borrowers of Securities under these Supplementary Terms and Conditions may be broker-dealers regulated under the U.S. Securities Exchange Act of 1934; pursuant to regulations applicable to such broker-dealers, notice is given that, in the event any such Borrower defaults on any obligation with respect to any Borrowing, Lenders will not be protected by the U.S. Securities Investor Protection Act of 1970, but will have recourse only to the guarantee set out in Section 14.

EUROCLEAR BANK SA/NV

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EUROCLEAR BANK SA/NV

The following Supplementary Terms and Conditions shall govern the lending and borrowing of securities through the Securities Lending and Borrowing Program. Capitalized words used herein to indicate defined terms shall have the meanings assigned to them in the Terms and Conditions Governing Use of Euroclear unless otherwise defined herein.

1. Definitions When used herein, unless the context otherwise requires: (a) 'Automatic Borrower' means a Borrower participating in automatic borrowing, as described in Section 7. (b) 'Automatic Lender' means a Lender participating in automatic lending, as described in Section 3. (c) 'Borrowed Securities' means securities borrowed by a Borrower pursuant to these Supplementary Terms and Conditions. (d) 'Borrower' means a Participant which is approved by Euroclear Bank as a Borrower and which (i) has acknowledged receipt of and agreement to these Supplementary Terms and Conditions, and (ii) maintains a credit arrangement satisfactory to Euroclear Bank. (e) 'Borrowing' means any borrowing of securities pursuant to and subject to these Supplementary Terms and Conditions (including any Non-cash Distribution distributed by an issuer on Borrowed Securities); different types of Borrowing may be defined, subject to different terms and conditions, in the Operating Procedures. (f) 'Business Day' has the meaning set forth in the Operating Procedures. (g) 'Cash Account' has the meaning set forth in the Operating Procedures. When referred to herein, the Cash Account of a Lender means the Cash Account associated with the Securities Clearance Account to which loaned securities were debited, and the Cash Account of a Borrower means the Cash Account associated with the Securities Clearance Account to which Borrowed Securities were credited. (h) 'Cash Distribution' means any interest, dividend or other payment distributed by any issuer, or any agent on behalf of an issuer, on any issue of securities as to which there are Borrowed Securities, other than a payment in full or in retirement thereof. (i) 'Euroclear Bank' means Euroclear Bank a société anonyme incorporated under Belgian law. 'Euroclear System' means the clearance and settlement system for internationally traded (i) securities operated under contract by Euroclear Bank. (k) 'Lendable Position' means the quantity of securities of an issue available for lending determined as set forth in the Operating Procedures. (1) 'Lender' means a Participant which is approved by Euroclear Bank as a Lender and which has acknowledged receipt of and agreement to these Supplementary Terms and Conditions. (m) 'Loan' means any loan of securities by a Lender pursuant to and subject to these Supplementary Terms and Conditions (including any Non-cash Distribution distributed by an issuer on loaned securities); different types of Loans may be defined, subject to different terms and conditions, in the Operating Procedures. (n) 'Market Value' of securities on a given Business Day means the market value of such securities determined by Euroclear Bank in accordance with the Operating Procedures. Any such

determination by Euroclear Bank shall be conclusive and binding on each Lender and Borrower.

1. Definitions (continued)

- (o) 'Non-cash Distribution' means any bonus securities, rights or other entitlements accepted for deposit in the Euroclear System, distributed by an issuer, or any agent on behalf of an issuer, on any issue of securities as to which there are Borrowed Securities.
- (p) 'Operating Procedures' means the Operating Procedures established by Euroclear Bank in accordance with the Terms and Conditions, as the same may be amended or supplemented from time to time.
- (q) 'Opportunity Borrower' means any Borrower making a Borrowing of securities pursuant to Section 8.
- (r) 'Opportunity Lender' means any Lender which is not an Automatic Lender.
- (s) 'Record-keeping Account' means an account to record Borrowings and Loans opened by Euroclear Bank on its books in the name of each Borrower and each Lender. A Recordkeeping Account may be divided into different subaccounts to record different types of Borrowings or Loans, or Borrowings or Loans with different terms, fees, priority allocations, or other features. Each such subaccount may be named 'a Record-keeping Account' but will be considered for all purposes, except as otherwise set forth in the Operating Procedures, as being part of one single and indivisible Record-keeping Account as defined herein. When referred to herein, the Record-keeping Account of a Lender means the Record-keeping Account associated with the Securities Clearance Account to which loaned securities were debited, and the Record-keeping Account of a Borrower means the Record-keeping Account associated with the Securities Clearance Account to which Borrowed Securities were credited.
- (t) 'Repayment Date' has the meaning set forth in Section 13 hereof.
- (u) 'Requested Recall' means the quantity of loaned securities which in accordance with the Operating Procedures is required to be returned to a Lender.
- (v) 'Securities Lending and Borrowing Program' means the program for securities lending and borrowing established under these Supplementary Terms and Conditions.
- (w) 'Supplementary Terms and Conditions' means these Supplementary Terms and Conditions Governing the Lending and Borrowing of Securities through Euroclear, as the same may be amended or supplemented from time to time.
- (x) 'Terms and Conditions' means the Terms and Conditions Governing Use of Euroclear, as the same may be amended or supplemented from time to time.

2. General Terms

- (a) The categories of securities eligible for lending and borrowing and the types of Loans and Borrowings that may be made pursuant to these Supplementary Terms and Conditions shall be as set forth in the Operating Procedures.
- (b) Each Lender and Borrower shall designate, in accordance with the Operating Procedures, one or more Securities Clearance Accounts as being available for the lending and/or borrowing of securities pursuant to these Supplementary Terms and Conditions. Euroclear Bank shall open a separate Record-keeping Account with respect to each Securities Clearance Account so designated, it being understood that if a Participant designates a single Securities Clearance Account as being available for both lending and borrowing, Euroclear Bank will open only one Record-keeping Account with respect to such Securities Clearance Account. It is understood that a Record-keeping Account is not a Securities Clearance Account and shall be used solely for the purpose of recording Loans by Lenders and Borrowings by Borrowers.

- 2. General Terms (continued)
- (c) Each Lender covenants to Euroclear Bank that
 - (i) it will have the right and will have received all requisite approvals necessary to lend all securities made available by it for lending and
 - (ii) it will not make any securities available for lending unless it is the beneficial owner of such securities or has obtained where necessary the prior consent of its customer or other person who is the beneficial owner of such securities to make such securities available for lending. Each Borrower covenants to Euroclear Bank that it will have received all requisite approvals necessary to borrow all Borrowed Securities.
- (d) These Supplementary Terms and Conditions are supplementary to the Terms and Conditions and, accordingly, except as otherwise expressly provided herein, the rights, duties, responsibilities and liabilities of Euroclear Bank and each Lender and Borrower and the limitations on such rights, duties, responsibilities and liabilities shall be governed by and determined in accordance with the Terms and Conditions.

All references to Securities Clearance Accounts and to holders of Securities Clearance Accounts in the Terms and Conditions shall, unless the context otherwise requires, be deemed to include Record-keeping Accounts and holders of Record-keeping Accounts.

In the event of any conflict between these Supplementary Terms and Conditions and the Terms and Conditions, the Terms and Conditions shall prevail. However, in the event of any conflict between these Supplementary Terms and Conditions and the Operating Procedures, these Supplementary Terms and Conditions shall prevail.

- (e) Lenders and Borrowers shall submit all notices, instructions and other communications contemplated hereby, including any withdrawals or modifications of such notices, instructions and communications, to Euroclear Bank by the means and in accordance with the formats and timings set forth in the Operating Procedures.
- (f) Euroclear Bank will not reveal the name of any Borrower of any particular issue of securities to any Lender of such securities or the name of any Lender of any particular issue of securities to any Borrower of such securities.
- (g) In furnishing the guaranty pursuant to Section 14, Euroclear Bank acts solely in its capacity as a bank and not in its capacity as operator of the Euroclear System.
- (h) A distribution or right on or with respect to any Borrowed Security other than a Cash Distribution or a Non-cash Distribution shall not, except as otherwise provided in the Operating Procedures, be included in any Loan or give rise to any rights of any Lender under these Supplementary Terms and Conditions.

3. Automatic Lending

Any Lender may advise Euroclear Bank that it wishes to be an Automatic Lender with respect to one or more of its Securities Clearance Accounts. Any options as to lending securities through the Securities Lending and Borrowing Program that are available from time to time, are set forth in the Operating Procedures. Euroclear Bank will determine in its sole discretion whether a Lender may be an Automatic Lender with respect to each account and option it elects.

Once a Lender has received advice from Euroclear Bank that it may be an Automatic Lender with respect to a particular Securities Clearance Account, securities standing to the credit of such account shall in accordance with the Operating Procedures be available for lending.

	Exhibit E-4	EUROCLEAR BANK SA/NV
4.	Opportunity Lending	(a) If Euroclear Bank determines in accordance with the Operating Procedures that the total of the Lendable Positions of securities of a particular issue for all Automatic Lenders will not be sufficient to fill all requests to borrow and to recall Loans of any type of securities, Euroclear Bank will, for any such issue, determine, in its sole discretion:
		 (i) whether to contact any Opportunity Lender to determine whether such Opportunity Lender is willing to make securities of such issue available for lending; (ii) which Opportunity Lender(s) to contact; and (iii) in which order any Opportunity Lender(s) will be contacted.
		Euroclear Bank will contact any such Opportunity Lender on each occasion before arranging a Loan of any type for such Opportunity Lender.
		(b) Euroclear Bank may at any time in its sole discretion cause one or more Loans of any type by an Opportunity Lender to be reimbursed in whole or in part, in accordance with the Operating Procedures.
5.	Implementation of Loans	(a) A Loan by a Lender shall be effected by Euroclear Bank by debiting to the Securities Clearance Account of the Lender, and simultaneously crediting to the related Record-keeping Account, the quantity of such securities, or as otherwise specified in the Operating Procedures. A reimbursement of a Loan shall be effected by debiting to the Record-keeping Account of the Lender and simultaneously crediting to the related Securities Clearance Account, the

(b) Euroclear Bank shall determine, in accordance with the Operating Procedures, the types and amounts of the Loans of each issue by each Lender.

quantity of such securities, or as otherwise specified in the Operating Procedures.

6. Loan Recall

All Requested Recalls of a particular issue shall be taken into account, in accordance with the Operating Procedures, before any requests to borrow securities of such issue. If all Requested Recalls of a particular issue of securities cannot be granted at any time, the order of granting Requested Recalls shall be determined in accordance with the Operating Procedures. Any Requested Recall not granted in full (revised to take account of any subsequent changes in the Requested Recall) will be re-attempted in accordance with the Operating Procedures until either all the recalled securities are returned to the Lender, or the Loan is dealt with pursuant to Section 14.

In addition to such attempts to effect a Requested Recall, Euroclear Bank will attempt to determine whether sufficient additional securities may be available during the Securities Lending and Borrowing Process next succeeding the determination that a Requested Recall was not granted in full. If it determines that sufficient additional securities are unlikely to be available, or if having determined that such securities may be available, they do not become available, Euroclear Bank will make a mandatory recall of Borrowed Securities in an amount sufficient to permit the Requested Recall to be granted. Such Requested Recall (unless it has been previously granted as described above) will be effected in accordance with the procedures and timings set forth in the Operating Procedures.

Exhibit E-4		EUROCLEAR BANK SA/NV		
7.	Automatic Borrowing	Any Borrower may advise Euroclear Bank that it wishes to be an Automatic Borrower with respect to one or more of its Securities Clearance Accounts. Any options as to borrowing securities through the Securities Lending and Borrowing Program that are available from time to time are set forth in the Operating Procedures. Euroclear Bank will determine in its sole discretion whether a Borrower may be an Automatic Borrower with respect to each account and option it elects.		
		Upon despatch of notice to a Borrower that it may be an Automatic Borrower with respect to a Securities Clearance Account, Euroclear Bank will determine for such Securities Clearance Account at such times and in such manner as are set forth in the Operating Procedures, whether the quantity of securities of any issue for which the Borrower is an Automatic Borrower, standing to the credit of such Securities Clearance Account, will be insufficient to permit the execution of certain securities transaction instructions and custody operation instructions submitted by such Automatic Borrower, as described in the Operating Procedures. Each Automatic Borrower will be deemed to submit a request to borrow in order to cover any such insufficiency as so determined.		
		An automatic Borrower may also submit requests to borrow as an Opportunity Borrower pursuant to Section 8.		
8.	Opportunity Borrowing	A request to borrow securities through the Securities Lending and Borrowing Program by an Opportunity Borrower must be submitted to Euroclear Bank by the means and in accordance with the formats and timings set forth in the Operating Procedures.		
9.	Implementation of Borrowings; Recall of Borrowings	(a) A Borrowing by a Borrower shall be effected by debiting to the Record-keeping Account of the Borrower, and simultaneously crediting to the related Securities Clearance Account, the quantity of the Borrowed Securities, or as otherwise specified in the Operating Procedures. A reimbursement of a Borrowing shall be effected by crediting to the Record-keeping Account of the Borrower and simultaneously debiting to the related Securities Clearance Account of such Borrower, the quantity of the Borrowed Securities, or as otherwise specified in the Operating Procedures.		
		(b) Euroclear Bank shall determine, in accordance with the Operating Procedures, the types and amounts of the Borrowings of each issue by each Borrower.		
		(c) Notwithstanding any other provisions of these Supplementary Terms and Conditions, Euroclear Bank may refuse to arrange any Borrowing:		
		(i) if Euroclear Bank determines in its sole discretion that		
		 (A) upon completion of the requested Borrowing, the Borrower requesting to borrow such securities would not have adequate credit arrangements, or 		
		(B) there has occurred any event which constitutes (or with notice or lapse of time, or both, would constitute) a default under the provisions of any credit arrangements entered into between the Borrower and Euroclear Bank; or		
		(ii) that fails to satisfy any conditions set forth in the Operating Procedures.		
		(d) Euroclear Bank may at any time in its sole discretion send a notice of recall requiring any Borrower to repay its Borrowings in whole or in part in accordance with the procedures and timings set forth in the Operating Procedures.		

Exhibit E-4	EUROCLEAR BANK SA/NV
10. Reimbursement of Borrowing	Euroclear Bank will determine the extent to which Borrowings by any Borrower may be reimbursed, in whole or in part, in accordance with the Operating Procedures. Euroclear Bank will cause the Borrowings of such Borrower to be reimbursed to the extent so determined.
11. Cash Distributions Paid on Securities; Redemption	(a) Whenever a Cash Distribution shall be paid by an issuer on any issue of securities as to which there are Borrowed Securities, an amount equal to such Cash Distribution or such other amount as may be described in the Operating Procedures in respect of the quantity of the securities loaned by each Lender as of the date of such Cash Distribution payment (or if there is a record date for determining who is entitled to receive such Cash Distribution, as of such record date) will be credited to the Cash Account of such Lender, in accordance with the Operating Procedures.
	The Cash Account of each Borrower of such securities will be debited for an amount equal to such Cash Distribution or such other amount as may be described in the Operating Procedures in respect of the quantity of the securities borrowed by such Borrower, in accordance with the Operating Procedures.
	(b) Whenever an issuer of any issue of securities as to which there are Borrowed Securities shall make a payment in full of such securities or any payment in retirement thereof, an amount equal to the amount paid by such issuer in respect of the quantity of the securities loaned by each Lender as of the date of payment will be credited to the Cash Account of such Lender, and the related Record-keeping Account of such Lender will be debited for such securities, in accordance with the Operating Procedures.
	The Cash Account of each Borrower of such securities will be debited for an amount equal to the amount paid by the issuer in respect of the quantity of the securities borrowed by such Borrower, and the Record-keeping Account of such Borrower will be credited for such securities, in accordance with the Operating Procedures.
12. Non-cash Distributions on Securities	Whenever a Non-cash Distribution shall be distributed by an issuer on any issue of securities as to which there are Borrowed Securities, each Lender shall be entitled to receive as of the first date of trading such Non-cash Distribution, or the first date of trading of the product of such Non-cash Distribution, (or the next succeeding Business Day if such date is not a Business Day) in each case as determined in the sole discretion of Euroclear Bank, in respect of the quantity of securities of such issue loaned as of such date (or if there is a record date for determining who is entitled to receive such Non-cash Distribution, as of such record date):
	 (a) credit to its Record-keeping Account reflecting such Non-cash Distribution in respect of securities loaned; or
	(b) credit to its Record-keeping Account reflecting the product of such Non-cash Distribution in respect of securities loaned (subject to any provisions of the Operating Procedures with respect to the exercise and any exercise price thereof); or
	(a) immediate minchenerate of Leans to the entert of such New code D' to 'leat'

- (c) immediate reimbursement of Loans to the extent of such Non-cash Distribution on securities loaned; or
- (d) immediate reimbursement of Loans in the form of the product of any Non-cash Distribution on securities loaned (subject to any provisions of the Operating Procedures with respect to the exercise and any exercise price thereof); or

12. Non-cash Distributions	 (e) credit to its Cash Account of cash compensation with respect to such Non-cash Distribution on securities loaned; or
on Securities (continued)	 (f) such other entitlement with respect to such Non-cash Distribution as shall be provided for in the Operating Procedures,
	in accordance with the provisions of the Operating Procedures applicable to the type of securities loaned.
	Euroclear Bank will take the following action in respect of each Borrower as of the first date of trading of any such Non-cash Distribution or the first date of trading the product of such Non-cash Distribution (or the next succeeding Business Day if such date is not a Business Day) in respect of the quantity of securities of such issue loaned as of such date (or any relevant record date):
	 (A) debit such Non-cash Distribution to its Record-keeping Account reflecting the securities borrowed; or
	(B) debit the product of such Non-cash Distribution to its Record-keeping Account reflecting the securities borrowed (subject to any provisions of the Operating Procedures with respect to the exercise and any exercise price thereof); or
	(C) recall Loans with Repayment Date the first date of trading of the Non-cash Distribution (or the next succeeding Business Day if such date is not a Business Day), to the extent of such Non-cash Distribution on securities borrowed; or
	(D) recall Loans in the form of the product of such Non-cash Distribution on securities loaned, with Repayment Date the first date of trading of such product (or the next succeeding Business Day if such date is not a Business Day), subject to any provisions of the Operating Procedures with respect to the exercise and any exercise price thereof; or
	(E) debit to its Cash Account cash compensation with respect to such Non-cash Distribution on securities borrowed; or
	(F) debit to its Securities Clearance Account, its Record-keeping Account or its Cash Account such other entitlement with respect to such Non-cash Distribution as shall be provided for in the Operating Procedures,
	in accordance with the provisions of the Operating Procedures applicable to the type of securities loaned.

13. Repayment of Securities

- (a) The Repayment Date of a Borrowing (or portion thereof) by a Borrower shall be the earlier of:
 - (i) the date specified in a notice of recall issued pursuant to Section 9(d);
 - (ii) the date specified in or determined pursuant to any credit arrangement entered into between the Borrower and Euroclear Bank;
 - (iii) the expiry date, if any, of such Borrowing;

(continued)

(iv) the date on which

- (A) an involuntary case or other proceeding shall be commenced against the Borrower seeking liquidation, reorganization or other relief with respect to it or its debts under any bankruptcy, composition, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its property, or an order for relief shall be entered against the Borrower under any bankruptcy, composition, insolvency or other similar law now or hereafter in effect, or, in addition to the foregoing, if the Borrower is a bank, any comparable event shall occur, or any supervisory authority shall commence any proceeding or seek or order any comparable relief or take any comparable action; or
- (B) the Borrower shall commence, or file a petition for the commencement of, a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, composition, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its property, or shall consent to any such relief or to the appointment of or taking possession by any such official in an involuntary case or other proceeding commenced against it, or shall make a general assignment for the benefit of creditors, or shall fail generally to pay its debts as they become due, or shall admit in writing its inability to pay its debts as they become due, or shall take any action in furtherance of any of the foregoing, or, in addition to the foregoing, if the Borrower is a bank, any comparable event shall occur or the Borrower shall take any comparable action (including any request for relief from any supervisory authority); provided that Euroclear Bank may in its sole discretion determine that the occurrence of any of the events specified in clauses (A) and (B) shall not constitute a Repayment Date of a Borrowing.

Euroclear Bank may, in its sole discretion, decide to exercise the guaranty as provided in Section 14, and attempt to purchase replacement securities in order to fulfil the Borrower's obligations vis-à-vis the Lender(s) without notifying a Loan recall to the Lender.

- (b) Each Borrower must return Borrowed Securities in such a manner that they can be credited to the Securities Clearance Accounts of one or more Lenders by the Repayment Date for such Borrowing (or the next succeeding Business Day if the Repayment Date is not a Business Day). Therefore, the Borrower must make the Borrowed Securities available in its Securities Clearance Account in accordance with the timings set forth in the Operating Procedures.
- (c) In the event that any Borrower fails to return Borrowed Securities by the Repayment Date, Euroclear Bank reserves the right to charge such Borrower a supplementary fee on such terms, for such period, and at such rate as are described in the Operating Procedures. Such supplementary fee shall be debited to the Cash Account of the Borrower.

Such supplementary fee will be paid to the Lenders to which the unreturned securities were allocated pursuant to Section 14(a)(i), pro rata to the quantity of such securities allocated to such Lender and will be credited to its Cash Account.

14. Guaranty to Lenders; Remedies against Borrowers

- (a) Euroclear Bank makes the following guaranty to each Lender:
 - (i) In the event any Borrower fails to return Borrowed Securities by the Repayment Date in accordance with Section 13, Euroclear Bank will:
 - (ia) in case it has notified a Loan recall, select, in accordance with the Operating Procedures, one or more Lenders and will allocate the unreturned securities among the Lenders so selected;
 - (ib) in case a Lender has sent a Requested Recall, contemplate to substitute such Lender and if this is not possible, generate a notice of recall to the Borrower;
 - (ic) in case the Lender does not send a Requested Recall and Euroclear Bank does not notify a Loan recall to the Lender, make a reasonable effort, for the period as defined in the Operating Procedures, to purchase replacement securities pursuant to (v) below in order to reimburse the Lender.

A Lender may instruct Euroclear Bank in accordance with the Operating Procedures either (x) to credit to its Securities Clearance Account securities in replacement of the quantity of unreturned securities allocated to such Lender, (y) to credit to its Securities Clearance Account securities in replacement of the unreturned securities allocated to such Lender in the form of similar equivalent securities as the Borrowed Securities, or (z) to credit the Cash Account of such Lender with the amount of cash as described in (ix) below.

- (ii) If any Lender instructs Euroclear Bank in accordance with the Operating Procedures and pursuant to (i)(y) above to credit to its Securities Clearance Account securities in replacement of the quantity of unreturned securities allocated to such Lender, then upon receipt of such instruction, Euroclear Bank will make a reasonable effort, for the period defined in the Operating Procedures to purchase replacement securities pursuant to (v) below.
- (iii) If any Lender instructs Euroclear Bank in accordance with the Operating Procedures to credit its Cash Account in accordance with (i)(z) above, its Cash Account will be credited pursuant to (ix) below.
- (iv) If any Lender does not instruct Euroclear Bank by the deadline specified in the Operating Procedures in accordance with (i)(y) or (i)(z) above, Euroclear Bank will make a reasonable effort for the period defined in the Operating Procedures to purchase replacement securities pursuant to (v) below.
- (v) Any purchase of replacement securities in accordance with (ii) or (iv) above shall be made only in such markets, in such manner, on such terms and for such consideration as Euroclear Bank in its sole discretion shall consider appropriate. Any securities so purchased shall be credited to the Securities Clearance Account of such Lender as soon as possible after such securities are received by Euroclear Bank, and the related Record-keeping Account shall be debited with an equal quantity of such securities.
- (vi) If at the end of the period defined in the Operating Procedures, Euroclear Bank has not purchased securities to replace unreturned securities, a Lender may instruct Euroclear Bank to credit the Cash Account of such Lender with an amount of cash as described in (ix) below.
- (vii) If any Lender instructs Euroclear Bank in accordance with the Operating Procedures to credit the Cash Account of such Lender in accordance with (vi) above, the Cash Account of such Lender will be credited as described in (ix) below.
- (viii) If any Lender does not instruct Euroclear Bank to credit the Cash Account of such Lender, Euroclear Bank will allow the Loan to continue, as set forth in the Operating Procedures.

14. Guaranty to Lenders; Remedies against Borrowers (continued)

- (ix) If Euroclear Bank is required to act pursuant to (i)(z) or (vi) above, the Cash Account of each relevant Lender will be credited in accordance with the Operating Procedures with an amount of cash equal to the Market Value calculated as described in the Operating Procedures of the quantity of such securities allocated to such Lender by Euroclear Bank, together with any accrued interest on the securities so allocated to the date upon which such credit is effected, and the Record-keeping Account of such Lender shall be debited with an equal quantity of such securities.
- (x) If any Borrower, having failed to return Borrowed Securities by a Repayment Date, returns any such securities (i) prior to the initiation of the purchase by Euroclear Bank of replacement securities, then the quantity of any such purchase (or the quantity of an equivalent value for similar securities) shall be reduced by the quantity of securities returned, or (ii) prior to the credit to the Cash Accounts of any Lenders of amounts of cash equal to the Market Value of unreturned securities, then the amount of cash shall be reduced pro rata to the quantity of securities returned, or (iii) after the initiation of the purchase by Euroclear Bank of replacement securities, including securities in replacement of the unreturned Borrowed Securities or securities equivalent to the Borrowed Securities, then Euroclear Bank will, (a) in case the returned securities by the Borrower are sufficient to cover the Requested Recall, credit the purchased securities in the Borrower's Securities Clearance Account and debit the costs from the Borrower's Cash Account, (b) in case the returned securities by the Borrower are insufficient to cover the Requested Recall, credit the purchased securities in the Lender's Securities Clearance Account in so far as the Requested Recall was not covered and credit the remaining purchased securities in the Borrower's Securities Clearance Account and debit the costs from the Borrower's Cash Account.
- (b) Euroclear Bank guarantees to each Lender that all amounts of Cash Distribution and all amounts upon payment in full of securities required to be credited to the Cash Account of each Lender pursuant to Section 11, all fees required to be credited to such Cash Account pursuant to Section 16 and any other cash amounts required to be credited to such Cash Account pursuant to Section 12(e) or Section 12(f), will be so credited, and all amounts of Non-cash Distribution or any product of a Non-cash Distribution required to be reimbursed in kind in accordance with Section 12(c), Section 12(d) or Section 12(f) will be so reimbursed, subject to such provision as may be made in the Operating Procedures with respect to cash compensation in lieu thereof under circumstances described in the Operating Procedures.
- (c) Euroclear Bank will have the sole right, to the exclusion of any Lender or other person, to exercise or assert any and all rights or claims in respect of any failure to return Borrowed Securities, failure to make available a Non-cash Distribution or any other actions or omissions of any Borrower. Except as provided in this Section 14, neither Euroclear Bank nor any other person shall have any liability to any Lender for the failure of any Borrower to return Borrowed Securities, failure to make available a Non-cash Distribution or failure to pay any Cash Distribution, principal or fees payable in respect of Borrowed Securities.
- (d) All costs incurred by Euroclear Bank in connection with any purchase of securities and the amount of any payments by Euroclear Bank, in both cases pursuant to Section 14(a) or 14(b), as well as any other expenses incurred by Euroclear Bank (including those incurred under Section 14(c)) as a result of the failure of a Borrower to return Borrowed Securities on the Repayment Date of all or part of a Borrowing or as a result of the failure of a Borrower to make available on the ex-distribution date all or part of a Non-cash Distribution on any issue of loaned securities, shall be for the account and at the sole expense of such Borrower. Euroclear Bank will debit all such costs, payments and expenses to the Cash Account of such Borrower and in the event the amount standing to the credit of such Cash Account is insufficient to pay all such costs, payments and expenses, the Borrower shall remain liable to Euroclear Bank for any such deficiency.

Exhibit E-4	EUROCLEAR BANK SA/NV
15. Rights, Duties and Liabilities of Euroclear Bank	 (a) Euroclear Bank may be a Lender and, in that capacity, will have the same rights, duties and liabilities it would have if Euroclear Bank were not the operator of the Euroclear System. (b) Without limiting the generality of Section 2(d) of these Supplementary Terms and Conditions, Euroclear Bank shall have no liability to any Lender for the failure to arrange any Loan, or for any trading or other opportunities undertaken or foregone in anticipation of making a Loan and shall have no liability to any Borrower for the failure to arrange a requested Borrowing or for any trading or other opportunities undertaken or foregone in anticipation of making a Borrowing.
16. Fees and Expenses	Borrowers shall be charged such fees, and for such expenses and disbursements, and Lenders shall be paid such fees as shall be specified from time to time in accordance with the Operating Procedures. Amounts charged to Borrowers shall be debited to the relevant Borrowers' Cash Accounts, and amounts paid to Lenders shall be credited to the relevant Lenders' Cash Accounts.
17. Termination: Resignation	 (a) Euroclear Bank may at any time in its sole discretion discontinue the Securities Lending and Borrowing Program conducted pursuant to these Supplementary Terms and Conditions upon notice to all Lenders and Borrowers effective immediately. (b) Euroclear Bank may at any time in its sole discretion (i) terminate any Lender as an Opportunity Lender or Automatic Lender or (ii) terminate any Borrower as an Opportunity Borrower or Automatic Borrower upon notice to such Lender or Borrower effective immediately. (c) Any Lender may advise Euroclear Bank, in accordance with the Operating Procedures, that it wishes to resign as an Automatic Lender or an Opportunity Lender, and any Borrower may advise Euroclear Bank, in accordance with the Operating Procedures, that it wishes to resign as an Automatic Borrower or an Opportunity Borrower. Any such resignation shall become
	 effective in accordance with the Operating Procedures. (d) Upon the termination of a Lender as an Automatic Lender or Opportunity Lender, or upon the resignation of a Lender as an Automatic Lender or Opportunity Lender, Euroclear Bank will require one or more Borrowers selected in accordance with the Operating Procedures to repay their Borrowings in whole or in part (in an aggregate amount sufficient to permit repayment of the Loans by such Lender) pursuant to Section 9(d). Upon the discontinuance of the Securities Lending and Borrowing Program, Euroclear Bank will require all Borrowers to repay their Borrowings in whole pursuant to Section 9(d).
	(e) Neither the termination or resignation of a Borrower as an Automatic Borrower or Opportunity Borrower or of a Lender as an Automatic Lender or Opportunity Lender nor the discontinuance of the Securities Lending and Borrowing Program by Euroclear Bank shall affect the rights and obligations of any Lender or Borrower theretofore existing, including without limitation the obligation of a Borrower to return Borrowed Securities pursuant to Section 13. Euroclear Bank shall have no liability to any Lender, Borrower or other person as a result of any termination, discontinuance or any other action pursuant to this Section 17.



The Operating Procedures of the Euroclear System

February 2016

euroclear.com

The Euroclear System is operated under contract by: Euroclear Bank SA/NV

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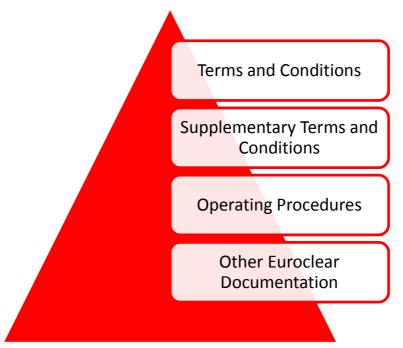
1.1 Welcome to the Euroclear Bank Operating Procedures

The Operating Procedures provide you with a comprehensive description of our services. This document forms part of the legal documentation which governs the use of our services.

Throughout this document:

- we, us, our refers to Euroclear Bank
- you, your refers to you as a Participant
- all references to time refers to Brussels time unless otherwise stated.

1.2 The Operating Procedures as part of our legal documentation



(a) The Operating Procedures must be read along with the Terms and Conditions and Supplementary Terms and Conditions. In cases of conflict, the Terms and Conditions and/or the Supplementary Terms and Conditions will prevail.

The Euroclear Documentation is supplemental to and constitutes and integral part of these Operating Procedures.

In cases of conflict with such other Euroclear Documentation, the Operating Procedures will prevail.

Contractual language

(b) The English language version of the following documents is official for our relationship:

- Terms and Conditions
- Supplementary Terms and Conditions
- Operating Procedures
- Euroclear Documentation.

Any translations we provide are for your convenience only and are not legally binding, except where we mention otherwise.

Amendments to these Operating Procedures

(c) We may amend these Operating Procedures at any time. We will notify you of such amendments, by email, in accordance with Section 19 of the Terms and Conditions.

Headings and references

(d) Headings and captions used throughout this document do not change the structure or meaning of the text. References to sections refer to sections within these Operating Procedures.

1.3 Banking services

We provide some services in a banking capacity. These services are governed by separate agreements and nothing within these Operating Procedures will amend or affect such services and/or agreements.

When offering banking services, we act in our capacity as a bank and not in our capacity as operator of the Euroclear System.

1.4 Regulators

As a Belgian bank we are subject to:

Regulation	Article of Belgian Law	Comments
Oversight of the National Bank of Belgium ('NBB') on the Euroclear System	 Article 8 of the Law of 22 February 1998 on the Organic Statute of the NBB Article 23 of the Law of 2 August 2002 Law of 28 April 1999 implementing the EU Settlement Finality Directive (Directive 98/26/EC) NBB Circular 2012-06 implementing CPSS –IOSCO Principles for Financial Market Infrastructures 	The Euroclear System, operated by Euroclear Bank, is recognised as a Securities Settlement System. The NBB ensures that the Euroclear System operates properly, including by verifying our compliance with international regulatory standards.
Prudential supervision of the NBB	 Articles 36/2 and 36/3 of the Law of 22 February 1998 on the Organic Statute of the NBB Article 77 of the Law of 25 April 2014 on the Status and the Supervision of Credit Institutions 	We have been designated as a systematically important financial institution which results in a specific supervisory regime.
Supervision on post-trade market rules and conduct of business rules of the Belgian Financial Services and Markets Authority ('FSMA')	Articles 23 and 45 §1 of the Law of 2 August 2002	This includes - market abuse - conflicts of interest - ethical conduct - protection of client assets - best execution - client classification - compliance function.
Supervision of anti-money laundering practices by the NBB	Law of 11 January 1993 on the prevention of money laundering and terrorism financing implementing Directives 2005/60/EC and 2006/70/EC	

1.5 Contact us

If you have any questions about these Operating Procedures, please contact your relationship manager. You may also visit the 'contacts app' on <u>www.euroclear.com</u> for service specific help desks.

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2.1 Requirements to become a Participant

2.1.1 Prerequisite to admission

You may only be admitted in the Euroclear System if:

- you are established in a jurisdiction that is not subject to international or European sanctions or that is not subject to a call for action from the Financial Action Task Force (FATF) in the context of the fight against money laundering and terrorism financing
- you provide adequate information enabling us to meet the Belgian anti-money laundering and terrorism financing requirements that apply to us.

2.1.2 General admission policy

(a) We will consider you for your admission in the Euroclear System as either

- a Standard Participant
- a Specific Regulated Participant
- a Specific Participant

depending on your regulatory status and/or place of permanent establishment.

This categorisation is by virtue of the Belgian legislation implementing the EU Directive 98/26/EC on Settlement Finality in Payment and Securities Settlement Systems. Specific Regulated Participants and Specific Participants must comply with specific additional requirements to mitigate potential additional risks resulting from their participation in the Euroclear System. You must bring appropriate evidence enabling us to adequately consider and handle your application.

(b) You are a Standard Participant if:

- you are licensed as a credit institution or investment firm, whether or not in the EU
- you are a public authority or a publicly guaranteed undertaking
- you fall under the supervision of a competent authority in the meaning of the EBA (1093/2010), EIOPA (1094/2010), ESMA (1095/2010) or EMIR (648/2012) regulations.

(c) You are a Specific Regulated Participant if:

- you are subject to supervision in a jurisdiction outside the EU
- you are listed on a stock exchange.

(d) You are a Specific Participant if you are neither subject to supervision in your jurisdiction nor listed on a stock exchange.

(e) You must comply with the below criteria on an ongoing basis in order to participate in the Euroclear System:

- adequate financial resources
- operational and technological capacity
- legal capacity
- internal control and risk management
- ethical standards

Criteria

You demonstrate adequate financial resources to run your business on a going concern basis and meet your obligations towards us, the Euroclear System and its Participants. This includes:

For All Participants	For Specific Participants	
 your current resources and your ability to maintain adequate financial resources on an ongoing basis, having regard to your activities and the environment in which you operate you provide your annual reports for the two preceding years, and those of your direct and ultimate parent companies and you provide these statements on an annual basis as long as you remain a Participant 	 either you also provide your semi-annual financial statements, or you confirm the absence of adverse change to your financial condition since the last financial statements 	

You have adequate operational and technological capacity to ensure business continuity and avoid material adverse impact on the integrity of the Euroclear System. This includes:

For All Participants	For Specific Participants	
 you have adequate human resources, facilities and infrastructure to use the Euroclear System effectively you can comply with the security requirements necessary for the safety of the Euroclear System you can install, operate and maintain the necessary communication platforms with the Euroclear System you have adequate back-up facilities and contingency plans for maintaining operational capabilities in contingency situations 	 you demonstrate you have adequate internal procedures and controls (ISAE 3402 report or equivalent external report), or you provide adequate evidence of your business continuity plans and operational readiness (including sourcing policies if relevant) 	

You demonstrate your legal capacity and ability to accept and comply with the rules of the Euroclear System. This includes:

For All Participants	For Specific Participants	
 you are duly incorporated in your country of permanent establishment (articles of association, by-laws, extract of your national legal entities registry) you are duly licensed and supervised to carry out your business 	 you also execute a set of representations and warranties to confirm the absence of legal impediment for you to participate in the Euroclear System. A specific form is available. 	

You have an appropriate internal control and risk management framework in place that is such as to preserve the integrity and reputation of the Euroclear System. This includes:

For All Participants	For Specific Participants	
 your internal control and risk management framework is commensurate with your risk profile, capital strength and business strategy you have no business practices or any other factor that would adversely reflect on your internal controls and risk management your business activities do not generate unacceptable risks for the Euroclear System or for us 	 you also provide adequate documentation on your internal control and risk management framework you advise us of any material change in the internal control and risk management framework as long as you remain a Participant 	

You have implemented ethical standards that are such as to protect the integrity and reputation of the Euroclear System. This includes:

For All Participants	For Specific Participants	
 if you are subject to anti-money laundering and terrorism financing regulations, your ability to demonstrate an adequate anti-money laundering program which includes a procedural framework, Know Your Customer (KYC) measures, beneficial owners and Politically Exposed Persons (PEPs) identification and monitoring of client activities your adhesion to high standards for fighting fraud, bribery, market abuse and conflicts of interest your management's reputation is adequate 	 you also provide appropriate evidence of your internal code of ethics which should cover fraud, bribery, acceptance of gifts, conflicts of interest and prevention of market abuse 	

We apply a risk-based approach and therefore, we can take other relevant risk factors into account where needed for the protection of the Euroclear System or its Participants.

(f) You must notify us in writing, with appropriate supporting documents, of any material event or changes which may affect your ability to comply with the criteria listed above. Such changes may include, but are not limited to:

- your activity
- your corporate and ownership structure
- your corporate object
- your legal capacity
- the extent or the validity of the signatory powers of your representatives
- your operational or technical organisation,
- any new contractual arrangement, such as an outsourcing
- any law, decree, regulation, governmental order, court decision
- a material case of fraud.

(g) Our admission policy is set by the Board of Euroclear Bank. You must meet our admission criteria so that we can comply with applicable regulatory requirements. Your participation in the Euroclear System should not expose us to any additional reporting, disclosure or other regulatory requirements.

We will at all times look to protect the integrity of the Euroclear System as a wholesale international settlement system with a broad variety of Participants. We may therefore adapt the above criteria upon the decision of the Euroclear Bank Management Committee, in order to take into consideration any relevant risk for us, the Euroclear System or its Participants.

(h) We may admit you into the Euroclear System for a particular service and not our full service offering. If this is the case we may:

- refuse to process Instructions which are inconsistent with limitations we place on you as a result of your limited participation
- take any actions required to implement the limitations.

2.1.3 Appeal

Your relationship manager will notify you in writing of whether our Management Committee has accepted your application.

If we refuse your application, you have the right to appeal. Our letter informing you of our decision will explain the reasons for your rejection and the procedure to appeal. The process is shown below.

Step 1: Sending your appeal	 you must appeal in writing to the Chairman of our Board within 30 calendar days of receiving our initial rejection letter you must explain the grounds of your appeal and why you believe you fulfil the participation requirements
Step 2: Board discussion	 our Management Committee will provide information relevant to your application to our Board prior to its meeting to discuss your appeal. Our Board will decide the outcome of your appeal within 60 calendar days of receipt of your written appeal request
Step 3: Communication of decision	- You will be informed promptly of the Board's decision. This decision is final.

2.2 Opening of Accounts

2.2.1 Abbreviation of names and special designations

(a) We create an electronic record to identify you and your Accounts in computer produced reports. We may abbreviate your name and Accounts in such reports as well as any other name/designation that may be added in line with these Operating Procedures.

(b) We may add a designation in an Account which identifies a person other than you. The designation will not create a contractual relationship between us and the designated person, nor will it provide the basis for a claim for such designated person over the securities and cash held in those Accounts.

2.2.2 Securities Clearance Accounts and Cash Accounts

(a) Once you enter into an agreement to participate in the Euroclear System we will open at least one Account for you which contains:

- a Securities Clearance Account to which securities accepted in the Euroclear System are credited
- a related Cash Account with subdivisions for each Settlement Currency accepted in the Euroclear System
- a related Transit Account.

We will inform you of your Account number once the Securities Clearance Account and related Cash Account are available for transactions.

2.2.3 Additional Accounts

(a) If you request to segregate securities held in the Euroclear System in two or more Securities Clearance Accounts we can open additional Securities Clearance Accounts for you. Each will have its own related Cash Account and Transit Account.

Any additional Account will be opened under the same name as your main Account. If you request it, we can add a designation to help distinguish Accounts from one another.

This is without prejudice to Sections 3.5.2 and 3.6 of these Operating Procedures.

(b) You may choose one of your Cash Accounts to be an 'Aggregate Cash Account' (also known as a 'work-with account'). This Cash Account will then be used for the credits and debits of cash related to the activity on all your Securities Clearance Accounts, or on the Securities Clearance Accounts you specify.

If you use an Aggregate Cash Account for any or all of your Accounts, references in the Terms and Conditions and Operating Procedures to a related Cash Account mean the Aggregate Cash Account.

2.2.4 Transit Accounts

When opening a Securities Clearance Account we will automatically create a separate balance within the Account. This can be used to record either:

- securities received into the Euroclear System which have not yet met the conditions for credit to the Securities Clearance Account
- securities debited from a Securities Clearance Account that have not yet been delivered out of the Euroclear System.

This separate balance is called the Transit Account. It forms an integral part of your Securities Clearance Account.

Any securities standing to the credit of a Transit Account are not available for the settlement of Instructions or Custody Operations.

2.2.5 Record-keeping Accounts

A Record-keeping Account records Borrowings and Loans on our books in the name of each Borrower and Lender. Record-keeping Accounts do not record holdings of securities in the Euroclear System and as a consequence do not correspond to any securities available for use in the Euroclear System.

The Record-keeping Account may be divided into sub-accounts to record:

- different types of Borrowings or Loans
- Borrowings or Loans with different terms, fees, priority allocations or other features.

Sub-accounts will be considered as being part of one, indivisible Record-keeping Account unless otherwise specified.

2.2.6 Non-Deposit Accounts

(a) We may use Non-Deposit Accounts to enable our reporting of information to you or for other reasons we consider appropriate. Non-Deposit Accounts do not record holdings of securities in the Euroclear System and as a consequence do not correspond to any securities available for use in the Euroclear System.

In particular, Non-Deposit Accounts may be created:

- to record that securities temporarily delivered out of the Euroclear System for voting purposes in certain markets are to be redeposited in the Euroclear System (see Section <u>5.3.2.7</u>)
- to record information and provide services for securities not held in the Euroclear System.

(b) We can close Non-Deposit Accounts at any time.

(c) The securities losses provisions outlined in Section 17 of the Terms and Conditions do not apply to records on Non-Deposit Accounts. We reserve the right to amend information recorded on Non-Deposit Accounts at any time, without notice, on the basis of what we believe to be reliable sources of information.

(d) As Non-Deposit Accounts do not record holdings of securities in the Euroclear System:

- we have no lien or claim in respect of securities held outside the Euroclear System
- you cannot pledge or transfer by way of security any rights or interest in respect of such securities held outside the Euroclear System.

(e) We will keep records of the IOA for each New Global Note. The records will form a Non-Deposit Account designated as the 'Issuer Memorandum Account'. Upon the request of an authorised person, we will produce a statement for the Non-Deposit Account. This will show the total nominal amount of all our Participants' holdings for securities issued in New Global Note form as of the date specified in the request.

(f) We can block securities recorded on your Non-Deposit Account in order to facilitate operations and handling Instructions.

(g) We may refer to Non-Deposit Accounts as 'Memorandum Accounts' in other Euroclear Documentation.

2.2.7 *Différé* of Accounts

For the purposes of Belgian law, all entries made to a Transit Account or a Record-keeping Account, or more generally, all entries relating to the delivery or the receipt of securities whose credit to the available balance of a Securities Clearance Account is deferred until the fulfilment of a condition, the determination of its amount or the expiry of a time limit, constitute the *différé* part of the relevant Securities Clearance Account within the meaning of the coordinated Royal Decree No. 62 on the Deposit of Fungible Financial Instruments and the Settlement of Transactions involving such Instruments.

2.3 Entries in Participant Accounts

2.3.1 Final or provisional entries: general rules

(a) Credits and debits to your Accounts can be final or provisional. We credit your Account only when we have obtained the final receipt of securities for our account in the local market.

(b) Exceptions to this general rule are set out in the specific services sections of these Operating Procedures and may also apply for certain domestic markets (see the <u>Online Market Guides</u>). We may credit securities or cash to your Account before we receive confirmation that the receipt of such securities or cash in the local market is final (see the <u>Online Market Guides</u>).

Until final receipt of securities, credits to your Account are provisional and securities cannot be used for further transactions.

(c) The rules in this section apply to Securities Clearance Accounts, Cash Accounts and Transit Accounts.

2.3.2 **Provisional entries**

(a) Credits/debits applied to your Securities Clearance Accounts, Cash Accounts or Transit Accounts which are labelled as provisional can be reversed. Reversal will take place if the conditions described in Sections <u>2.3.2.1</u> and <u>2.3.2.2</u> are not met.

You authorise us to credit you with securities prior to final receipt even though such credit may be reversed. Further information can be found in Section 3.2 - Reversals.

(b) A provisional credit/debit does not become final by either:

- the lack of an express reference to provisional status in a statement or report to you from us
- further credits/debits to the same Account resulting from further securities transactions
- statements in a report relating to credits to a Cash Account that indicate that funds have been received and reconciled by us.

2.3.2.1 Securities Clearance Accounts

Specific rules for the final and provisional credits/debits for specific services are described in Part V of these Operating Procedures. The general rules for such credits/debits are described below.

Credits to Securities Clearance Accounts

For	General rule
Receipts of physical, registered, inscribed or book- entry securities (or ownership transference	Become final only once:
documents)	 the credit to our account in the local market is final, or the registration in our name, the name of the Depository, Other Settlement System or appropriate nominee is final, or if received by us or a Depository directly through an Other Settlement System - the transfer to our, the Depository's or appropriate nominee's account is final under local market rules/practice

Debits to Securities Clearance Accounts

For	General rule
Deliveries of physical, registered, inscribed or book- entry securities (or ownership transference	Become final only once:
documents)	 the transfer is deemed final under local market rules/practice, or if transferred by us or a Depository directly through an Other Settlement System - our local market account is debited and the intended recipient's Account is credited

2.3.2.2 Cash Accounts

Credits to Cash Accounts

For	Are provisional as follows
Deliveries of securities to Clearstream against payment	Are considered provisional until we receive Clearstream Feedback Transmission indicating acceptance/refusal of delivery
Custody Cash Distributions	Are considered provisional until we receive final receipt in whole of such payments and complete the necessary reconciliation
Receipts of funds at Cash Correspondents	Are considered provisional until such receipts are final and we complete the necessary reconciliation

Debits to Cash Accounts

For	Are provisional as follows
Receipts of securities against payment	Are considered provisional until the securities are accepted in accordance with <u>Part V: Section 2</u> (Settlement Services) of these Operating Procedures

2.4 Safekeeping and rights to securities in the Euroclear System

2.4.1 Safekeeping of securities

(a) You agree that all securities held on your Account(s) within the Euroclear System are fungible with all other securities deposited with us of the same type and with the same Common Code.

This is in accordance with the coordinated Royal Decree No. 62 on the Deposit of Fungible Financial Instruments and the Settlement of Transactions involving such Instruments and other applicable Belgian legislation.

(b) We may deposit securities with:

- a Specialised Depository including:
 - Common Depositories
 - o Common Safekeepers
- an Other Settlement System (including Clearstream).

The code for each Specialised Depository or Other Settlement System is shown in our securities database.

(c) Certain securities held by us directly in an Other Settlement System are considered specialised to that Other Settlement System. Those securities may in turn be sub-deposited by the Other Settlement System with its own depository or Other Settlement System.

(d) If a security is sub-deposited by a Common Depository or Common Safekeeper the sub-depository will not become a Common Depository or Common Safekeeper. The sub-depository will be responsible for the safekeeping of the security exclusively to the Common Depository or Common Safekeeper, as applicable.

(e) Certain securities in registered form may be held directly with the issuer (or its agent) without the need for a Depository.

2.4.2 Your rights

(a) When you deposit securities in the Euroclear System you receive a co-ownership right in a pool of fungible book entry securities of each category. You have no direct right over any individual certificated or uncertificated securities. We hold the securities deposited on your behalf but do not acquire any ownership rights over them.

(b) Your co-ownership right is intangible, represented only by a book entry record in your Account recorded on our books which are located in Belgium. The pool of fungible book-entry securities in which you have such co-ownership right is located in Belgium on our books and not in the location of the specific underlying securities held by us with any other Depository or Other Settlement System.

This is in accordance with Section 4 of the Terms and Conditions, <u>Part V: Section 3 (Custody Services)</u> of these Operating Procedures and applicable Belgian legislation.

(c) We are subject to legal and regulatory requirements on client assets segregation and may not use the financial instruments deposited with us without having obtained your express prior consent to this effect.

2.5 Disclosure

2.5.1 Authorised disclosure

We are subject to a banking duty of discretion under Belgian law. When you send us information on yourself or your clients, we keep such information confidential.

However, you authorise us to disclose certain information about you and your participation in the Euroclear System if required by:

- laws and/or regulations applicable to you, us, a Depository, an Other Settlement System or a Cash Correspondent
- provisions of the corporate charter or other constitutional documents of the issuer of securities or under the terms of the governing documentation of the issue
- mandatory provisions of any law or regulation applicable to the holding of securities (or to any payment of income, principal or any other distribution, or any tax concession or reduction obtained or to be obtained through the Euroclear System), or pursuant to any agreement, certification or related declaration by you
- a court order or instruction received by us, or where applicable, by a third party provider in accordance with Section <u>2.12</u> or <u>3.9.1</u>, from a court, governmental agency or body, or international regulatory authority of competent jurisdiction
- for investments funds, the request of a fund management company, its agent or the fund itself
- a request from issuers for securities with the '3c7' marker

or where otherwise permitted by our banking duty of discretion, applicable under Belgian law.

The information we are required to disclose may include your name, the amount of particular issues of securities you hold or are recorded on an Account, the amount of cash standing to the credit of any Cash Account, information about your transactions, recordings of any telephone conversations with you and any other required information.

You hereby represent and warrant that you have informed your employees, contractors and other persons acting on your behalf of the receipt, collection, processing, possible disclosure and transfer of their personal data by us and of our purposes for doing so as described above.

In particular, by virtue of a Belgian Royal Decree of 17 July 2013 implementing the Belgian Income Tax code, we must disclose specific data relating to cash accounts and investment service agreements to the National Bank of Belgium. The Disclosure must be done on a yearly basis, starting from calendar year 2010.

This information obligation aims at determining the taxable revenues of account holders in order to ensure collection of all taxes due by the Belgian tax authorities. We have to disclose the following data:

- the IBAN number of your cash account(s)
- if applicable, the kind of agreement that you have concluded with us
- if you are a Belgian entity: your company number
- if you are a foreign entity: your full denomination, legal form and country of incorporation.

The data will be kept by the National Bank of Belgium for a period of 8 years from the end of the year for which data is reported. You have the right to inspect the data (request to be addressed to National Bank of Belgium, division Point de Contact central/Centraal Aanspreekpunt, Berlaimontlaan 14, 1000 Brussels) and to correct or to remove incorrect data. The request to correct or remove incorrect data must be addressed to us.

2.5.2 Disclosure to third parties

You authorise us to disclose the following information to third parties, unless you provide us with a written request to the contrary:

Third party	Which information	Comments
Third parties in general	 your name your participation in the Euroclear System 	
Stock exchanges, clearing houses, or other trading platforms	 your name your participation in the Euroclear System your settlement information 	These are the parties with whom we or you have contracts with for trading, settlement or clearing

Other Participants and their representatives	 your name your participation in the Euroclear System your Securities Clearance Account number(s) 	To facilitate the smooth processing of settlement transactions
Our Depositories and Other Settlement Systems	 your name your participation in the Euroclear System your Securities Clearance Account number(s) 	To facilitate the smooth processing of settlement transactions
A third party with whom we, or Euroclear plc, have announced a joint venture, merger, acquisition or other consolidation	 your name your participation in the Euroclear System information on your securities and cash positions and activity 	These third parties are subject to substantially the same confidentiality obligations as us
A third party provider	 any information necessary for the provision of the outsourced services 	These third parties are subject to substantially the same confidentiality obligations as us

2.5.3 Disclosure to Euroclear group entities

(a) You authorise us to disclose or give access to information about you, your positions and activity in your Accounts to any other entity of the Euroclear group if information is needed for:

- analysis
- testing, development or operation of systems
- the offering, arranging, managing and provision of products and services of the Euroclear group.

(b) The recipient(s) of such information are authorised to disclose or give access to it to relevant third parties (for instance consultants and contractors) where it is required to enable the above activities. These third parties will be subject to confidentiality obligations for such information.

2.6 Audit requirements

As part of our audit procedures we may require you to confirm certain aspects of your operations as a Participant. We may also require that you evidence them. These requests do not mean you no longer have to reconcile your records as set out in Section 10 of the Terms and Conditions.

2.7 Calculation of interest

(a) We will determine the interest rates applicable to each Settlement Currency in a Cash Account. According to prevailing market conditions and best practices, we can modify:

- the terms and rates of interest
- the interest period
- the timing of credit or debit of such interest
- any other relevant modalities.

(b) Interest rate information will not be displayed on your Account statements and you waive any right you may have under applicable law to this effect. We will make such information available to you on request in an appropriate manner.

(c) Although credit and debit interest is calculated separately, the two amounts will be netted when applied to each subdivision of your Cash Account(s). Balances or interest amounts calculated in different Settlement Currencies will not be netted.

(d) Interest is calculated monthly on a 360 or 365-day basis as per the market practice for each Settlement Currency.

(e) If calculated monthly, the credit/debit interest will be transferred on the fourth Business Day of the following month for Value Date the first calendar day of such month.

2.8 Exchange rates

(a) We determine in our banking capacity exchange rates that are applied to:

- foreign exchange transactions
- foreign exchange direct dealing transactions
- transfers under Section 16(a) of the Terms and Conditions.

These rates are calculated for each transaction individually.

All other exchanges between Settlement Currencies are effected on the basis of rates applied to all Participants except as required by applicable exchange controls. The rates are determined each Business Day and derived from quoted bid and offer rates taken from publicly available information sources.

(b) We will advise you of the exchange rates we will apply by means of the 'Daily cash movements report'.

2.9 Claims and compensation

(a) The interest equivalent referred to in Section 16(g) of the Terms and Conditions is determined:

- from the day when the payment would have been carried out until the day when it is actually carried out, subject to Section 16(g) of the Terms and Conditions
- on the basis of a year of 360 days
- at the debit rate applied to your Cash Account for the relevant period
- on the instructed amount of the payment.

(b) In all instances when the concerned payment was made to another Cash Account, compensation will be made in the form of a Value Date adjustment in the relevant Cash Account(s).

2.10 Value Date

(a) The Value Date is used when calculating:

- interest on credit/debit balances in a Cash Account
- fees.

(b) The Value Date may be, but is not necessarily, the same as the date of the credit/debit entry.

(c) You agree to waive the application of any law which may alter the Value Date from what is set out above.

2.11 Insurance information

We maintain insurance policies for securities held in the Euroclear System in accordance with the Terms and Conditions. This insurance coverage is part of the insurance policies contracted for the benefit of the Euroclear group. Further information is available on request.

2.12 Outsourcing

(a) Some of the services we offer are provided with the help of or are outsourced to third party providers. Such third party outsourcing may include solutions such as software as a service (SaaS), cloud computing, external hosting or similar solutions and may be located anywhere in the world (see Section <u>3.9.1</u> for more information). You may, upon request, obtain a list of concerned countries. Such list may change from time to time.

Such solutions will be governed by applicable law relevant to the jurisdiction in which they are carried out or where the third party provider may be located. They may lead to additional obligations and responsibilities including, but not limited to, the disclosure of information.

(b) We have put in place Board policies and internal risk procedures to make sure that the necessary steps are taken to assess and manage any risks that arise from such outsourcing. Amongst other things, we will ensure that security measures are in place to maintain the confidentiality and integrity of our information and data.

2.13 Fees

2.13.1 General

(a) Fees, expenses and discounts are as set out in the Euroclear Documentation related to tariffs which may be amended from time to time. The rules contained in tariff documentation should be read together with this Section 2.13.

(b) Fees, expenses and discounts will be debited from your Cash Accounts even if you have defaulted.

(c) If you act as a Borrower in the Securities Lending and Borrowing Program you may be required by law to withhold or deduct an amount for tax or other duties on your Borrowing. In this case we will alter the fees we bill you for so that the amount due matches with the amount which would have been due had no withholding been necessary.

2.13.2 Charging fees to other Accounts

You can request that fees due from one of your Cash Accounts be charged to another of your Cash Accounts. This request should be sent by authenticated SWIFT message. In the absence of such request, fees are charged to the Cash Account to which the fee relates. You can also request that the fees be charged to another Participant's Cash Account, provided you can evidence such other Participant's approval.

2.13.3 Calculation dates

Fees are calculated as shown below:

Fees for	Calculation
Expenses resulting from the physical delivery of securities	from the 26 th of the month to the 25 th of the following month (inclusive of both dates)
Any other fees, expenses or discounts	for the calendar month

2.13.4 Value calculation

(a) When fees are determined on the basis of the market value of securities, such market value of securities is calculated by using prices from publicly available information sources generally considered reliable.

We will not be liable for the use of such prices when we make such calculations.

(b) Daily depot values will be based on the result of the RTP dated the Business Day for which the depot value is calculated.

2.13.5 Minimum fees

If the total amount of gross fees to be debited for the month is less than the relevant minimum amount (as shown in the tariff documentation), the applicable monthly minimum fee will be charged.

Gross fee amounts to be debited are calculated before the deduction of any rebates. Fee amounts to be credited are not taken into account.

2.13.6 Additional fees

(a) If your external Instructions remain unmatched or unsettled in a local market and this causes us a loss, we may charge you a penalty supplemental fee limited to the amount of such loss. You can avoid this by providing us with notice by authenticated SWIFT message that your Instruction will not match or settle in the relevant market.

Your notice must be sent no later than our Input Deadline for a wire transfer in the currency of the cash counter value in the relevant Instruction.

(b) Custody Cash Distributions which we do not receive due to your decision to waive your rights to such distribution (see Section <u>5.3.1.5.3</u>) may cause us to apply a penalty fee.

(c) We reserve the right to charge you with any additional fees which are imposed on, or paid by us due to your noncompliance with:

- local laws
- terms of issuance
- taxes and/or similar duties.

This includes any interest or penalties associated to such fees.

2.13.7 Automatic fee conversion

(a) When you register with us, you may request that monthly fees are converted into a Settlement Currency of your choice. This ensures that the monthly fee amount is converted with a Value Date for the same day as the monthly fees.

We must receive your request by 10:00, 4 Business Days before the day of credit/debit of fees in your Cash Account.

(b) The conversion is executed on the day on which the monthly fees are to be credited/debited. Cash is credited/debited to the appropriate subdivisions of your Cash Account on the day of conversion. The Value Date is the first Business Day after the date of conversion which is a business day in the countries of both currencies.

Part III: Rights and Responsibilities

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3.1 Compliance with local market legislation and governing documentation of issues

3.1.1 General

(a) We do not monitor your compliance with local laws or with the requirements or conditions shown in the governing documentation of an issue of securities eligible for our services. It is your responsibility to determine whether such requirements and/or conditions apply to your holdings of securities and also to ensure your compliance on an ongoing basis. We have no duty to inform you of such laws or governing documentation, or of any amendments thereof.

(b) You are solely responsible for:

- ensuring all applicable legal, tax and regulatory requirements for disclosure or reporting as to holding, control
 or beneficial ownership or any other such requirements are met for securities credited, or to be credited to
 your Securities Clearance Account(s) or Transit Account(s). This includes any matter which may require your
 disclosure, in accordance with Section <u>2.5</u>, and any matter that relates to information recorded on a NonDeposit Account
- informing yourself of the characteristics of the securities you hold, intend to hold or are to be recorded on any Account in the Euroclear System. This includes, without limitation:
 - special instalment payment provisions
 - o holding or transfer restrictions
 - foreign ownership limitations
 - o requirements of ownership disclosure.

(c) It is your obligation, as an ongoing condition of participation in the Euroclear System, to comply with any applicable law, decree, regulation, standard or order of any government, government body (including any court or tribunal) or international regulatory authority which relates to money laundering or fraud. This includes, without limitation, obligations to:

- identify your customers and verify that identification where required
- take reasonable steps to enable suspicious transactions to be recognised
- maintain appropriate operational controls
- maintain procedures for the reporting of suspicious transactions. This includes reporting validated suspicious transactions to appropriate authorities where required
- maintain appropriate records of customer identification and transactions for a minimum of 5 years
- give appropriate training to relevant staff.

(d) We may provide you with information on the application of local laws and governing documentation of securities. We do not guarantee the accuracy, completeness or timeliness of such information. Reliance on this information is at your sole risk.

(e) Our services are designed for eligible counterparties and/or professional clients in the sense of MiFID (EU Directive 2004/39), as amended from time to time. Therefore, certain services may be offered only to Participants that qualify as such.

3.1.2 Holding or transfer restrictions

(a) You must comply with all holding or transfer restrictions which may apply due to your holdings in the Euroclear System or use of our services. This includes restrictions relating to securities recorded on your Non-Deposit Account.

We accept no liability for any losses you incur due to holding or transfer restrictions:

- applicable to securities you hold in the Euroclear System
- following your use of our services.

(b) In accordance with Section <u>3.1.1(d)</u> we may include information we have obtained about restrictions on individual holdings of particular issues in specific markets in the <u>Online Market Guides</u>. We may also use other appropriate means to inform you of other restrictions. We do not guarantee the accuracy, completeness or timeliness of such information.

3.1.3 Taxes, similar duties and related interest and penalties

If in connection with any receipt (whether actual or proposed), transfer or holding of cash or securities in or into the Euroclear System or due to your participation in the Euroclear System any taxes, duties, claims, interest, fines, penalties or damages (including reasonable attorney's or accountant's fees) are imposed on, paid by or charged to us, then:

- you must indemnify and hold us harmless for such amounts pro rata the amount of cash or quantity of securities received (or which would have been received), transferred or held by you
- we can immediately debit your Cash Account for such amounts.

3.1.4 Registered securities

Registered securities and dematerialised securities deposited in the Euroclear System are registered in the name of either:

- one of our nominee companies
- the Depository for the issue
- in 'street name'; depending on the market, the 'street name' is the name of a broker or other institution holding the securities for its customer(s) or the name of a previous holder
- another name as we consider appropriate.

The registered name is described in:

- the relevant country section of the Online Market Guides under 'Registration'
- Part V: Section 6 (FundSettle).

(a) To deliver registered securities into the Euroclear System, you must ensure that these securities are registered in the name shown in:

- the relevant country section of the <u>Online Market Guides</u> under 'Specific Instructions Requirements'
- Part V: Section 6 (FundSettle).

Alternatively, you must send us the correct transfer instruments for registration in that name.

(b) We accept the same responsibilities as provided in the Terms and Conditions, Supplementary Terms and Conditions and these Operating Procedures for the acts and omissions of our nominee companies where securities are registered in their name.

(c) If a deposited security is denied registration in the applicable nominee's name, the holder of the Securities Clearance Account or Transit Account where the securities were first credited is liable for the re-registration of the securities or their replacement except where stated otherwise in the <u>Online Market Guides</u>.

(d) If the registration of securities you deposit into the Euroclear System or hold via FundSettle requires any fee, tax or other amount to be paid as a condition of, or in connection with, such securities' registration, then we have the right to debit such amount from your Cash Account.

The debit will be for value the Payment Date of such fee, tax or other amount, pro rata the amount of such securities credited to your Account.

(e) We accept no liability for any delay in, or rejection of registration by the registrar.

3.1.5 Registered or dematerialised Fund Shares

(a) When we hold Fund Shares through a Depository, we may not have received information directly from the Fund on issues such as the Fund's registration practices or the content of the Fund's register of shareholders. We have no obligation to obtain or review such information.

Practices of certain Funds may cause their records to differ from ours. Our Depositories are contractually required to confirm registration for each order processed for us.

In accordance with Section 12 of the Terms and Conditions and without limiting the generality of the previous provisions, we are not liable for:

- a Depository failing to obtain confirmation of the registration of Fund Shares
- a Fund's failure to abide by such confirmation
- a Fund's failure to record our nominee company (or the nominee of our Depository) as the registered holder of the Fund
- any change of the Fund register made without our consent
- any discrepancies that result from your direct dealing with the Fund without sending us appropriate Instructions
- your failure to comply with any transfer restrictions.

(b) We can hold Fund Shares in registered form directly on the books of the Fund or entities acting for the Fund. As such, we can enter into agreements with these entities.

We accept no liability for the acts and omissions (or bankruptcy or insolvency) of such entities, towards you. We will take such steps in order to effect a recovery as we deem appropriate under all the circumstances (including without limitation the bringing and settling of legal proceedings).

(c) Any discrepancies between the records of the Fund and our records which result from your breach of the governing documentation, any other agreement or instrument (including, without limitation, restrictions on internal or Bridge transfers) will not give rise to any liability on our part.

(d) Certain Funds require information on internal or Bridge transfers. You are responsible for verifying and complying with the requirements for each issue of Fund Shares. Failure to follow such requirements can result in the delay or failure of the processing of your Instructions.

(e) You can send Instructions or orders directly to the Fund for the subscription of new Fund Shares or for the switch or redemption of Fund Shares held in the Euroclear System. We reserve the right to make exceptions and process your redemption orders in specific cases (see (f) below).

You can register Fund Shares in our nominee name for subscription or refer, in your orders, to registration in our nominee name for switches or redemption. This is to the extent that such Instruction or order does not exceed the amount of Fund Shares held in your Securities Clearance Account and the position recorded on the Fund's own records when you place the order directly with the Fund.

You are liable for any losses resulting from Instructions or orders sent directly to the Fund. This includes discrepancies between the Fund's records and our records caused by your lack of sufficient Fund Shares to cover your Instruction or order.

(f) For the Transfer Agents or Fund managers listed on our website (my.euroclear.com > My Apps > Knowledge base and enter: Entity: Euroclear Bank – Keyword: Transfer Agent restrictions on the Core) which do not allow you to send Instructions or orders directly to them for the subscription of new Fund Shares or for the switch or redemption of Fund Shares held in the Euroclear System, you can send us Instructions or orders in the manner and at the conditions described in the relevant service description available on our website. By sending us such Instructions or orders, you:

- irrevocably constitute and appoint us as your true and lawful agent and attorney in fact for the purpose of:
 - (i) placing on your behalf such Instructions or orders with the Fund
 - (ii) instructing the Fund to settle such Instructions or orders against your Account(s)
 - (iii) instructing a settlement Instruction against payment out of your Account(s) in order to match the corresponding against payment Instruction instructed by the Fund
- acknowledge that you are bound to the terms and conditions, including any indemnity, penalty or similar provisions, of all documents we execute on your behalf
- acknowledge that you will be fully responsible for any liability that may arise as a result of any Instruction or order we accept on the basis of the above power of attorney.

If, in the process of performing the above actions, any additional information is required, you must provide us with the information upon request. We are not responsible for any delay in processing your Instructions or orders caused by the need for additional information.

(g) In accordance with Section <u>5.6.4.2(b)</u> below, you agree to hold us harmless and indemnify us from and against any and all claims, demands, liabilities and expenses which may be incurred by or brought or made against us, whether arising directly or indirectly in connection with our having acted upon your FundSettle Instructions or where we have otherwise entered into agreements such as those envisaged in Section <u>5.6.4.2(a)</u>.

3.2 Reversals

(a) We can reverse any:

- i. credit or debit which we have made to an Account as a result of an error, regardless whether the error was made by us, you, another Participant or any other person. You must inform us promptly if you discover an erroneous entry in your Account(s) and you must not attempt to adjust the entry yourself
- ii. provisional credit or debit to any Account if the relevant conditions are not fulfilled (see Section 2.3)
- iii. credit or debit to any Account if required by any law, regulation, order, judgement, injunction, asset freeze or other action of any receiver (including persons fulfilling a similar function), government, court, other instrumentality of government (including central banks) or international regulatory authority, the legal effect of which is to require us, or in the case of Bridge settlement, Clearstream, to reverse any credit or debit
- iv. in the other circumstances set out elsewhere in these Operating Procedures.

(b) In the event that Clearstream fails to pay us an amount due, we have the right and are authorised by you to debit your relevant Cash Account(s) for a portion of the unpaid amount due by Clearstream to us.

Your relevant Cash Accounts are those to which credits were previously made as a result of transactions taken into account to determine the amount due by Clearstream to Euroclear Bank.

The debit is calculated currency by currency in proportion to the amounts credited in the relevant currency in the Cash Account(s).

The debit will be provisional, subject to the resolution of all claims that may be asserted under the letter of credit provided by Clearstream under the Bridge Agreement, and any other claims available to us with respect to such failure to pay.

Such debit or a portion of such debit will become final should we not be able to recover our entire exposure via the letter of credit provided by Clearstream under the Bridge Agreement, or any other claims available to us with respect to such failure to pay.

(c) You must indemnify us for any costs (including reasonable fees of counsel), expenses or penalties incurred as a result of any event described in (a) above. We accept no liability for any losses, including but not limited to fees, expenses and foreign exchange risks, that result from your use or re-use of a provisional credit.

(d) It is the relevant Participant's responsibility to cover any shortfall in a Securities Clearance Account which could or has resulted from a reversal effected in accordance with (a). If it fails to do so, such shortfall will be considered as a securities loss under Section 17 of the Terms and Conditions.

We may share such loss amongst all Participants holding the relevant securities in the Euroclear System.

We accept no liability for the application of such loss sharing provision in accordance with the Terms and Conditions.

(e) We may make an interest adjustment in respect of any reversal or credit/debit to a Cash Account.

(f) We will inform you of any reversal in any Account and of any interest adjustment made to your Cash Account.

3.3 Blocking

3.3.1 General rules

(a) We may block securities or cash on your Account(s) if we either:

- have notice or reasons to believe such action is required under any applicable law, decree, regulation, order or injunction of any government, court or international regulatory authority
- otherwise determine such action is necessary, advisable or in the best interests of the Euroclear System.

(b) We may also block securities or cash on your Account(s) if we deem it necessary to enforce any right we have under the Terms and Conditions, these Operating Procedures or any other agreement we have with you.

3.3.2 Availability of securities

(a) A sufficient amount of securities must be credited to your Securities Clearance Account to successfully execute any debit. This is without prejudice to Section <u>5.3.2.6.</u>

(b) Securities which are blocked or subject to settlement restrictions as described throughout these Operating Procedures will be unavailable to execute any debit.

3.3.3 Blocking by us

Securities will be blocked in your Securities Clearance Account in, among others, the following circumstances:

When we block	Additional comments
For registered securities in certain domestic markets	If the securities are sent to the registrar for registration (see the <u>Online Market Guides</u>)
If securities are being realigned	As shown in Section 5.2.4 (External settlement)
If securities due to be debited (following an Instruction) are in transit	Including any necessary trans-shipments in connection with the inventory management of the Euroclear System
If securities are being collected in a Securities Clearance Account to enable an Instruction with a higher priority, earlier Settlement Date or for a linked instruction	
If we deem it necessary for Custody Operations	
If securities are subject to a Certification Event and the Input Deadline for us to receive the certification has been reached	

If securities are subject to a Custody Operation with default actions which require the blocking of securities	If we receive an Instruction from you informing us not to take such default actions we will lift the blocking during the RTP which follows the OSSP of the Business Day after the Input Deadline
If there is a suspected securities loss or if an event took place which in our opinion could give rise to a securities loss (for example, the unwinding of a receipt or delivery in a local market)	Blocking may be for the entire amount of affected securities credited to your Account, or in proportion to the number of securities subject to such suspected or possible securities loss. You will not be able to exercise your custody entitlement in such event.
	Or
	If the Securities Clearance Accounts are not blocked and we are unable to exercise certain rights (including voting rights), we may execute, for each Participant, a reduced number of custody Instructions pro rata to the amount of shares for which such Participant has sent such custody Instructions.
	For Custody Operations which do not require your Instruction, the proceeds will be allocated among all Participants that are entitled to these proceeds in accordance with the Terms and Conditions and these Operating Procedures pro rata to the amount of shares such Participant held in the Euroclear System at the time the entitlement to these proceeds is determined.
If securities to be credited to your Securities Clearance Account relate to a delivery Instruction proposed by Clearstream for 'Daylight Bridge Processing' in a Clearstream Delivery Transmission	Blocking is lifted in accordance with the rules set out in Section <u>5.2.3</u> (Bridge settlement)

3.3.4 Blocking at your request

(a) You may instruct us to block securities standing to the credit of, or expected to be credited to, your Securities Clearance Account(s).

(b) You may instruct us to unblock securities blocked in accordance with (a) provided this is not forbidden by local market rules or practice. Instructions to unblock partial amounts are not accepted.

(c) Instructions to block and unblock your securities must be received by 10:00 on a Business Day and will be processed in the OSSP dated the next Business Day.

(d) Your Instructions to block securities will not prevent us from debiting your Account for such securities in accordance with:

- the Terms and Conditions or these Operating Procedures
- any other agreements between you and us
- any law, regulation, order, judgement, injunction, asset freeze or other action of any receiver (including persons fulfilling a similar function), government, court, other instrumentality of government (including central banks), or international regulatory authority.

3.4 Settlement restrictions

3.4.1 Securities approaching redemption

(a) Securities approaching final redemption cease to be available for the execution of:

- internal delivery and receipt Instructions, on the redemption date, beginning with the OSSP dated the redemption date
- external delivery Instructions, at the time outlined under the 'Settlement restrictions' section of the <u>Online</u> <u>Market Guides</u> or 7 calendar days before the redemption if no time is outlined in the Online Market Guides.

(b) When there is a reduction of the minimum denomination in which securities approaching partial redemption can be traded, such securities cease to be available for the execution of Instructions as shown in the below chart.

Instruction Type	When?
External delivery Instructions	7 calendar days before the redemption date
Internal and Bridge delivery Instructions	On the Business Day prior to the redemption date
Collateral management services (which we offer as a banking service)	In the RTP dated the Business Day prior to the redemption date

Securities received from execution of an internal receipt Instruction after the time that blocking takes effect will be credited to a Securities Clearance Account but will be equally blocked.

(c) We reserve the right to make securities approaching partial redemption by drawing unavailable for the execution of external delivery Instructions at any time between the Business Day before the drawing in the local market and the time of allocation of drawn securities in the Euroclear System.

The securities will not be available for any other operation or Instruction from the moment we start the allocation process of drawn securities. The securities remain unavailable until the close of the RTP on the date of the allocation in the Euroclear System. Any securities credited to the Securities Clearance Account after the start of the allocation process in the Euroclear System are available for the execution of delivery Instructions.

(d) The rules on availability set out in (a), (b) and (c) also apply to securities with currency or other options.

(e) If we receive notice of any special circumstances which may change the settlement restrictions stated in this Section 3.4.1, we will do our best to inform you, but accept no liability for not doing so.

3.4.2 Specific settlement restrictions

(a) Special circumstances that affect particular issues of securities may result in the complete or partial restriction of the transfer or delivery of such securities.

(b) Such restrictions may include:

- closed books periods prior to interest payments or other Corporate Actions
- particular domestic markets restrictions, as shown in the Online Market Guides.

We will hold in the backlog of unexecuted Instructions:

- any receipt Instruction we receive before a closed books period for which securities are not received by the start of the closed books period
- any delivery Instruction (other than Bridge delivery) which remains unexecuted at the start of such closed books period, or received by us during any closed books period.

Internal Instructions (and, unless otherwise indicated, Bridge Instructions) may be executed throughout such closed books period.

We are not liable for any delay or failure of local settlement or failure to obtain agreement to the matching of Instructions due to such restrictions.

(c) If you, as an Automatic Borrower, input a Lowest Priority Instruction, no Borrowing will take place to cover a shortfall.

3.4.3 Global certificates

(a) Only internal and Bridge settlement Instructions may be executed, when an issue exists only in the form of a global certificate deposited:

- in the Euroclear System
- with Clearstream
- with a Common Safekeeper or Common Depository for us and Clearstream.

It is not possible to execute Instructions for physical deliveries of securities which are in the form of global certificates, except when and as permitted by the governing documentation of the issue.

If a delivery Instruction for a global certificate cannot be executed, the Instruction will be held in abeyance until the global certificate is exchanged for definitive certificates.

(b) When an issue only exists in the form of a global certificate deposited in a local clearing system we will only accept your delivery or receipt Instructions if either:

- they are connected with internal or Bridge settlement
- the addressee or entity receiving/delivering securities is a member of such local clearing system.

3.5 Statutory lien and pledge to our benefit

3.5.1 Statutory lien

(a) Pursuant to Article 31 of the Belgian Act of August 2, 2002, relating to the Supervision of the Financial Sector and Financial Services and without prejudice to the Terms and Conditions and any collateral arrangements entered into between us acting in our banking capacity and you, we are the beneficiary of a statutory lien on:

- the balance of all securities credited to each Securities Clearance Account and Transit Account
- the balance of all cash standing to the credit of each Cash Account
- all rights and entitlements of any Participant in the Euroclear System which are credited to an Account or a Record-keeping Account.

(b) Without prejudice to the Terms and Conditions and any collateral arrangements entered into between us acting in our banking capacity and you, we hereby waive the statutory lien referred to in (a) above over the balance of all securities credited to a Securities Clearance Account which has been separately and expressly identified in writing by you as an Account to which solely customer securities are credited.

This is unless you agree in writing that the statutory lien should continue to apply to the customer securities credited to such Securities Clearance Account.

(c) The statutory lien secures any claim we have against you arising in connection with the clearance or the settlement of transactions through, or in connection with, the Euroclear System, including claims resulting from loans or advances.

If you have agreed that the statutory lien applies to customer securities, the statutory lien on such securities only secures claims we have against you arising in connection with the clearance or the settlement of transactions through, or in connection with, the Euroclear System, carried out on behalf of your customers including claims resulting from loans or advances.

3.5.2 General pledge

In order to secure any claim we have against you which arises in connection with the use of the Euroclear System (in particular any claim resulting from any extension of credit or conditional credit made in connection with the clearance or settlement of transactions or custody services), you hereby pledge the following in our favour:

- all securities and cash you hold in the Euroclear System
- all right, title and interest in and to all such securities and cash
- all existing and future contractual claims that you may have against us in connection with the use of the Euroclear System and in particular your claim to receive from us securities from a local market as a result of either:
 - stock exchange trade orders where such transactions are automatically fed by the local stock exchange into the local clearance system
 - o receipt Instructions that we send to the local market on your behalf.

This general pledge concerns both your proprietary securities and securities you hold on behalf of your customers.

This general pledge is without prejudice to any collateral arrangements you entered into with us (acting in our banking capacity) and without prejudice to the statutory lien referred to in Section <u>3.5.1</u> above.

3.6 Special pledged accounts

(a) We may open pledged accounts in accordance with the 'Pledged Account Terms and Conditions'.

We are not required to create a special pledged account under Article 7 of the coordinated Royal Decree No. 62 on the Deposit of Fungible Financial Instruments and the Settlement of Transactions involving such Instruments. You must have our prior written consent in order to open such pledged Account.

Also, we will not otherwise act as collateral agent ('tiers détenteur de gage' or 'tiers convenu') for the pledge of rights or interests in any Account.

(b) You will not pledge or transfer by way of security any right or interest in any of your Accounts without our prior written consent.

3.7 Securities and cash

3.7.1 Securities

(a) We will not take any action to protect your rights in the case of an issuer's insolvency or failure to comply with the terms of a security unless required by any law, regulation, order, judgement, injunction, asset freeze or other action of any receiver (including persons fulfilling a similar function), government, court, other instrumentality of government (including central banks), or international regulatory authority.

We may, however, in our sole discretion decide to take certain actions as regards your rights in defaulted securities but we do not accept any liability if we fail to do so or provide inaccurate or incomplete information to you.

For more information see Section 5.3.1.3 – Services for securities in default.

(b) We are not obliged to provide tax assistance. We may decide to discontinue our tax services and we accept no liability for any consequences which follow from such discontinuance.

We accept no liability for the amounts credited as tax relief and the timing of such credit. We do not guarantee the result of the introduction of a withholding tax refund claim.

You authorise us to debit your Cash Account for any unwarranted benefit that you could receive.

For more information see our website and Section 5.3.2.2.2 – Provision of assistance in obtaining tax relief.

(c) When effecting a purchase of securities for your Account in accordance with the Terms and Conditions, Supplementary Terms and Conditions or these Operating Procedures, we will make reasonable efforts to purchase the exact amount of securities of the issue that is required, even if such amount is different from the minimum tradable amount for such security or a multiple of such minimum tradable amount. If, however, notwithstanding our reasonable efforts, we cannot purchase the exact amount of securities required, we can purchase such higher amount of securities of the issue as is required to match the minimum tradable amount or appropriate multiple thereof.

In such an event, the full amount of the securities purchased will be credited to your Securities Clearance Account and the full expense associated with such purchase will be debited from your Cash Account.

(d) We have the right to reverse any debit or credit to Cash Accounts in respect of market claims for which we have not received an interest payment. For more information see Section <u>5.3.2.6.2</u> – Other market claims procedure.

3.7.2 Cash

(a) We reserve the right in our sole discretion and without notice:

- not to accept a currency as a Settlement Currency within the Euroclear System
- to withdraw acceptance of any Settlement Currency previously accepted
- to refuse any deposit into the Euroclear System of a Settlement Currency regardless of any deposit of other cash in the same Settlement Currency, or to deliver out of the Euroclear System to any Participant holding such cash in the Euroclear System, if we determine that acceptance of any deposit in such Settlement Currency would not be in the best interests of Participants generally or of the Euroclear System.

(b) We have the right to appoint or disable a Cash Correspondent upon notice to you. Any payment made through a disabled Cash Correspondent is deemed not to have been received by us. See Section <u>5.4.2.1</u> – Cash Correspondents.

(c) If you fail to preadvise funds or to correctly preadvise funds, you authorise us to debit your Cash Account for an amount of compensation calculated in accordance with the method provided in Section <u>5.4.2.5.4</u>. If your preadvised funds are not received, we may apply supplemental penalty fees.

(d) If you hold funds, or funded your Cash Account, in a Settlement Currency then you bear the risk of default of the Cash Correspondent to which the funds have been remitted to the extent that either:

- funds credited have not been preadvised or have been incorrectly preadvised by you
- funds credited are in excess of the amount you preadvised
- the preadvice of funds has been received after the relevant Input Deadline as included in the Euroclear Documentation.

For more information see Section <u>5.4.2.5.4.2</u>.

3.8 Rules applicable to defaulted Participants

(a) The rules set out throughout the Terms and Conditions and these Operating Procedures apply equally to defaulted Participants represented by an appointed administrator, liquidator or similarly appointed entity or legal successor.

Such default can be caused by either:

- the Participant being unable to fulfil its obligations under the terms of the Euroclear Documentation or agreements to which they are bound
- the Participant's liquidation or bankruptcy (or initiation of such proceedings).

(b) Upon your default, we have the right to retain cash or securities up to an amount which we in our reasonable opinion believe, based on the portfolio composition and history of occurrence of default of the issuer of such securities, will cover any amount due or that may become due to us by you.

This provision applies regardless of whether the event which gives rise to the payment obligation has taken place. We are entitled to retain cash and/or securities as long as there is a risk that such an event may occur.

(c) Our rights relate in particular to reversals, payments connected to a market claim, taxes, fees, penalties and damages (including reasonable attorney's and accountancy's fees).

For more information see Section 3.2 – Reversals, Section 5.3.2.6 – Market claims, Section 5.3.2.2 – Taxes and Section 2.13 – Fees.

3.9 Use of information and data protection

3.9.1 Our use of information

(a) In addition to Section 2.5 and without prejudice to this Section 3.9.1, you authorise us to use information:

- you have provided to us
- related to you and your activities in the Euroclear System

where such information is necessary for our activities and/or our services.

You specifically authorise us to use information relating to positions or movements in your Securities Clearance Account(s) to enable the repurchase of securities in accordance with the Terms and Conditions, Supplementary Terms and Conditions and these Operating Procedures.

(b) We may receive, collect and process personal data involving or relating to people employed by and/or associated with you, beneficiaries of Accounts administered by you and other persons involved in your admission procedure.

This personal data will be used for:

- managing your admission procedure
- administering your Account(s)
- providing services to you
- contacting and communicating effectively with you
- other related purposes including direct marketing and handling of claims/litigation whether in Belgium or abroad.

Personal data may be passed on to other Euroclear entities or third party service providers (including third party providers of IT solutions such as software as a service 'SaaS', cloud computing, external hosting or similar) to achieve the above purposes.

Such entities or third party providers of IT solutions may be located in any country of the world, including in countries outside the European Economic Area, which do not offer a level of protection of personal data equivalent to that offered by the personal data protection EU legislation and implementing national legislation. Local laws where such entities, third party providers and/or providers of IT solutions are established or located may imply that local authorities (for example, court, governmental agency or body of competent jurisdiction) can access your personal data. You may, upon your request, obtain from us the most up-to-date list of such countries. Such list may change from time to time.

In any case, we will ensure that the transfer of personal data complies with applicable EU and Belgian personal data protection law where such entities, third party providers and/or providers of IT solutions and any other recipients mentioned under Section 2.5 are established or located outside the European Economic Area in countries which do not offer a level of data protection equivalent to that offered by the EU personal data protection legislation and implementing national legislation.

We will allow individuals to access, and, if shown to be incorrect, rectify their personal data in accordance with applicable EU and Belgian personal data protection law.

You hereby represent and warrant that you have informed your employees, contractors and other persons acting on your behalf of the receipt, collection, processing and transfer of their personal data by us and of our purposes for doing so as well as their right to request access to their personal data and their correction in the event of inaccuracies.

For the purpose of this provision, personal data includes all data pertaining to an identified or identifiable natural person, including, without limitation, names, contact details and other associated data such as the recording of phone conversations as set out in these Operating Procedures.

(c) To the extent permitted by applicable law, we may record telephone conversations with you for the purpose of proof of existence, timing and content of commercial transactions or related professional communication with you.

The recordings will be stored for a period of time that does not exceed the period during which the relevant transaction can be contested in justice.

You represent and warrant that you have properly informed all individuals acting on your behalf of such telephone conversation recording for such purposes and for such duration as mentioned above.

By using the Euroclear System, you agree for yourself and for all individuals acting on your behalf to the recording of telephone conversations with us in accordance with the foregoing.

3.9.2 Your use of information

(a) You may use information we provide exclusively to support your primary business and your Euroclear related activities. Be aware that we receive information from various third party information providers and as such we do not guarantee the accuracy, adequacy, completeness, timeliness or availability of such information.
 We are not responsible for any errors or omissions or for the results obtained from your use of such information or for any lost profits, indirect, special or consequential damages.

Unless you have our (and/or the necessary third party's) prior written consent, information you receive from us must not be repackaged, further transmitted, transferred, disseminated, distributed, redistributed, sold, resold, leased, rented, licensed, sublicensed, altered, modified and/or adapted.

Information received from us must not be used for any illegal purpose.

You will take all reasonable steps to ensure that your officers, directors, employees, representatives, contractors and agents comply with this section.

(b) You agree and acknowledge the following:

- certain information received from us is, and remains, valuable intellectual property owned by, or licensed to us and/or a third party information provider. No proprietary rights are transferred to you
- misappropriation or misuse of such information may cause damage to us and/or a third party information provider so that monetary damages may not provide sufficient compensation
- in the event of misappropriation or misuse, we, and/or the third party information provider, have the right to obtain injunctive relief in addition to other remedies to which we or they are entitled.

(c) Most issuers of securities rated by ratings agencies have, prior to assignment of a rating, agreed to pay the relevant rating agency. Relevant ratings agencies and their affiliated entities maintain policies and procedures to ensure the independence of their ratings and rating processes.

With respect to the use of ratings by rating agencies, you agree that:

- credit ratings and other opinions we provide are statements of opinion and not facts or recommendations to purchase, hold or sell any securities
- each rating or other opinion is only one factor in an investment decision made by you or on your/an investor's behalf
- you will make your own study and evaluation of each security and of any issuer, guarantor and provider of credit support for securities that you consider purchasing, holding or selling
- we are not responsible for the accuracy, adequacy, completeness, timeliness or availability of information we provide that is derived from data supplied by rating agencies.

3.10 Confidential information

(a) You must take all necessary precautions when sending us confidential information. You agree to maintain the confidentiality of confidential information received from us.

(b) We may store, reproduce, download or transmit confidential information through any website, internet server or other secured means for your use or retrieval. We will use adequate security, encryption and authentication procedures/software to prevent any unauthorised third party disclosure.

(c) We may transmit or accept confidential information by means we deem appropriate to and from Participants, Depositories, Other Settlement Systems, Cash Correspondents or third parties if:

- we consider it necessary to provide our services
- this is consistent with market practices
- there is no other means of transmitting or receiving such confidential information
- there is a contingency situation.

(d) We accept no liability for the consequences of a third party intercepting confidential information or when we or any third party service provider are required to disclose confidential information in accordance with Sections <u>2.5</u>, <u>2.12</u> or Section <u>3.9.1(b)</u>.

3.11 Access to records

(a) Upon your reasonable request, we may grant you access to our premises and may allow you to view your accounts opened in our electronic books and records, all of this in the presence and under the control of members of our staff. We may also provide you copies of such books and records, at you own expenses.

(b) We are available during normal business hours to discuss these Operating Procedures and any internal control and reconciliation systems that we have in place.

(c) You can find further information on our financial situation and internal controls on our website, including:

- our annual accounts and report
- the ISAE 3402 report.

3.12 Business continuity

(a) We maintain a business continuity framework that describes:

- roles and responsibilities
- standards and guidelines
- incident management checklists
- crisis management checklists
- standardised departmental plans
- the risk-based approach we adopted.

(b) Our business continuity framework includes business continuity plans based on various scenarios impacting our staff, offices and IT services, enabling us to recover from a disaster and continue providing services to you within reasonable recovery time objectives.

We intend for our business continuity plans to comply with the CPSS-IOSCO Principles for Financial Market Infrastructures (April 2012).

(c) We test our business continuity arrangements at least annually.

(d) You can find further information on business continuity in the <u>ISAE 3402 report</u>, which is published on our website:

- IT and office recovery strategies
- the hierarchical framework for decision
- recovery requirements by department
- communication contact lists with the main internal and external stakeholders (employees, clients, external providers, public authorities and media).

Part IV: Connectivity

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4.1. To Euroclear Bank

4.1.1. General rules

(a) You can communicate with us in the ways shown below.

General connectivity	Instructions
SWIFT	SWIFT
EUCLID	EUCLID
EasyWay	EasyWay
ESSC	ESSC
Mail	Mail
Telex	Telex
Fax	Fax*
Email	Email*
Courier	Courier
Telephone	

*in exceptional circumstances only

(b) We may accept (i) scanned copies of duly signed forms and documents and (ii) forms and documents which are signed with a copy (or scan) of an original signature. You will be bound by such forms and documents as though they were the original forms or documents.

(c) Certain forms and documents may be completed and submitted through our website. In order to express your agreement to the content and submission of such forms and documents you have to sign, scan and submit by email a confirmation with a unique identifier which will also appear on the form.

You agree that such confirmation constitutes proof of your agreement to the content and submission of the relevant forms or documents.

(d) Certain forms and documents may be completed and submitted through SWIFT messages. In order to express your agreement to the content and submission of such forms and documents you have to entirely copy the relevant form or document wording in your SWIFT message without deleting or omitting any part of it.

You agree that

- such forms or documents completed and submitted through SWIFT message constitute proof of your agreement to the content and submission of the relevant forms or documents
- any deletion or omission of (part of) the wording of the relevant form or document will be considered as an involuntary mistake and any deleted or omitted part of such wording will be considered as agreed by you and forming an integral part of the agreed form or document
- you are solely responsible for ensuring that the forms or documents completed and submitted through SWIFT messages have been duly authorised internally.

(e) You are solely responsible for ensuring that you have the necessary internal security controls to enable safe and secure communication and compliance with (b) through (d) above.

We will treat as authentic any forms and documents (including Instructions) sent to us which comply with the procedures above.

(f) We have no responsibility for the acts or omissions of any supplier of network or other services in respect of the operation, availability or access to any of the communication tools described in this Part IV.

4.1.1.1 Our address

(a) All Instructions and communications must be addressed to:

Euroclear Bank SA/NV		
(Department concerned – see below)		
1, boulevard du Roi Albert II		
B – 1210 Brussels		
Belgium		

Telephone: +32 2 326 1211

Telex: Belgium 61025 Answerback MGTEC B

BIC: MGTC BE BE ECL or MGTC BE BE

Email available at my.euroclear.com > My Apps > Contacts

(b) Each Instruction or other communication must carry the following general header:

- department concerned, as shown in the Euroclear Documentation
- name and location of sender
- Account number of sender (if not included in the message text).

(c) Instructions and other communication intended for more than one department must be sent by separate messages to each department.

4.1.1.2 Deemed receipt

Your Instructions or communications are deemed to be received by us on any Business Day:

Communication type	Deemed receipt
If sent by EUCLID or SWIFT straight-through	when you receive validation results which do not indicate rejection or the need for further validation
If sent by SWIFT free format	when the message is received at our SWIFT address (see BIC code above) and the client receives the status report (e.g.MT567, MT548) to confirm the status of the transaction
If sent using EasyWay	when your Instruction's status is updated from 'to authorise', 'to confirm' or 'declined' to any possible status as defined in the EasyWay documentation
If sent using ESSC	when the file is uploaded
If sent by mail or courier	when physically received at our address
If sent by telex	when you receive the appropriate answer back from us
If sent by fax	when received at our address
If sent by email	when received at our email address

4.1.1.3 Authorised signatories for Instructions by mail, courier or fax

(a) When you become a Participant in the Euroclear System you must provide us with a list of your authorised signatories. This list must contain the individuals' original signatures and signing powers. You are responsible for informing us of any changes to this list. Changes must be sent in writing with appropriate supporting documents.

(b) We require 2 authorised signatures for Instructions sent by mail, courier or fax. When signing a document you must also print the signatories name in capital letters to help us identify it. We are under no obligation to verify the identity of person(s) giving the Instructions or the conformity of their signatures with the list of authorised signatories you send.

(c) We reserve the right not to process Instructions received via mail, courier or fax which contain a signature that in our opinion does not appear on the provided signatory list.

(d) We may require you to send replacement Instructions if we deem that your initial Instructions are not signed by an authorised signatory. If you fail to provide such further Instructions by the Input Deadline we specify or within 10 Business Days, your Instructions will lapse.

4.1.2. Means of sending Instructions

4.1.2.1. Standard messaging formats

4.1.2.1.1. SWIFT

(a) If you wish to communicate with us by SWIFT then you must enter into an agreement with us whereby you agree to the rules for use of the service. These rules are set out throughout the Euroclear Documentation. In particular, you must confirm that transmissions sent through SWIFT will be protected by the SWIFT built-in authentication procedures.

(b) You use SWIFT at your own risk and expense. We accept no liability in respect of the operation or availability of SWIFT.

(c) By using SWIFT you agree that any transmissions you send to us will conform to:

- current formats and procedures as specified by SWIFT
- any additional requirements that we specify.

(d) You must verify that you can meet all the processing requirements for transmission of Instructions/messages including:

- those described in the Euroclear Documentation or SWIFT Specifications (including security requirements)
- your own internal control procedures.

(e) An authenticated free format message containing Instructions will be processed as though it were a telex Instruction (unless stated otherwise in the Euroclear Documentation). It must comply with the requirements for telex Instructions set forth in these Operating Procedures and throughout the Euroclear Documentation.

4.1.2.1.2. EUCLID

(a) If you wish to communicate with us by EUCLID then you must enter into an agreement with us whereby you agree to the rules for use of the service. These rules are set out throughout the Euroclear Documentation. You should familiarise yourself with the rules included in the following legally binding guides:

Communication Platform	Guide
EUCLID PC	EUCLID PC - Installation and Technical Administration Guide
EUCLID PC	EUCLID PC - Getting started
EUCLID Server	EUCLID Server - Technical Administration Guide
EUCLID Server	EUCLID Server – Installation Guide

EUCLID PC & EUCLID Server	IP connection guide
EUCLID file transfer	EUCLID file transfer connection manual
EUCLID	IP Network and security guide - EUCLID

(b) It is your sole responsibility to:

- ensure that you select the most appropriate EUCLID access mode for your own operational requirements
- comply with the security requirements for EUCLID.

(c) By signing the relevant registration form(s) you are deemed to have agreed to the terms and conditions of the EUCLID PC, EUCLID Server and/or EUCLID file transfer agreement

(d) You must ensure that you use the most recent version of EUCLID PC and or EUCLID Server and that you update your local databases on a regular basis.

(e) Any Instruction we receive from you which has passed through the EUCLID access authentication procedures will be treated as authentic for all purposes.

EUCLID Access

(f) Your access to EUCLID is controlled by the use of:

- a network user number and password
- a EUCLID User number and password.

This set of identification procedures is designed to maintain the external and internal security and confidentiality of your operations when using EUCLID.

(g) EUCLID can be accessed using either:

- EUCLID PC
- EUCLID Server
- EUCLID file transfer mode
- EUCLID interactive mode
- a combination of the above modes.

(h) We can discontinue EUCLID access:

- immediately if we have reason to believe that you have misused your access or your use threatens the network
- with reasonable notice to you if you no longer use your EUCLID access and/or have not updated your EUCLID PC and/or EUCLID server version.

EUCLID User hierarchies

(i) You must specify one or more 'EUCLID Administrators' who will each manage a user hierarchy. A EUCLID Administrator has access to a single permanent network user number and EUCLID User number allocated by us. The associated network and EUCLID passwords are initially allocated by us but automatically change upon first connection. They then remain encrypted in the local EUCLID database at your premises.

These are called 'communication passwords' and they will change roughly every 30 calendar days. In EUCLID file transfer, you will be prompted to change the passwords allocated by us roughly every 30 calendar days.

(j) A EUCLID Administrator may create one or more 'EUCLID Users', each of whom will have a single permanent network user number and EUCLID User number as allocated by us. The associated network and EUCLID passwords are initially allocated by the EUCLID Administrator but automatically change upon your first connection. The EUCLID Administrator(s) and EUCLID User(s) form a 'User hierarchy'.

The EUCLID Administrator can assign the following to any EUCLID User:

- any EUCLID service
- access type
- Securities Clearance Account
- Cash Account
- any function to which it has access (other than the creation of other EUCLID Users).

This enables the EUCLID Administrator to manage EUCLID security by such segregation. They can also lock and unlock the access facility for a EUCLID User. A locked EUCLID Administrator can only be unlocked by a Euroclear Bank data security administrator.

4.1.2.1.3. EasyWay

(a) If you wish to communicate with us by EasyWay then you must enter into an agreement with us whereby you agree to the rules for use of the service. These rules are set out throughout the Euroclear Documentation. You should familiarise yourself with the rules included in the following legally binding guides:

Communication platform	Guide
EasyWay	Corporate Actions user guide
EasyWay	Settlement user guide
EasyWay	Collateral Management user guide
EasyWay	User access management guide
EasyWay	How to connect to EasyWay guide
EasyWay	Getting started Quick Card
EasyWay	Connectivity Quick Card

(b) It is your sole responsibility to ensure that you:

- select the most appropriate EasyWay access mode for your own operational requirements
- select which network provider you will use, and whether to use more than one (you should contact and contract with the relevant network providers directly)
- use the most recent software version of the Web PKI component we provide to manage Euroclear Bank smartcards.

(c) Instructions which pass the EasyWay authentication procedures will be treated as authentic for all purposes. Instructions sent through EasyWay must be authorised before they are released in accordance with the user access rules you define.

(d) We do not guarantee:

- the accuracy and/or consistency of communication or data sent through EasyWay
- the availability of the service at all times (there are specific periods of planned downtime as shown in the Euroclear Documentation).

You should establish sufficient contingency arrangements to send Instructions and messages to us in case EasyWay is unavailable.

(e) We make an effort to protect any communication or Instruction received through EasyWay. Despite this, we cannot guarantee the integrity and security of messages sent through the internet and we accept no liability for any data corruption or unauthorised amendment.

4.1.2.1.4. ESSC

(a) If you wish to communicate with us by ESSC then you must enter into an agreement with us whereby you agree to the rules for use of the service. These rules are set out throughout the Euroclear Documentation. You should familiarise yourself with the rules included in the following legally binding guides:

Communication platform	Guide
ESSC	Connectivity Quick Card
ESSC	Setup guide
ESSC	User access management guide
ESSC	User guide French FTT Service

(b) It is your sole responsibility to ensure that you:

- select the most appropriate ESSC access mode for your own operational requirements
- select which network provider you will use, and whether to use more than one (you should contact and contract with the relevant network providers directly)
- comply with the security requirements for ESSC.

(c) Instructions which pass the ESSC authentication procedures will be treated as authentic for all purposes. Instructions sent through ESSC must be authorised before they are released in accordance with the user access rules you define.

(d) We do not guarantee:

- the accuracy and/or consistency of communication or data sent through ESSC
- the availability of the service at all times (there are specific periods of planned downtime as shown in the Euroclear Documentation).

You should establish sufficient contingency arrangements to send Instructions and messages or files to us in case ESSC is unavailable.

(e) We make an effort to protect any communication or Instruction received through ESSC. Despite this, we cannot guarantee the integrity and security of messages or files sent through the internet and we accept no liability for any data corruption or unauthorised amendment.

4.1.2.1.5. Mail

We may accept Instructions sent by mail in accordance with Section 4.1.1.3.

4.1.2.1.6. Telex

(a) We will provide you with a telex authenticating chart once you enter the Euroclear System. There are no other test key arrangements for the Euroclear System. You must test all Instructions sent by telex.

(b) Instructions sent by telex will not be considered for processing in the Euroclear System until a correct and complete authenticating test key is received.

(c) Subject to passing the relevant authentication procedures, any test key we receive will be treated as authentic for all purposes. We will notify you of any incorrect test key. The correct test key must be communicated before the relevant Input Deadline. If the correction allowing authentication or cancellation is not received by the second Business Day after the notification, the Instruction will lapse.

(d) Telex transmissions must be complete prior to the relevant Input Deadline in order to be processed.

4.1.2.2. Exceptional circumstances

4.1.2.2.1. Email and fax

(a) Except as otherwise described throughout these Operating Procedures, we only accept Instructions by email or fax in what we deem to be exceptional circumstances. We may accept Instructions received via email or fax if we believe

such Instruction to be genuine and submitted by you or on your behalf. We are not obliged to verify the identity of the person giving the Instructions.

(b) We are not liable for acting upon your email or fax Instruction after subsequently receiving contradictory Instructions you send by EUCLID, SWIFT, EasyWay, ESSC or mail.

Our acts or omissions taken in relation to Instructions received from you via email or fax will not be affected by your failure to confirm their validity by EUCLID, SWIFT, EasyWay, ESSC or mail.

(c) Reproductions of email Instructions from our internal site records will act as valid evidence of such Instructions.

4.1.3. Deadlines for Instructions

4.1.3.1. General rules

(a) We must receive your Instructions by the relevant Input Deadlines. Input Deadlines are described on our website, in DACE notices and uninstructed reminders we send to you and below. In the event of discrepancy, the information contained in DACE notices will take precedent.

(b) It is your responsibility to take into account holidays in the relevant local market when inputting your Instructions on any particular Business Day.

(c) We may try to process Instructions received or validated after an Input Deadline but accept no liability for:

- our failure to execute such an Instruction
- errors or omissions resulting from our processing of the Instruction
- our delay in doing so.

(d) If we accept a late Instruction, we are not obliged to do so again in the future.

4.1.3.2. Input Deadlines

Input Deadlines are as follows:

Instruction Type	Input Deadline (or appropriate document)
Mail, fax or SWIFT free format	As set out in the Euroclear Documentation
New Issues Instructions	As set out in the 'New Issues Distribution Guide'
EUCLID or SWIFT straight-through – Internal settlement	As shown in the 'Internal settlement' section on our website
EUCLID or SWIFT straight-through – Bridge settlement	As shown in the 'Bridge settlement' section on our website
External Settlement Instructions	As shown in the 'Settlement timing card' (available on our website)
Custody Operations Instructions	As shown in the relevant DACE notice or on our website
Money Transfer Instructions	As shown in the 'Quick Cash Card' (available on our website)
EUCLID or SWIFT straight-through – Lending and Borrowing Instructions	As shown in the 'Lending and Borrowing' section on our website
FundSettle Instructions	As shown in the FundSettle Browser

4.1.4. Processing and validation of Instructions

4.1.4.1. Processing of Instructions

Except as agreed in writing with us or as otherwise documented in these Operating Procedures we will:

- act as instructed in respect of your Accounts
- process your Instructions for the amount of securities or cash instructed by you (provided sufficient securities and cash are available)
- process your Instructions on Business Days only.

4.1.4.2. Validation of Instructions

(a) The format of Instructions and reports for each method of communication follows recommendations from the International Organisation for Standardisation (I.S.O) to the extent possible. We accept no liability for where we have not followed the recommendations.

(b) Only Instructions which conform to the requirements described in the Euroclear Documentation or which we deem suitable for processing will be considered valid and accepted for processing.

(c) If you send an incomplete or incorrect Instruction, we may repair it for you if we have the required information and reasonably believe you intended to supply a valid Instruction. We deem such an Instruction received once we have repaired it.

We accept no liability for the processing of repaired Instructions.

(d) If you have sent us a valid Instruction that has been incidentally rejected by us, we may repair it for you. In case we have repaired your Instruction we will inform you thereof either by phone or by email. However, if your Instruction has been repaired by us and you wish to:

- cancel it: you must act in accordance with the rules set out in Section <u>4.1.5.2</u>. below;
- modify it: you must act in accordance with the rules set out in Section 4.1.5.3 below.

(e) We accept no liability for failing to process Instructions that are received 5 months prior to their Value Date or processing date. This is regardless of us having accepted such Instructions for future validation/processing or their conformity with the rules set out in (b) above.

We may accept and retain such Instructions for future validation/processing but accept no liability for either doing or not doing so.

4.1.4.3. Validation of data fields

(a) Mandatory, conditional and operational data fields in Instructions are submitted to a computer validation process. Some Instructions may require further manual validation.

(b) A required data field that is found to be invalid will cause an entire Instruction to be rejected. For money transfer Instructions this is subject to the provisions set out in Section <u>5.4.2.4.4</u>.

(c) Instructions that contain all relevant and correctly formatted items of information will be accepted for further processing despite superfluous data being provided. We ignore any data outside validated fields which is included in an Instruction.

4.1.4.4. Use of code numbers

(a) Code numbers are used to identify:

- Accounts
- securities

- counterparties
- Cash Correspondents
- Depositories
- other parties involved in the execution of an Instruction.

(b) You must enter Instructions in the Euroclear System using a code number (as shown in the relevant Euroclear Documentation). Information on BIC codes is contained in Database 4: I.S.O. Bank Identifier Codes and can be accessed as described in the Euroclear Documentation.

(c) If you enter a number that is not used as a code number in the Euroclear System we can try to select the code number which is used in the Euroclear System that corresponds with your incorrect entry. We accept no liability for delay or any consequence of our failure or error in doing so.

(d) If you enter a code number used in the Euroclear System and a description/code number not used in the Euroclear System, which does not match a correct code number, we will base our processing on the Euroclear System code number.

(e) We give you the option of using BIC or local codes. We translate such codes into code numbers used in the Euroclear System. We base such translation on a dictionary of information provided by external service providers and validate whether or not the BIC or local code input by you is recognised by the dictionary. We then process the Instruction accordingly.

We do not guarantee that the dictionary is up-to-date, complete, accurate or always available. Consequently, Instructions input with a BIC or local code may be rejected. To avoid this risk you should not use BIC or local codes.

4.1.4.5. Use of decimals

(a) Cash amounts in Instructions and reports are expressed to two decimal places in the Euroclear System. Any further decimal places are ignored (without rounding).

(b) Securities on the FundSettle platform are expressed as described in <u>Part V: Section 6</u> of these Operating Procedures.

4.1.4.6. Notification of invalid Instructions

We will notify you if we find any of your Instructions are invalid as soon as practicable but do not guarantee the timeliness of any such notification.

4.1.5. Cancellation and modification of Instructions

4.1.5.1. Cancellation by us

We may, at any stage, refuse to process your Instructions or cancel them. We will inform you via our reports if we refuse or cancel your Instruction and take no other action. The same rules apply for lapsed Instructions which are subsequently cancelled.

4.1.5.2. Cancellation by you

(a) You may only cancel (or modify the priorities of) Instructions which have been received and validated by us but not yet executed.

(b) We must receive your cancellation Instructions before the Input Deadline of the original Instruction. Cancellation Instructions must conform to the requirements described throughout the Euroclear Documentation. Instructions become irrevocable at the Input Deadline provided that no cancellation Instruction has been received in accordance with this Section before such Input Deadline.

(c) If, due to the original course of processing (e.g. we have sent your Instruction to the Depository, Cash Correspondent, issuer or agent), we are unable to revoke your initial Instruction, we reserve the right to reject your cancellation Instruction.

(d) You cannot cancel Instructions generated by us.

4.1.5.3. Modification of Instructions

Except as provided in Section <u>5.2.1</u> (Processing rules) you cannot modify a valid Instruction (except the priority). In order to modify a valid Instruction you must cancel the original Instruction and submit a new Instruction (except for priority modifications for Instructions which have not reached the end of their life cycle). We can only submit your new Instruction to the relevant local market once the cancellation of your original Instruction has been processed on said local market.

4.2. From Euroclear Bank

4.2.1. General rules

(a) You may receive communication from us by:

General connectivity
SWIFT
EUCLID
EasyWay
ESSC
Mail
Telex
Fax
Email
Internet
Courier
Telephone

(b) Upon your request we will make a reasonable effort to communicate information to you via a courier service of your choice. We accept no liability for failure to do so, delay, loss of documents or any other consequence of acting upon your request.

(c) We require your up-to-date address to enable successful communication. It is your responsibility to inform us of any changes to your contact details. Notification of changes must be in writing under authorised signature, via authenticated SWIFT message, by tested telex or on a duly signed letterhead.

4.2.2. Deemed receipt

You are deemed to have received communication sent by us as shown in the table below.

Communication type	Deemed receipt
SWIFT	when the message is sent to the correct SWIFT address (as set out in the agreement for SWIFT users) and acknowledgement is received from SWIFT
EUCLID	when our back office database (tandem) has been updated. It is up to you to pull the report and synchronise your local database

EasyWay	when the information is available to you on the screen
ESSC	when you trigger the download
Mail or courier	5 calendar days after being deposited in the mail, postage prepaid or after having been delivered to the courier
Telex	when you receive the appropriate answer back from us
Fax	when the transmission report indicates your receipt
Email	on the Business Day the email is sent or, if sent outside of business hours, on the following Business Day (am)
If communicated via our website	on the upload date

4.2.3. Reports

4.2.3.1. Availability and content

(a) We will report activity within the Euroclear System to you through the reports and at the times shown in the Euroclear Documentation. Some reports are only provided if you have registered for a specific service. Subscription and registration details for such services are available on request.

(b) SWIFT Specifications form an integral part of the Euroclear Documentation. In order to receive certain reports based on the SWIFT Specifications you must first subscribe by completing, signing and returning the appropriate registration form.

(c) If you use EUCLID you must ensure you retrieve the most recent reports available from EUCLID.

(d) You acknowledge that data in reports sent by email may be of a confidential nature and that emails, by their nature, may be intercepted, altered by or misdirected to third parties. You agree that the use of emails in this respect is at your own risk. We accept no liability for any consequence arising from the use of emails for the purpose of sending these reports.

4.2.3.2. Official reports

The official statements of balance for your Account(s) are:

For securities	the most recent paper (non-electronic) version of the Statement of Transactions sent, or to be sent to you, via mail
For Settlement Currencies	the most recent paper (non-electronic) version of the Daily Cash Statement sent, or to be sent to you, via mail

Our right to reverse erroneous, conditional or provisional entries is not modified by receipt of these official reports.

4.2.3.3. Reports provided to auditors

If we receive a request, duly authorised by you, from your auditors we will provide them with all aspects of your position via a standard report. We will also send you a copy of the report upon your request.

4.2.4. List of Participants

(a) Periodically we may send you a directory of Participant, counterparty and correspondent codes. This directory also includes a list of Participants and their Securities Clearance Account numbers.

We can make this information available through the relevant Euroclear Documentation or another appropriate medium.

(b) You can request that your name and Security Clearance Account number(s) are withheld from such documentation.

4.2.5. Information published online

(a) Some information is available through our websites. While we produce or obtain such information from publicly available sources generally considered reliable, we cannot verify its accuracy or completeness. You should not rely on our websites as a primary source of information and we do not keep this information up to date. Your use of the information shown on our websites is entirely at your own risk.

(b) We do not endorse or review any third party websites which we provide links for on our websites. As such we do not take responsibility for data, information or materials shown on such websites.

We provide no warranty or representation regarding our websites. We disclaim all warranties and representations including implied warranties of:

- merchantability
- non-infringement of third party rights
- freedom from viruses or other harmful code
- fitness for particular purpose.

4.2.6. Statements of movements in Transit Accounts, Record-keeping Accounts and Non-Deposit Accounts

For the purposes of Section 10 of the Terms and Conditions, the statements we provide include statements in respect of movements in Transit Accounts, Record-keeping Accounts and Non-Deposit Accounts. Such statements do not change the legal nature of such accounts as described in these Operating Procedures.

Part V: Section 1 – New Issues

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5.1.1 Acceptance criteria

(a) We can accept securities into the Euroclear System provided that they meet our criteria which include, without limitation, fungibility, regulatory and tax considerations. We report accepted securities in our securities database.

(b) Odd Lots that are not accepted in the relevant local clearing system are not accepted in the Euroclear System.

(c) Nominal amounts of securities expressed in decimals are not accepted in the Euroclear System unless otherwise stated in these Operating Procedures. Fractional nominal amounts of Fund Shares may be accepted under the conditions in <u>Part V: Section 3</u> (Custody).

(d) We will decide for which services accepted securities are eligible and provide this information to you throughout the Euroclear Documentation.

(e) Fractional amounts of securities denominated in EUR where the minimum denomination is expressed with no more than 2 digits after the decimal point can be accepted in the Euroclear System.

e.g. 0.00

(f) We reserve the right, either to:

- not accept securities in the Euroclear System for any reason whether published in advance or not
- withdraw acceptance of any securities previously accepted
- refuse any transfer/deposit into the Euroclear System of securities even if we already hold securities of the same issue
- deliver out of the Euroclear System securities to you if it is necessary either:
 - under applicable law, regulation or provision of the corporate charter (or other constitutional documents of the issuer) or the governing documentation of the issue
 - o due to applicable corporate, judicial or administrative decision or inquiry
 - o for the best interests of the Euroclear System.

(g) We may classify securities into different categories (such as, for example, issuer or tax status) in line with procedures we define from time to time. We do not accept liability for the accuracy, completeness, adequacy, timeliness or availability of such categorisation.

5.1.2 Acceptance process

(a) Prior to accepting a new security we need time to gather information relating to its acceptance into the Euroclear System. You must take this time into account when informing us of your wish for us to accept a new security.

(b) You must provide us with any information we request to make our decision on whether or not to accept a security into the Euroclear System if you request the acceptance of a new security.

(c) When making our decision we may take into account information provided by:

- the issuer
- the lead manager
- the issuing agent
- Clearstream (or indirectly through them)
- data vendors
- other sources.

We accept no liability for acting in reliance on the information provided by the above sources.

New Global Notes and New Safekeeping Structure

(d) For acceptance of securities issued in NGN form we require a signed Issuer ICSD Agreement in the form shown on our website and, if necessary, an 'effectuation authorisation' and/or legal opinion.

(e) For acceptance of registered form securities to be held in the New Safekeeping Structure we require a signed Issuer ICSD Agreement in the form shown on our website.

5.1.2.1 Common Code and ISIN

(a) Once requested, we (or Clearstream) will allocate a Common Code to each issue of securities held in the Euroclear System or Clearstream (or both).

(b) We reserve the right to use any appropriate means in order to identify a security.

(c) To the extent that we and Clearstream are responsible for the allocation of an ISIN, the Common Code for an issue will form the basis for the related ISIN.

(d) We accept no liability for the availability or use of ISINs we publish or make available to you that are allocated by other numbering agencies, including substitute numbering agencies.

(e) Securities will be issued with different Common Codes if treated differently, even if they are issued under the same governing documentation (unless they are a subsequent tranche of, or amendment to, an existing issue).

Securities represented by different Common Codes may form separate issues for the purposes of Section 17 of the Terms and Conditions.

(f) We reserve the right not to accept securities (or related Instructions) until a Common Code has been allocated by us or Clearstream.

(g) The allocation of a Common Code or ISIN does not indicate acceptance of the security within the Euroclear System. Acceptance is indicated:

- to issuing agents, via a validation message
- to Participants, by the security appearing in the list of eligible securities available on our website.

5.1.2.2 Fungibility

(a) At the time of acceptance we will determine whether a later tranche of securities is to be treated as fungible with one or more tranches previously issued.

(b) Securities in the Euroclear System are held fungibly by issue, unless within the issue certain securities do not carry the same rights (e.g. securities drawn for redemption). We may allocate a different Common Code or ISIN to such securities.

(c) We may decline to accept or hold securities where they can be issued in more than one form (e.g. registered and bearer) or in forms which cannot be treated as fungible.

Remote Market Securities will not be treated as fungible with the Home Market Securities of the same issue. Both Remote Market Securities and Home Market Securities will carry the same ISIN but will be differentiated within the Euroclear System by the allocation of different Common Codes.

5.1.2.3 Invalid securities

(a) We accept securities into the Euroclear System on the assumption that they are valid. We do not make any investigation or assessment as to the validity of the securities.

(b) If after crediting your Account with securities, we are informed that such securities are invalid, we can:

- block the relevant securities in your Account(s)
- suspend Instructions and requests involving such securities
- debit entries related to such securities
- suspend all services related to such securities
- cancel all unexecuted Instructions related to such securities
- delete the Security Code of the securities in the securities database.

5.1.2.4 Instructions involving unknown Securities Codes

We will recycle securities transaction Instructions at your request that were rejected due to an unknown Security Code. We will also attempt to investigate whether such securities can be accepted in the Euroclear System. The recycling process does not indicate acceptance by us.

5.1.2.5 Confidential securities

(a) If requested by a lead manager or issuer or provided for in the governing documentation of the issue, we may set up any security as a confidential issue provided the rules in this Section 5.1.2.5 are followed.

(b) The request must specify how long the confidentiality conditions should last and also whether they apply to Clearstream.

(c) We do not report or respond to queries about confidential securities other than on the 'Deferred Income Payments' section of our website.

(d) We will only make information about confidential securities available to the lead manager or issuer, who requested confidentiality, and you, if:

- you have a position in the issue
- you have entered settlement Instructions for securities transactions in the issue.

Requests for information from anyone else will be referred to the party who initially asked for the security to be marked as confidential.

(e) We do not confirm whether inquiries have been made by the persons outlined in (d) and we rely solely on the oral representation of the caller.

(f) We can remove the confidentiality restrictions if information about the securities becomes publicly available.

5.1.3 Acceptance channels

(a) We accept communications for the acceptance of new issues into the Euroclear System via various channels, including email and phone, as described throughout the 'New Issues Acceptance Guide' (available on our website). Information on the European Pre-Issuance Messaging System is shown below.

5.1.3.1 European Pre-Issuance Messaging System (EPIM) services

(a) A description of this service is contained in the EPIM Documentation which is available on request. This documentation includes information on:

- the categories of securities eligible for this service
- the EPIM operating hours
- fees

(b) You alone are responsible for selecting the most appropriate EPIM connection for your own operational requirements.

(c) Any EPIM Message which has passed through the necessary authentication procedures and appears to us to be from you is deemed as authentic.

(d) You are responsible for:

- your use of third party software and hardware required for your use of the EPIM service
- procuring and complying with any necessary licenses.

(e) We do not warrant that the EPIM service is interruption or error free or is merchantable or fit for any purpose.

(f) We may suspend the EPIM service occasionally to carry out maintenance. This maintenance is very rarely carried out on Business Days and should not disrupt your service. On occasions where such maintenance is carried out on Business Days, we will inform you of such maintenance via our standard messaging formats.

5.1.3.2 Connection security

(a) You alone are responsible for the security of your connection to EPIM and any consequences that follow unsuitable security arrangements.

(b) You will be assigned a user ID and password. It is your responsibility to ensure the privacy of your password. If you are required to change your password, you must do so before its expiry date to ensure the service is not interrupted.

(c) Failure to comply with security requirements for the EPIM service may expose you to statutory and contractual liability as well as reduced security. You indemnify us, our agents and employees for loss, claim, liability or expense caused by:

- your non-compliance with the security requirements
- unauthorised use of your EPIM connection
- false or misleading information or failure to disclose any material fact in respect of the security requirements.

(d) We may disconnect our or your connection to EPIM due to a contractual breach by you, for security purposes or for other reasons. We will notify you of this as soon as practicable.

(e) You may disconnect your connection to EPIM provided you give us reasonable notice and you have no messages pending through the service.

5.1.4 New issues distribution

(a) This section on new issues distribution should be read in conjunction with the 'New Issues Distribution Guide' (available on our website).

(b) The procedures outlined in this section apply to distributions of securities held with a Common Depository or Common Safekeeper. The same procedures apply to securities held with a Specialised Depository or Other Settlement System but are subject to differences which result from local market practice.

(c) Unless previously agreed with us, no provision that is included in documents concerning an issue of securities which requires us to take action is applicable or binding upon us. You must draw our attention to any feature of an issue which requires action to be taken by us, the Common Service Provider, Common Safekeeper or Common Depository.

(d) When distributing a new issue through the Euroclear System, the requesting party must send us the full final documentation no later than the Issuance Date.

(e) Questions regarding the documentation requirements for acceptance of a new issue in the Euroclear System should be addressed to us and not to any other party.

5.1.4.1 Syndicated lead manager distribution – Against payment

5.1.4.1.1 Conditions for the use of the against payment procedure

(a) Lead managers must be Participants in the Euroclear System and have a Securities Clearance Account and Cash Account for the purpose of distributing new issues. These Accounts will be named 'New Issues Securities Clearance Account' and 'New Issues Cash Account' and captioned 'New Issues Against Payment'.

These Accounts can only be used to execute payments and internal settlements in connection with these distribution procedures.

(b) Lead managers are liable for all debit balances in their 'New Issues Cash Account' to the same extent as for any other Cash Account they hold with us.

(c) Unless agreed otherwise with us, each lead manager will use the same Accounts to distribute all new issues to which this procedure applies.

(d) Lead managers who become Participants solely to use the new issues distribution procedures may request that we do not publish their names in the 'Directory of Participant, Counterparty and Correspondent Codes'.

5.1.4.1.2 Preliminary information

(a) As soon as possible, but no later than 3 Business Days before the scheduled Closing Date, the lead manager must provide us with all the details we request as regards the issue.

Specifically, information regarding the planned date and place of closing, proposed instructions for payment to the issuer and the documentation for the new issue must be sent to us as soon as possible.

(b) Lead managers may allow allotees to receive part of their allotment in Clearstream and part in the Euroclear System. This is known as a split allotment. Primary delivery of part of an allotment received in the Euroclear System to a counterparty in Clearstream is not allowed.

If a split allotment is permitted by the lead manager, this should be indicated to us in the preliminary information submitted.

(c) We must receive the following in draft and final forms before the Closing Date:

- the offering or invitation memorandum, if any
- the allotment list with delivery Instructions to allotees

- the offering circular or issue prospectus
- the fiscal agency, indenture, depository (or other) agreement including the text of any required form of
 ownership certification in connection with exchanges, redemptions and interest payments on global securities,
 interest payments and rights attached to the issue
- confirmation of the tax status of the issue, including the text of the required form of ownership certification for tax purposes.

These documents are required for reference and we will not review them in detail.

5.1.4.1.3 The allotment list

(a) The lead manager must:

- provide us with a complete allotment list for the portion of the issue to be distributed in the Euroclear System. This must be done as soon as possible and no later than 19:45 on the third Business Day prior to the scheduled Closing Date (we may cancel distribution of an issuance if this deadline is not adhered to)
- notify allotees of the necessary details of the distribution procedures including the requirement to choose whom they wish to receive their allotments through (us or Clearstream) by sending appropriate Instructions.

Any timetable delivered to allotees must conform to the timetable agreed with us.

(b) If allotees elect to split their allotment between us and Clearstream then the lead manager must ensure that the allotment list submitted to us reflects this, if necessary, by amending it. Submission of an amendment constitutes a request to us to prepare internal delivery Instructions to reflect such change.

Final amendments must be made and received by us no later than 10:00 on the second Business Day before the scheduled Closing Date.

(c) By the third Business Day prior to the scheduled Closing Date, the lead manager must have identified:

- any allotees who have not sent receipt Instructions within the Euroclear System or Clearstream
- any non-matching internal receipt Instructions.

Provided they are received before 10:00 on the second Business Day prior to the scheduled Closing Date, we will accept transmissions as shown below.

From	Accepted transmissions
Lead managers	Amendments to the allotment list reflecting the discovery of unmatched Instructions
	Instructions requesting us to facilitate the amendments to the allotment list
	Instructions requesting us to enable securities to be transferred to those allotees who have failed to input internal receipt Instructions
Allotees	Internal receipt Instructions for their allotments
	Modifications to previously input receipt Instructions

(d) No later than 10:00 on the second Business Day before the scheduled Closing Date the lead manager must instruct against payment transfer of new issues out of their 'New Issues Securities Clearance Account' to cover allotments for which no matching receipt Instructions have been input.

In this instance we will allow transfer of the new issuance to another of the lead manager's Securities Clearance Accounts. If the lead manager has no other Account, the portion of issuance may be transferred to another Participant.

(e) At 11:00 on the second Business Day prior to the scheduled Closing Date we will fix the portions of the new issue to be held in the Euroclear System. We inform the lead manager of the nominal amount.

Allotees cannot alter their elections once the amount is fixed. Amounts to be held by an allotee may be modified by subsequent transfer Instructions after the processing of the distribution.

5.1.4.1.4 Closing Date

(a) The Closing Date must be:

- a Business Day
- a business day at Clearstream
- a business day in the country of the currency in which the payment to the issuer is to be made, including the city of the Cash Correspondent, Common Depository, Common Service Provider or Common Safekeeper
- a business day in the city in which closing takes place.

(b) Neither we nor the Common Depository, Common Service Provider or Common Safekeeper accept any liability for the delay or cancellation of a closing or distribution.

(c) The lead manager acknowledges and agrees that in providing payment to the issuer on our behalf, the Common Depository or Common Safekeeper acts as sub-agent on behalf of such lead manager. Accordingly, the lead manager accepts that it bears the risk of default or insolvency of such Common Depository or Common Safekeeper under circumstances where such Common Depository or Common Safekeeper would have received cash to pay the issuer from us but would not yet have made effective payment to the issuer.

If the lead manager is not comfortable with our choice of Common Depository or Common Safekeeper, they may request that a different one be appointed.

(d) Positive balances in the 'New Issues Cash Account' are not allowed. If, following the distribution such Account shows a positive balance, the lead manager must give a single book transfer Instruction with a Value Date, not earlier than the Closing Date, to another of his Accounts to ensure the balance returns to nil.

5.1.4.2 Syndicated free of payment distribution

Under this procedure, the issuer's agent receives the portion of the issue to be held in the Euroclear System free of payment and may then instruct us to transfer the securities to the allotees.

5.1.4.2.1 Preliminary information

The preliminary information we require for this procedure is the same as that set out for syndicated lead manager distribution – against payment (see Section 5.1.4.1.2 above).

5.1.4.2.2 The allotment list

(a) The lead manager must:

- provide us with a complete allotment list for the portion of the issue to be distributed in the Euroclear System. This must be done as soon as possible and no later than 19:45 on the third Business Day prior to the scheduled Closing Date (we may cancel distribution of an issuance if this deadline is not adhered to)
- notify allotees of the necessary details of the distribution procedures including the requirement to choose whom they wish to receive their allotments through (us or Clearstream) by sending appropriate Instructions.

Any timetable delivered to allotees must conform to the timetable agreed with us.

(b) Final amendments must be made and received by us no later than 10:00 on the second Business Day before the scheduled Closing Date.

Submission of an amendment constitutes a request by the lead manager for us to prepare internal transfer free of payment Instructions to reflect such change.

5.1.4.2.3 Closing Date

(a) The Closing Date must be:

- a Business Day
- a business day at Clearstream
- a business day in the city of the Common Depository or Common Safekeeper
- a business day in the city in which closing takes place

(b) Neither we nor the Common Depository, Common Service Provider or Common Safekeeper accept any liability for the delay or cancellation of a closing or distribution.

5.1.4.3 Non-syndicated issuing agent distribution – Against payment

Three procedures are available for the distribution of non-syndicated new issues:

- Prerelease (against payment and free of payment)
- same-day (against payment and free of payment)
- backvalue (against payment).

5.1.4.3.1 Conditions for the use of non-syndicated issuing agent distribution – Against payment

(a) Issuing agents must be Participants in the Euroclear System and have a Securities Clearance Account and Cash Account for the purpose of distributing new issues. These Accounts will be named 'New Issues Non-Syndicated Distribution Securities Clearance Account' and 'New Issues Non-Syndicated Distribution Cash Account' and captioned 'New Issues Non-Syndicated Distribution Account'.

These Accounts can only be used to execute payments and internal and Bridge settlements in connection with these distribution procedures.

(b) Issuing agents are liable for all debit balances in their New Issues Non-Syndicated Distribution Cash Account to the same extent as for any other Cash Account they hold with us.

(c) Unless agreed otherwise with us, each issuing agent will use the same Accounts to distribute all new issues to which this procedure applies.

(d) Issuing agents who become Participants solely to use the non-syndicated distribution procedures may request that we do not publish their names in the 'Directory of Participant, Counterparty and Correspondent Codes'.

5.1.4.3.2 Preliminary information

(a) Issuing agents must provide us with all the details we request from them for new issues distribution no later than 10 Business Days before the scheduled Issuance Date.

(b) We must receive in draft and final forms, before the Issuance Date of securities issued under the non-syndicated distribution procedures (including each drawdown under programmes we have previously accepted):

- the pricing supplement
- the paying agency (or other) agreement including the text of any required form of ownership certification in connection with exchanges, redemptions and interest payments on global securities, interest payments and rights attached to the issue
- confirmation of the tax status of the issue, including the text of the required form of ownership certification for tax purposes.

These documents are required for reference but we do not review them in detail.

(c) A programme reference number is allocated to the issuing agent upon acceptance of the programme for acceptance in the Euroclear System of issues under such programme.

(d) The issuing agent must notify dealers of the necessary details of the distribution procedures. This notification should include the requirement that dealers elect through whom they wish to receive their securities (us or Clearstream). This choice should be made by sending appropriate instructions to us or to Clearstream.

Any timetable delivered to dealers by an issuing agent must conform to the procedures set out in this section and the chapter titled 'Non-syndicated Issuing Agent distribution – Against payment' in the 'New Issues Distribution Guide' (available on our website).

5.1.4.3.3 Issuance Date

(a) The Issuance Date must be:

- a Business Day
- a business day at Clearstream
- a business day in the country of the currency in which the payment to the issuer is to be made including the city of the Cash Correspondent, Common Depository, Common Service Provider or Common Safekeeper
- a business day in the city in which closing takes place.

(b) Neither we nor the Common Depository, Common Service Provider or Common Safekeeper accept any liability for the delay or cancellation of a closing or distribution.

(c) Positive balances in the 'New Issues Non-Syndicated Distribution Cash Account' are not allowed. If, following the distribution, such Account shows a positive balance, the issuing agent must instruct a transfer of cash with a Value Date, not earlier than the Issuance Date, to an account either within the Euroclear System or outside the Euroclear System to ensure the balance returns to nil.

5.1.4.4 Back Value procedure

(a) We can apply Back Value to Newly-Issued Securities both:

- settling internally during the OSSP
- settling internally during the next RTP provided the Instructions were matched before the OSSP.

Most transactions of Newly-Issued Securities settle with a cash value date of the Settlement Date agreed between the parties regardless of the actual date of settlement.

(b) In some instances we may not always be timely advised and aware of a Closing Date for Newly-Issued Securities and therefore we may be unable to inform you of the application of Back Value until after the Closing Date. In other cases we may not be able to apply Back Value with respect to securities transactions involving such Newly-Issued Securities. We accept no liability for any loss incurred by you as a consequence of you having assumed that we will apply Back Value to a particular issuance of securities without having obtained our confirmation that such application of Back Value would occur.

It is up to you to check with us at the end of the Closing Date whether Back Value will be applied and obtain confirmation from us.

(c) We apply Back Value solely on the basis of the Settlement Date agreed between the parties. If you want to avoid Back Value being applied to your settlement of Newly-Issued Securities you should choose a Settlement Date that is neither the Closing Date nor the Business Day after.

(d) If the entire issuance of Newly-Issued Securities has been Pre-Released then any related against payment securities transactions which settle in the OSSP will be settled without Back Value.

(e) If the entire issuance of Newly-Issued Securities has been Pre-Released but not all against-payment securities transactions settle during the OSSP, we may apply Back Value upon your request, for transactions with the Closing Date as the Settlement Date.

We may also apply Back Value in these circumstances to transactions taking place over the Bridge if agreed with Clearstream.

(f) Back Value as of Closing Date is applied to all against payment securities transactions involving Newly-Issued Securities that:

- are not fully Pre-Released
- have a Settlement Date that is the Closing Date
- settle on the Business Day after the Closing Date.

(g) In our sole discretion (for internal settlement) or in agreement with Clearstream (for Bridge settlement) Back Value may be applied to against payment securities transactions for Newly-Issued Securities, not fully Pre-Released, that settle on the second Business Day after the Closing Date in line with the rules below:

- Back Value as of the Closing Date is applied where the Settlement Date is the Closing Date
- Back Value as of the Business Day after the Closing Date is applied where the Settlement Date is the Business Day after the Closing Date.

Part V: Section 2 – Settlement Services

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5.2.1 **Processing rules**

(a) These rules on processing apply as set out in the Euroclear Documentation. We may adjust them in exceptional or contingency situations. Processing of Instructions can only take place on Business Days and we do not guarantee a particular timing for each Processing.

(b) We reserve the right to add or omit processes to any Processing set out in this section.

(c) We may perform a Processing at any time, and include data, that we in our sole discretion consider appropriate if we are either:

- unable to perform all or part of the OSSP or RTP
- have not received the required data for such processes from external sources by the scheduled time.

You authorise us to credit and debit your Account(s) before receipt of applicable reporting from the local market.

Some processing may be provided to us via a platform shared with other affiliated entities. When transactions or processes with these other entities have priority, we may be unable to perform all or part of the OSSP and RTP as scheduled.

Processing cycle for a given Business Day



5.2.2.1. Overnight Securities Settlement Processing

(a) The OSSP begins the Processing cycle for the Business Day (Day X). The OSSP starts after the Input Deadline referenced in the Euroclear Documentation on Day X-1 and ends with the start of the RTP in the morning of Day X.

(b) The OSSP will have one process but may, in exceptional cases, include more processes. In that case, unless stated otherwise in the Operating Procedures, Instructions for processing in the OSSP may be processed in either part of the OSSP at our discretion.

5.2.1.1.1 Positions

Your Account balances (securities and cash) starting positions are available at the close of the RTP dated Day X -1.

5.2.1.1.2 Records and reporting

(a) Balances and movements are reported as described in the Euroclear Documentation.

(b) The balances in Securities Clearance Accounts as reported at the end of a Processing reflect all debits and credits of securities, regardless of whether they are final or provisional.

For final SWIFT reports using the ISO 15022 standard, the 'aggregate balance' (as defined in the SWIFT specifications) reflects all final securities credits and debits at the completion of the OSSP.

(c) The reporting of the status of unexecuted Instructions is based on the available securities balance at the time of positioning of such Instructions taking into account:

- each Instruction separately within the same level of priority
- all unexecuted Instructions with higher priority.

The report does not guarantee the continued availability of securities for settlement of Instructions with the same level of priority.

5.2.2.2. Real-time Processing

(a) The RTP starts at the end of the OSSP and ends in the evening of Day X. The Processing cycle for Day X ends after the completion of the RTP.

(b) The selection of Instructions or operations that are eligible for the RTP begins at the start of the RTP and continues until the Input Deadline for such RTP.

An exception is made to the above rule for certain credits or debits of cash that we perform. These can be processed after the Input Deadline for the RTP until the start of the next OSSP or at another time during the RTP which we in our sole discretion determine.

5.2.2.2.1. **Positions**

(a) The RTP begins with the Securities Clearance Account and Cash Account balances available at the end of the OSSP for Day X.

(b) During the RTP and for the purpose of the execution of an Instruction or operation, the available Securities Clearance Account and Cash Account balances used will be those recorded at the end of the booking of the previous transaction.

5.2.2.2.2. Records and reporting

(a) Balances and movements are reported as described in the Euroclear Documentation.

(b) The account balances that are reported after the completion of a RTP reflect all credits and debits executed during that RTP, regardless of whether they are final or provisional.

For final SWIFT reports using the ISO 15022 standard, the 'aggregate balance' (as defined in the SWIFT specifications) reflects all final securities credits and debits at the completion of the RTP.

(c) The reporting of the status of unexecuted Instructions is based on the available securities balance at the time of positioning of such Instructions taking into account:

- each Instruction separately within the same level of priority
- all unexecuted Instructions with higher priority.

The report does not guarantee the continued availability of securities for settlement of Instructions with the same level of priority.

5.2.2.3. Processing sequence

(a) Settlement and Custody Operation Instructions are simulated in a processing sequence which takes into account your priorities and options. This sequence determines the order in which your Instructions will be executed depending on your available Securities Clearance Account and Cash Account balances. If you lack sufficient securities, we will take into account your provision of cash or collateral (if using a secured credit line) to execute all Instructions in a single Processing.

(b) The sequence may differ from one part of the Processing to another depending on your choice of settlement priorities and options.

(c) We will use the Euroclear reference number (from lowest to highest) to determine which Instruction should be executed first if having followed the processing sequence no distinction can be made.

(d) The processing sequence is as follows:

First – We consider all debits and credits of securities and their related cash movements. This is regardless of the specific securities issue (i.e. ISIN) and whether the Instructions are part of linked sets before taking into account any other Instructions which qualify for inclusion in the relevant Processing.

Second – We consider all other Instructions which qualify for the Processing and their execution is on an issue by issue basis.

Third – We also sequence Instructions within each issue.

The sequencing priorities are shown in the table below.

Sequence	Order of priority
First	 reversals, adjustments to items already processed, securities losses, transfers from one securities code to another, blockings, recalls of borrowed securities, confirmations or refusals of local market deliveries/receipts unconditional cash movements resulting from market claims unconditional cash movements resulting from fees, interest payments receipts of securities free of payment from outside the Euroclear System full and partial redemptions including drawings
Second	 i. distribution of new issues of securities from a new issues Securities Clearance Account ii. all issuances of short and medium term instruments iii. all issues subject to a Custody Operation resulting in a Custody Cash Distribution based on the positions at the end of that Settlement Date iv. all other issues in random order v. technical netting movements
Third	 i. those resulting in credits of securities against payment in respect of new issues distribution assigned first level 1 priority, then level 2 ii. those resulting in credits for external or Bridge receipts of securities against payment Custody Operation Instructions for voluntary Corporate Actions iii. internal, Bridge and external deliveries taking into account the priority allocated, Settlement Date and amount of securities (Against payment Bridge receipts will be sequenced in the RTP after the security deliveries designated either 'Top Priority' or 'Priority' but before 'Lowest Priority') iv. all other Instructions v. Opportunity Borrowing requests

5.2.2.3.1. Processing for positioning

(a) We will select valid Instructions that are eligible for processing and (where necessary) matched for immediate processing or positioning.

(b) For each Cash Account, Instructions are sequenced in accordance with Section 5.2.1.4.

(c) For each Securities Clearance Account, Instructions are sequenced in accordance with Section 5.2.1.5.

(d) You are offered different options as to priorities and other processing variables which are described throughout this section. You may also link your Instructions in accordance with Section <u>5.2.1.7.</u>

5.2.2.3.2. Recycling of Instructions

The positioning of Instructions which fail and remain unexecuted will be recycled within the Processing (for which they are eligible) provided that:

- the related Account(s) have received a credit of securities and/or cash that enables the Instruction to meet the applicable Positioning Conditions
- the Instruction is eligible for processing at such time.

The recycling period (or 'settlement window') for an Instruction may be shorter than the full RTP.

5.2.2.4. Positioning sequence of against payment external receipts and money transfer Instructions

(a) Once authenticated, validated and matched (where necessary), your external settlement Instructions for receipt against payment of securities and money transfer Instructions selected for positioning will be sequenced as follows:

- in chronological order of applicable positioning deadlines
- unexecuted external receipt Instructions before any money transfer Instructions
- where there are several unexecuted securities against payment receipt Instructions, in chronological order of Settlement Date
- in descending order of the amount of cash in the Instruction.

(b) Where unexecuted Instructions have equal priority after the application of the positioning sequence above, they will be sequenced in a random order.

5.2.2.5. Positioning sequence of securities deliveries

(a) Once authenticated, validated and matched (where necessary), your delivery Instructions for securities will be considered based on these factors in the order they are listed:

- your priority designations
- the Instructions' Settlement Dates
- the amount of securities in each Instruction.

As a general rule, if the positioning is ongoing, we will position Instructions in the order they are received (before taking your priority designations into account).

(b) You cannot designate priorities for FundSettle Instructions.

5.2.2.5.1. Settlement processing procedures

If you do not specify an option, we will process your Instructions under option N (shown below).

We must receive your choice of option by the timing specified in the Euroclear Documentation.

Default standard procedure – Option N

(a) Execution of outstanding unexecuted delivery Instructions for securities of the same issue and priority level will be sequenced in chronological order of the Settlement Date.

(b) An unexecuted Instruction with an earlier Settlement Date blocks the availability of securities for Instructions with a later Settlement Date until the required amount is available for the execution of the Instruction with such earlier Settlement Date. This blocking will continue until the Instruction with earlier Settlement Date is executed, lapsed, cancelled or given a lower priority by you.

(c) Any securities in your Account in excess of the amount reserved for the execution of the Instructions with an earlier Settlement Date remain available for the execution of Instructions with later Settlement Dates.

Modified standard 'optimisation' procedure - Option Y

(d) This procedure allows you to optimise the use of your available securities. This is achieved by following option N for positioning before the contractual Settlement Date. If after this, an Instruction with an earlier Settlement Date cannot be executed, the failure will not block the availability of the securities for processing of an Instruction with a later Settlement Date.

Exceptional procedure – daily 'purge' – Option D

(e) Under this procedure you can introduce a standing Instruction which removes Settlement Date from the criteria for standard order of selection for simulation or sequence. Your Instructions will then be sequenced based on the order of priority and amount of securities only.

5.2.2.5.2. Priority designations

(a) Your securities delivery Instructions can be sequenced in accordance with the following priority designations.

Priority Level	Comments
'Top Priority'	Can be used for all Instructions
'Priority'	Can be used for all Instructions
'Regular'	Automatic classification if you fail to request a designation
'Lowest Priority'	Can only be applied to avoid Automatic Borrowing in the Securities Lending and Borrowing Program

(b) Custody Operation Instructions that require a debit of securities will be processed before any other Instructions regardless of their priority designation. Voluntary Corporate Actions with unconditional movements are unaffected by any priority designations.

Subject to Section 5.3.2.6.1.2, Custody Operations which require a blocking of securities are submitted in the RTP.

(c) Against payment Instructions are normally sequenced before free of payment Instructions if at any time there are several outstanding unexecuted Instructions to deliver securities:

- of the same issue
- with equal priority
- with the same amount of securities
- with the same Settlement Date (under options N and Y, not applicable for option D).

(d) Within the same issue of securities, and up to the amount required for the relevant Instructions, the following rules apply.

In the OSSP:

- an unexecuted Instruction with a higher priority blocks the availability of securities for the execution of delivery Instructions with lower priority up to the amount needed for the execution of the higher priority Instruction. Securities accumulate in your Account to permit the processing of such higher priority delivery Instruction or Custody Operation Instruction before any lower priority Instruction to deliver.
- securities reserved in the OSSP are unblocked in the RTP and become available for other Instructions and operations. Top Priority Instructions are exempt from this rule. Securities reserved for Top Priority Instructions remain blocked until such Instructions are executed, lapsed, cancelled or given a lower priority by you.

In the RTP:

- an unexecuted Custody Operation Instruction blocks the availability of securities for all other delivery Instructions up to the amount of securities needed for its execution.
- an unexecuted Top Priority Instruction blocks the availability of securities for all lower priority delivery Instructions up to the amount of securities needed for its execution.

Securities accumulate in your Account to permit the processing of a higher priority delivery Instruction or Custody Operation Instruction before the processing of any lower priority Instruction to deliver.

Securities reserved for Top Priority Instructions will only be unblocked in the RTP if the Instruction is either:

- executed
- lapsed
- cancelled
- given a lower priority by you.

Securities reserved for a Priority, Regular or Lowest Priority Instruction will be unblocked once the applicable recycling period ('settlement window') is closed or the Instruction is executed, lapsed or is cancelled.

(e) If the RTP ends with Top Priority and Custody Operation Instructions still pending, a reservation of securities will be made in subsequent OSSP until the Instructions are executed, lapsed, cancelled or given a lower priority by you. Any securities in your Account in excess of the amount reserved remain available for the settlement of lower priority Instructions.

5.2.2.5.3. Amount of securities

(a) If under options N or Y there are unexecuted delivery Instructions of the same issue with the same priority and Settlement Date, they will be sequenced in descending order of amount of securities. Option D follows the same rule but disregards the Settlement Date.

(b) Positioning of Instructions in the OSSP can be affected by unexecuted Instructions as shown below:

Settlement Process	Blocking Rules
OSSP	An unexecuted Instruction for a larger amount of securities blocks availability of securities for delivery Instructions with smaller amounts.
	Securities are accumulated in your Account to permit the processing of the delivery Instruction with a larger amount of securities before any delivery Instruction with a smaller amount.

(c) In the RTP, Instructions are positioned according to when they are received and whether you have sufficient securities and/or cash in your Account(s) to execute them.

5.2.2.5.4. Modification of priority designations

(a) You can modify the priority designation of your Instructions through EUCLID. The only way of achieving modification via SWIFT, mail or telex is to cancel and then resubmit an Instruction.

(b) The priority of Instructions to deliver securities which have not yet been successfully positioned may be modified as specified in the Euroclear Documentation.

5.2.2.6. Availability of cash for securities transactions

(a) To determine the starting positions for any given Processing, we may include any credit of cash we extend to you in our banking capacity.

(b) The availability of cash received at Cash Correspondents may be affected by holidays:

- where Cash Correspondents are located
- as indicated in the governing documentation of the issue.

(c) Incoming cash that is not associated with securities transactions, whether pre-advised or not, can be available for the execution of Instructions or operations in the RTP if:

- we have received the credit confirmation from the Cash Correspondent and cash has been credited to your Cash Account before the time of the positioning of Instructions or operations
- the cash is available as specified in Section 3.3.

5.2.2.7. Participant-linked settlement Instructions

(a) For an Instruction to qualify as a linked Instruction, it must:

- be for a Securities Clearance Account registered for the linking service
- be for the same issue of securities
- bear the same specific linking reference as described in the Euroclear Documentation. Two or more linked Instructions under the same reference constitute a 'linked set'.

The link is maintained until all linked deliveries are executed or until the relevant Instructions are cancelled.

(b) Qualifying linked Instructions are:

- linked if at least one receipt and one delivery Instruction for the same security are validated by us and at least one of the Instructions is selected for processing
- processed in the OSSP or RTP, where standard settlement rules apply between Instructions with the same linking reference.

(c) Settlement Instructions with the same linking reference are linked if at least one receipt and one delivery Instruction for the same security are validated in the Euroclear System and at least one of the Instructions is selected for processing.

5.2.2.1.1. Maintenance of linked securities and Instructions

(a) Unexecuted linked receipt Instructions and securities standing to the credit of an Account which are part of a linked set remain linked as long as the linked delivery Instructions remain unexecuted or until otherwise cancelled.

(b) The amount of linked securities available in a linked set is the sum of the amount of securities in:

- the executed linked receipt Instructions, plus any refused linked delivery Instructions regardless of whether all the securities originally debited were linked or not, plus any executed receipt Instructions that are not linked, to the extent that the securities are credited in replacement of linked securities previously debited in respect of the recall of a Loan by a Lender
- minus the amount of securities in executed linked delivery Instructions and Requested Recalls.

(c) Linked securities debited from your Account in response to a Requested Recall will remain linked securities for so long as the linked set exists up until the credit to your Account of replacement securities. The debited securities will not be available for the execution of linked delivery Instructions.

(d) A qualifying linked Instruction that we receive from you to receive or deliver securities, which bears the same linking reference as a linked Instruction to deliver, is also a linked Instruction in the same linked set.

(e) If at the time securities are debited from your Account or Instructions to deliver securities are cancelled there remains no other Instruction to deliver securities then, at the same time, any linked Instruction to receive that remains in the backlog of unexecuted Instructions will cease to be processed as a linked Instruction and any linked securities cease to be linked.

No qualifying linked Instruction received after the time described in (e) will be part of the linked set which included such previously linked Instruction. Such Instruction may however form part of a new linked set.

(f) For Instructions to be and remain linked, there must be at least one valid linked receipt Instruction and one valid linked delivery Instruction, both with the same linking reference, in the Euroclear System. Therefore:

- when securities are received and credited to your Account following the execution of a linked receipt Instruction, there must be a valid delivery Instruction with the same linking reference which has not yet been positioned or cancelled
- when a linked delivery Instruction is positioned, there must be a valid receipt Instruction with the same linking
 reference awaiting execution which has not been cancelled or already executed with a resulting credit of
 securities to your Securities Clearance Account.

5.2.2.1.2. Redemption and partial redemption by drawing of linked securities

(a) Securities will no longer be available as linked securities for linked Instructions if they no longer exist. This can occur when such securities are part of a redemption in full for such issue or for other reasons.

(b) Linked securities for which a partial redemption by drawing is processed cease to be linked securities.

However, linked Instructions, which remain in the backlog of unexecuted Instructions and have such securities as linked securities, will not be affected by the partial redemption by drawing. The Instructions remain pending until the partial redemption is complete.

5.2.2.1.3. Merging of fungible issues of linked sets

If an issue of securities (X) that contains linked sets becomes fungible with another issue of securities (Y) and is merged into Y, then:

- Instructions for X with a linking reference are cancelled and replaced with similar Instructions for Y with the same linking reference
- any linked X securities are debited and replaced with Y securities.

5.2.2.1.4. Linked securities – availability for positioning

(a) If a Securities Clearance Account is registered for the linking service, linked securities and linked sets will be considered for positioning separately from other securities and Instructions.

(b) In order to debit securities for a delivery Instruction that is not linked, there must be sufficient non linked securities available.

(c) In order to debit securities for a delivery Instruction that is linked, there must be sufficient linked securities under the same linking reference available. If there are insufficient linked securities at the time of positioning and there is no pending linked receipt Instruction, the linked delivery Instruction is executed if there are sufficient non linked securities.

(d) All delivery Instructions for Custody Operations are deemed not to be linked and are processed as such. If we take any action in respect of a Corporate Action for securities:

- where no holder action is required
- following a DACE notice requesting Instructions and we receive none by the set Input Deadline

the action is taken regardless of whether the securities are linked or not.

(e) For some Corporate Actions, securities can be blocked in your Account to enable you to participate in the event. If the number of securities blocked is more than the number of non linked securities, a linked delivery Instruction can be executed to the extent that:

- the total amount of securities standing to the credit of your Account (including both linked and non linked securities) is more than the amount blocked, and that excess is sufficient to allow the execution of the Instruction
- under the same linking reference there are sufficient linked securities.

(f) If the amount of securities blocked is the same or more than the amount of non linked securities, a non linked delivery Instruction cannot be executed.

(g) If the number of securities blocked is less than the number of non linked securities:

A linked delivery Instruction can be executed	 If there are sufficient linked securities under the same linking reference
	- If there are insufficient linked securities available at the time of positioning and no pending linked Instruction to receive, but there are sufficient non linked securities to cover the shortfall
A non linked delivery Instruction can be executed	- If the number of non linked securities is greater than the number of securities blocked and such excess is sufficient to allow the execution of the Instruction

5.2.2 Internal settlement

(a) Internal settlement of securities takes place by simultaneous book entries in the form of a credit of securities to one Securities Clearance Account and a debit of securities from another Securities Clearance Account. If settlement is against payment, the transaction also includes a credit of cash to one Cash Account and a debit of cash from another Cash Account.

(b) Internal settlement Instructions can settle in any eligible Settlement Currency or free of payment.

(c) Internal settlement transactions are settled on each Business Day regardless of holidays in the relevant local market. You may however wish to take local market holidays into account when choosing the Settlement Currency or Settlement Date for your Instructions.

(d) We do not guarantee the settlement time of internal Instructions.

5.2.2.1. Settlement Conditions

5.2.3.2.1. Input, deadlines and validation

(a) We must have received your internal Instructions by the Input Deadline as specified in the Euroclear Documentation.

Any late internal Instruction will be entered into the next Processing for which it is eligible.

(b) After authentication of input we must validate your internal Instructions as specified in Part IV (Connectivity) before they can be selected for submission to a Processing. If the validation is successful, the internal Instruction is submitted to the Processing. If the validation is unsuccessful, we will reject the Instruction and will notify you of this rejection.

You can cancel your successfully validated internal Instructions as set out in Section <u>4.1.5</u> - Cancellation and modification of Instructions.

5.2.3.2.2. Matching

(a) An internal delivery Instruction must match with an internal receipt Instruction and vice versa (unless they are Free of Payment Delivery Without Matching Instructions). If you choose to transfer or deliver securities without matching Instructions or use Free of Payment Delivery Without Matching Instructions, you assume the risk linked to the absence of matching such Instructions.

(b) The process of matching an Instruction consists of comparing the matching fields included in your Instruction and in your counterparty's Instruction. Where the fields are identical or any difference is within the tolerance level (see (e) below) the Instructions are matched. If, however, a matching field is missing or there is a difference which is outside the applicable tolerance level, the Instruction is unmatched.

(c) The information taken from the matching process is included in the reports of unexecuted Instructions. These reports reflect the matched/unmatched status of an unexecuted Instruction at a particular moment in time. These reports do not provide any indication about a potential later fulfilment of any other Settlement Conditions.

(d) Matched internal Instructions (and Free of Payment Delivery Without Matching Instructions) are put into the backlog of unexecuted Instructions until selected for submission to a Processing.

Unmatched internal Instructions are put into the same backlog of unexecuted Instructions and recycled until matched or cancelled.

(e) The fields of an internal Instruction which must match and the relevant tolerance levels are set forth on our website.

5.2.3.2.3. Selection for processing and positioning

(a) Selection for submission to a Processing only occurs at the Settlement Date of a valid internal Instruction, matched when necessary.

(b) All internal Instructions are eligible for submission to the OSSP provided they meet the relevant Input Deadline.

Internal Instructions selected for submission to a Processing before 13:30 on a Business Day are always eligible for the RTP, even without a Daylight Indicator.

(c) If the Settlement Date of an Instruction is not a Business Day, then it is selected for submission for the first eligible Processing the next Business Day.

(d) Once an internal Instruction has been selected for submission to a Processing it will be sequenced in accordance with Section <u>5.2.1</u>, taking into account your priorities and options. Once sequenced, the internal Instruction will be positioned as set out below.

Positioning involves determining whether the following Positioning Conditions have been met in order to allow the execution of the internal Instruction.

Positioning Conditions

The below table outlines the conditions that must be satisfied for successful securities and cash positioning:

Positioning	Conditions
Securities positioning	If your Account is to be debited with securities then you must have sufficient securities available in your Account
Cash positioning	If your Account is to be debited with cash then you must have sufficient cash in your Account (or provision of cash) in the relevant Settlement Currency to meet the Instruction or receive a credit line from us (as determined by us in our banking capacity) to meet the Instruction

(e) When deciding if your Instructions meet the Positioning Conditions we will see if they are System-linked Instructions for the purposes of technical netting or Linked Reimbursements (described below).

These Instructions allow that delivery proceeds of cash can be used to permit settlement of a linked receipt Instruction. The two Instructions are positioned together and proceeds from the delivery Instruction are included to determine if they provide sufficient cash to permit the settlement of the linked receipt Instruction. If this is possible then both transactions will settle.

5.2.3.2.4. System-linked Instructions (technical netting) and Linked Reimbursements

'System-linked Instructions'

(a) If you input two Instructions for the same Securities Clearance Account ('Pivot Securities Clearance Account') and for securities with the same Security Code we will consider the Instructions as System-linked Instructions for cash and securities positioning.

The Instructions which may be considered System-linked Instructions are:

- Bridge against payment receipt Instructions
- internal delivery and receipt Instructions.

The amount of securities indicated in the receipt and delivery Instructions do not need to be the same.

(b) If you input System-linked Instructions, for receipt and delivery Instructions to be positioned you must have sufficient:

- securities available in your Pivot Securities Clearance Account for the delivery Instruction (including from the execution of the System-linked receipt Instruction)
- cash (or provision of cash) in the related Cash Account to the Pivot Securities Clearance Account or receipt of
 a credit line from us (as determined by us in our banking capacity) for the receipt Instruction (including from
 the execution of the original delivery Instruction).

(c) This positioning technically nets:

- cash movements of one or more purchases which failed due to a lack of cash or credit (for internal clearances or Bridge receipt Instructions), with
- one or more onward sales to another Participant's Account (i.e. internal settlement) which failed due to a lack of securities.

You can request that we block specific securities that you do not wish to be subject to this technical netting procedure.

'Linked Reimbursements'

(d) Linked Reimbursements provide that joint and simultaneous positioning of a receipt Instruction and reimbursement of a Borrowing can occur during an OSSP where the following conditions are met:

- you have an outstanding Borrowing (other than one subject to a Requested Recall)
- for a Securities Clearance Account that is being credited with securities with the same Security Code against payment
- which is in the same OSSP where reimbursement of the Borrowing becomes possible.

The amount of securities in the Linked Reimbursement and receipt Instruction do not need to be the same.

For a Linked Reimbursement to be successfully positioned and to reimburse part of the Borrowing there must either be sufficient:

- securities of the issue to be credited for the receipt Instruction in your Securities Clearance Account
- cash (or provision of cash) or receipt of a credit line from us, as determined by us in our banking capacity, in the Settlement Currency in your Cash Account once the reduction in credit usage from the repayment of the Borrowing is taken into account for us to make a payment against the receipt of securities (subject to our timely notification of their deposit in the Euroclear System).

5.2.2.2. Successful and unsuccessful positioning

(a) If positioning is successful, the internal Instructions will be executed during the relevant Processing.

(b) If positioning is unsuccessful, the internal Instructions remain in the backlog of unexecuted Instructions and continue to be entered into subsequent Processings for which they are eligible until executed or cancelled.

5.2.2.3. Cancellation of Instructions

The following rules apply except as otherwise set out in the Online Market Guides.

In addition to the general rules on cancellation in Section <u>4.1.5</u>, with the exception of some securities, we will cancel unmatched internal Instructions at the end of each Business Day that have either:

- an input date
- an expected Settlement Date

which is more than 30 calendar days prior to that Business Day. We will take the later of the two dates into account for this cancellation.

You may request to be excluded from our daily clearing.

5.2.2.4. Credit and debit of Accounts

(a) Following the completion of a Processing in which your internal Instruction is executed we make:

For receipt of securities	a credit to your Securities Clearance Account and, if against payment, a debit to the related Cash Account
For delivery of securities	a debit to your Securities Clearance Account and, if against payment, a credit to the related Cash Account

(b) For the purposes of internal settlement, credits and debits are made to our account records held in Belgium. In exceptional circumstances, we may temporarily rely on records located outside of Belgium. For the sake of internal settlement, such records are deemed to be located in Belgium.

5.2.2.5. Settlement and Finality

(a) Internal settlement finality occurs:

For the OSSP	Upon completion of the Processing as a result of which the
	In struction in accordingly according
	Instruction is successfully executed
For the RTP	At the moment of successful execution and the simultaneous
	credit/debit of Accounts

(b) The settlement of an internal Instruction is final upon execution and the credit/debit of Accounts. As such, the simultaneous transfer of securities and cash (if against payment) is final at such time.

5.2.3 Bridge settlement

(a) Bridge settlement takes place by simultaneous book entries in the form of a credit or debit of securities to your Securities Clearance Account (or Transit Account) and debit or credit of securities to the Securities Clearance Account of Clearstream. If against payment, it will also include a credit or debit of cash to your Cash Account (or Transit Account) and debit or credit of clearstream.

(b) We only accept Bridge Instructions for Bridge eligible securities.

(c) Bridge transactions can be settled in the Euroclear System either free of payment or against payment in any Bridge Currency.

(d) Local market holidays have no bearing on Bridge settlement transactions in the Euroclear System. You may however wish to take local market holidays into account when choosing the Settlement Currency or Settlement Date for your Instructions.

(e) From time to time Euroclear Bank and Clearstream realign the securities positions we hold with each other. Such realignments are not related to settlement of transactions but may affect securities deliveries out of the Euroclear System (see Section <u>5.2.4.3</u>) and also your ability to participate in a particular Corporate Action.

Realignments may also affect Instructions related to Corporate Actions that require delivery of securities received over the Bridge.

(f) We reserve the right to refuse to process Bridge Instructions if the processing would:

- create an operational constraint that we deem unacceptable
- be inconsistent with the Bridge Agreement, these Operating Procedures or the Euroclear Documentation.

(g) For Bridge settlement we accept no liability for:

- the authenticity, completeness, contents or timeliness of Instruction data we receive from Clearstream
- our processing and reporting of such instruction data
- Clearstream processing, refusing to process and reporting to its members the information it receives from us in accordance with the Bridge Agreement
- Clearstream processing Instructions to be proposed to us in the framework of the Bridge Agreement, including the refusal by Clearstream to propose and process Instructions
- any loss you incur by relying on the delivery of securities over the Bridge in order to participate in a Corporate Action that requires delivery of those securities on the same day they were received
- losses resulting from a realignment which does not occur due to reasons outside of our control e.g. local market rules or procedures
- the consequences of our refusal to process Bridge Instructions
- your Bridge Instructions not being executed on the day you instructed as a result of our risk management procedures (see Section <u>5.2.3.1</u>).

5.2.3.1. Risk management procedures

(a) To meet applicable industry standards, such as the ECB-CESR Standards for Clearing and Settlement Systems in the European Union and the CPSS IOSCO 'Principles for Financial Market Infrastructures', Euroclear Bank and Clearstream have established risk management procedures to limit credit exposure over the Bridge.

(b) In accordance with the terms of the Bridge Agreement, each receiving settlement system ensures that the cash countervalue of delivered securities from the delivering settlement system is not greater than:

The amount of the applicable letter of credit (or other collateral) issued by the receiving settlement system in favour of the delivering settlement system

Plus

The cash countervalue of the next deliveries of securities to be proposed by the receiving settlement system

Any deliveries of securities which would exceed this threshold are refused, under the terms of the Bridge Agreement.

(c) You should be aware (and plan accordingly) that as a result of these risk management procedures, Bridge Instructions may be delayed and settle in the RTP rather than the OSSP. Exceptionally, they may be delayed so that they do not settle on a given Settlement Date.

We do not guarantee the settlement time of Bridge Instructions.

5.2.3.2. Settlement Conditions

5.2.3.2.1. Input, deadlines and validation

(a) We must receive your Bridge Instructions by the Input Deadline set forth in the Euroclear Documentation. Any late Bridge Instructions will be entered into the next Processing for which they are eligible.

(b) After authentication of your input we must validate your Bridge Instructions before they can be selected for submission to a Processing. If validation is successful, the Bridge Instruction is submitted for processing. If the validation is unsuccessful, we will reject the Instruction and will notify you of this rejection.

You can cancel your successfully validated Instructions as set out in Section 4.1.5.

5.2.3.2.2. Matching

(a) In order for an Instruction to match and be submitted for further processing, it must first be included in a prematching transmission.

(b) Bridge receipt and delivery Instructions must match with their corresponding delivery and receipt Instructions from Clearstream (except for Free of Payment Delivery Without Matching Instructions). If you choose to transfer or deliver securities without matching Instructions or use Free of Payment Delivery Without Matching Instructions you assume the risk linked to the absence of matching such Instructions.

(c) When we receive a valid Bridge Instruction that requires matching from you or Clearstream via a pre-matching transmission, we will search the backlog of unexecuted Instructions for a corresponding matching Instruction. If we cannot find one, we will add the Instruction to the backlog as 'unmatched', otherwise the two Instructions (one from you, one from Clearstream) will be paired together as 'matched'.



(d) Matched Bridge Instructions (and Bridge Free of Payment Delivery Without Matching Instructions) are put into the pool of unexecuted Instructions until selected for submission to a Processing.

Unmatched Bridge Instructions are put into the backlog and recycled until matched or cancelled.

(e) The fields of a Bridge Instruction which must match and the relevant tolerance levels are set forth on our website.

5.2.3.2.3. Selection for processing and positioning

(a) Valid Bridge receipt Instructions (matched where necessary) are put into the pool of unexecuted matched Instructions until we receive a Clearstream Delivery Transmission containing the corresponding delivery Instruction.

(b) For each delivery Instruction in the Clearstream Delivery Transmission received, equivalent delivery Instructions previously included in a pre-matching transmission from Clearstream in the backlog of unexecuted Instructions are looked for with the following results:

Situation	Action
There is no matching receipt Instruction	Clearstream's proposed delivery Instruction is refused
Receipt Instruction is found and matched	Clearstream's proposed delivery Instruction and your receipt Instruction are submitted for processing

(c) Valid Bridge delivery Instructions (matched where necessary) are put into the pool of unexecuted matched Instructions until submission to Clearstream for processing. We will report the delivery as settled once we receive notice of acceptance by Clearstream through their Feedback Transmission.

(d) Both Bridge delivery and receipt Instructions need a Daylight Indicator in order to be eligible for settlement during the Optional Bridge Settlement Processing.

(e) Once a Bridge Instruction has been selected for submission to a Processing, it will be sequenced in accordance with Section <u>5.2.1</u> taking into account your priorities and options. If Instructions remain unsettled, the following actions are taken:

Situation	Action
Bridge delivery Instruction remains unsettled after OSSP	Positioning is cancelled at the start of the RTP and we will automatically resubmit the Instruction for positioning for processing in the RTP
Bridge delivery Instruction remains unsettled after RTP	We cancel the positioning and then recycle the Instruction for the next Business Day (unless you cancel the Instruction)

The rules on cancellation of positioning are as follows:

Situation	Action
For Bridge delivery Instructions eligible for the Optional Bridge Settlement Processing	Cancellation does not occur until receipt of the final Feedback Transmission from Clearstream during the Optional Bridge Settlement Process on the relevant Business Day
For Bridge delivery Instructions not eligible for the Optional Bridge Settlement Processing	Cancellation does not occur until receipt of the final Feedback Transmission from Clearstream during the relevant RTP

Positioning Conditions for a Bridge Instruction

Securities positioning	If your Account is to be debited with securities you must
	have sufficient securities available in your Account
	AND
	For against payment Instructions we will check
	Clearstream's credit capacity
Cash positioning	If your Account is to be debited with cash then you must have sufficient cash in your Account (or provision of cash) in the relevant Settlement Currency to meet the Instruction or receive a credit line from us (as determined by us in our banking capacity) to meet the Instruction

(f) When deciding if your Instructions meet the Positioning Conditions we will see if they are System-linked Instructions for the purposes of technical netting or Linked Reimbursements (see Section <u>5.2.2.1.4</u>).

5.2.3.3. Successful and unsuccessful positioning

Successful positioning

(a) If positioning is successful, a Bridge receipt Instruction is executed following the receipt of the delivery Instruction in the Clearstream Delivery Transmission in which the Instruction meets the Settlement Conditions. After processing, a Feedback Transmission is sent informing Clearstream of the status of their proposed deliveries.

(b) If positioning is successful, a Bridge delivery Instruction is executed in the first Processing in which the Instruction meets the Settlement Conditions.

(c) At the end of the OSSP and at certain points of time during the RTS, we send to Clearstream a Euroclear Delivery Transmission containing all Bridge delivery Instructions positioned by such time.

(d) After processing by Clearstream, they will inform us by a Feedback Transmission whether Instructions in our Delivery Transmission have been accepted or not.

Unsuccessful positioning

(e) If positioning is unsuccessful, the Bridge Instructions remain in the backlog of unexecuted Instructions and continue to be entered into subsequent Processings for which they are eligible until executed or cancelled. For Bridge deliveries, no proposed delivery Instruction is sent to Clearstream.

(f) A proposed delivery Instruction included in a Clearstream Delivery Transmission that fails to be executed may be included in a later Clearstream Delivery Transmission.

5.2.3.4. Cancellation of Instructions

(a) The following rules apply except as otherwise set out in the Online Market Guides.

(b) In addition to the general rules on cancellation in Section <u>4.1.5</u>, with the exception of some securities, we will cancel unmatched Bridge Instructions at the end of each Business Day that have either:

- an input date
- an expected Settlement Date

which is more than 30 calendar days prior to that Business Day. We will take the later of the two dates into account for this cancellation.

You may request to be excluded from our daily cleaning.

(c) Except in the event of an issuer default, we will cancel pending Bridge Instructions on the final maturity date of the securities.

(d) During the RTP you can only cancel successfully positioned Bridge delivery Instructions if the proposed delivery is refused by Clearstream. All proposed Bridge delivery Instructions refused by Clearstream for which cancellation is pending will be cancelled once we receive the relevant Feedback Transmission from Clearstream.

5.2.3.5. Refusal of deliveries by Clearstream

(a) Bridge delivery Instructions that are refused by Clearstream will be re-attempted for settlement.

(b) Upon receipt of the final Feedback Transmission from Clearstream for a Processing which indicates that a proposed delivery has been refused, we will re-credit any provisionally debited securities to your Account and will debit the related Transit Account in the next available Processing.

Any provisional credit of cash related to the attempted Bridge delivery will also be debited from your Account with the same Value Date.

5.2.3.6. Credit and debit of Accounts

(a) Notwithstanding the information contained in reports we provide, credits and debits resulting from the execution of a Bridge Instruction may be final or provisional as set out in Section 2.3 and may be reversed as set out in Section 3.2. In particular Section 3.2(b), which deals with reversals in case of non-payment from Clearstream to us, explains the circumstances in which we may reverse such credits and debits in your Account(s).

(b) After the execution of a Bridge receipt Instruction, we will:

- credit securities to your Securities Clearance Account
- debit cash from the related Cash Account (if against payment)

with the Value Date of the relevant Processing (unless shown otherwise in Section 5.2.3.7 (c) below).

(c) We may apply Back Value to Bridge Instructions involving Newly-Issued Securities which either:

- settle in the OSSP
- are selected for processing in the OSSP but settle in the RTP.

The above is subject to Section 5.1.4.4 – Back Value procedure.

5.2.3.7. Settlement and Finality

(a) Settlement of Bridge Instructions occurs when:

- the Processing is completed
- the Instruction is executed
- we receive appropriate Feedback Transmission from Clearstream (including confirmation of acceptance for deliveries) or Clearstream receives appropriate Feedback Transmission from us (including confirmation of acceptance of receipts).

(b) Notwithstanding that we may report credits and debits as final or provisional, settlement of a Bridge Instruction in the OSSP becomes final when:

- i. Feedback Transmission is sent and received; and
- ii. Delivery Transmission is sent and received and either:
 - positive Verification Communication is received
 - o 15 minutes after the later of (i) and (ii) if no negative Verification Communication has been received.

(c) Notwithstanding that we may report credits and debits as final or provisional, settlement of a Bridge Instruction in the RTP becomes final:

For receipts	when securities are credited to your Securities Clearance Account	
For deliveries	when Clearstream records the credit of securities. The simultaneous transfer of securities and cash (for against payment Instructions) is final at such time.	
	You should note that we only become aware of the finality upon receipt of the Feedback Transmission	

(d) You may not be able to use cash from a Bridge delivery transaction until we have received the Feedback Transmission from Clearstream.

5.2.4 External settlement

(a) External settlement takes place by simultaneous book entries in the form of a debit/credit of securities to your Securities Clearance Account and a credit/debit of cash to an account in a local market which may be an account at the issuer's registrar.

If the transaction is against payment there will also be a debit/credit to your Cash Account and a credit/debit to a cash account in the local market.

If the settlement is through a physical receipt/delivery of securities, it will occur to or from an account outside the Euroclear System with corresponding movements into your related Transit Account.

(b) We only accept external receipt Instructions for eligible securities (see Section 5.1.1).

(c) External settlement Instructions can be settled in the local market either against or free of payment. Information on securities eligible for external settlement against payment in specific local markets can be found in the <u>Online Market</u> <u>Guides</u>. Payment can only be made in the Settlement Currency of the local market unless stated otherwise in the Euroclear Documentation.

(d) For some external Instructions, local market rules or practices may require an irrevocable commitment from us to pay cash for settlement of receipts in the local market, either:

- once an Instruction has been transmitted to the local market
- from the trade date of a stock exchange transaction in markets where such transaction is automatically fed by the stock exchange into the local clearance system
- at a time specified by local market rules.

Our exposure generated by this pre-settlement commitment constitutes an extension of credit. Such credit extension is subject to the 'General Conditions Governing Extensions of Credit to Participants' and to any collateral arrangements existing between us.

When we extend credit to you, you pledge your contractual claims against us for the delivery of the securities to be received from the local market. This is in line with the general pledge as set out in Section <u>3.5.2</u> and without prejudice to any other existing collateral arrangements.

Our books and records act as sufficient evidence for our credit claims resulting from the situations envisaged above.

(e) References to Depositories shall include Other Settlement Systems where relevant.

(f) We do not guarantee the settlement time of external Instructions.

5.2.4.1. Application of local market rules

(a) External settlement may be affected by local market rules (as from the moment they enter into force in the relevant local market) or the nature of the link with the local market as specified in the <u>Online Market Guides</u>.

You are required to comply with all local laws and all requirements stated in the governing documentation of issuers.

(b) It is your responsibility to research the risks of holding or settling securities in local markets.

(c) In some domestic markets there may be limitations to the maximum amount, either of cash to pay or securities to deliver or other restrictive conditions deriving from either:

- local laws or regulations
- the rules of a local clearing or settlement system
- our agreement with our local agent.

Such limits may cause the failure of settlement Instructions to settle on a given Settlement Date.

(d) For external settlement we accept no liability for:

- consequences of the execution or non-execution of receipt or delivery against payment Instructions that arise from exchanges of securities and cash not happening at the same time
- the lack of delivery versus payment in the local market
- the non-execution of new Instructions submitted in accordance with Section <u>4.1.5.3</u> above, if the nonexecution was caused by a delay of acceptance or rejection of your cancellation request on the relevant local market
- failure to match Instructions
- delay or failure of local settlement
- information we provide you with on the risks of holding or settling securities in the local markets
- our use of an Other Settlement System to settle and hold certain Multi-listed Securities in Remote Markets
- restricting our services to all or part of the standard services offered by the Remote Market's clearance system for certain categories of Multi-listed securities
- any Instruction that, having met the Settlement Conditions, fails to settle or is delayed as a result of limits or restrictive conditions.

(e) The range and the level of services we provide for certain categories of Multi-listed securities may differ from the services usually provided for similar securities we deposit with a Specialised Depository or Other Settlement System established in the country of issue of the securities.

5.2.4.2. Receipts

(a) Securities in physical form may be deposited by you or by other parties for credit to your Securities Clearance Account.

Nothing in these Operating Procedures creates an obligation for us towards anyone who deposits securities in physical form for credit to your Account or requires us to act as their agent in respect of such securities.

(b) Securities in physical form can only be deposited or transferred into the Euroclear System for credit to an Account, either:

- at the Specialised Depository designated for the issue
- by transfer to one of our accounts in an Other Settlement System.

You consent to our appointment of Depositories and Other Settlement Systems shown in the Euroclear Documentation.

(c) Securities held in dematerialised, registered, electronic or other book-entry form can only be deposited by book-entry transfer as described in each country section of the <u>Online Market Guides</u>. We can hold such securities on your behalf directly on the books of the issuer, the registrar or its agent.

(d) Depositories initially receiving securities will only accept them for our account if:

- the securities are accepted by us and conform to the information on such securities shown in the receipt advice
- the Securities Clearance Account number is indicated and corresponds to your name as shown in the delivery advice.

Likewise, we only accept securities for delivery to our accounts in Other Settlement Systems if:

- we have accepted the securities
- we are able to identify which Securities Clearance Account needs to be credited.

We have the right not to accept securities where the Depository or Other Settlement System has received (or identified post-realignment) the following:

Type of security	Exceptions/Comments
A temporary certificate	If delivered after the date on which permanent securities are available
A mutilated security	Unless the trustee, registrar, Transfer Agent or issuer provides written confirmation that the security is still valid for transfer
A security called for redemption	-
A security not accompanied by appropriate warrants, rights and coupons	Unless the missing coupon is replaced by an evidenced payment of equal value
A security in registered form	Unless registered to the bearer, in correct nominee name or accompanied by complete and correct transfer documents according to local market rules
A security that is not validly issued or fully paid	Except if specifically agreed with us
A security that is subject to a published notification of opposition or any other circumstance which affects its free transferability in any relevant market	If we discover such restrictions on a security after acceptance into the Euroclear System we can block or debit the security from a holders Account

5.2.4.3. Deliveries

(a) Securities available for delivery and subject to local regulations may be delivered or transferred out of the Euroclear System either free of payment or against payment (for securities eligible for delivery against payment).

Delivery of securities by a Depository or Other Settlement System will only take place if you send Instructions which comply with the rules in Part IV (Connectivity) of these Operating Procedures.

(b) Subject to applicable regulations, we may, either directly or through a Depository:

- exchange information about refused deposits with interested parties, including local authorities
- return refused securities to the relevant depositors/issuers
- take other appropriate action, including retaining securities whilst awaiting any legitimate claims to them.

Methods of delivery

(c) To enable the delivery or transfer of securities we will either perform (or request the relevant Specialised Depository to perform) the following actions:

For securities in physical form, to deliver securities either:

- to the national postal system of the Specialised Depository designated for the issue for forwarding by registered or value declared mail
- within the boundaries of the city in which the Depository or the Specialised Depository is located
- by armoured car or air-courier service
- to a courier service for delivery anywhere in the world.

For other types of securities, transfer securities:

• in accordance with the procedures of the relevant clearing or settlement system, Transfer Agent or registrar.

Risk of loss or delay

(d) Risk of loss or delay from the transport of securities you transfer or deliver out of the Euroclear System is borne by you once they are deposited in the mail, armoured car or courier service. At such time they cease to be held in the Euroclear System. We may however continue to insure such securities at this time.

We try to ensure that deliveries are made on the date you instruct or the relevant Execution Date but cannot guarantee such timing.

(e) You must inform both us and the instructing counterparty (who must also inform us) as soon as possible if you do not receive an expected delivery of securities. Recovery rights under the insurance policies may be affected if we do not receive prompt notice from you.

When we receive notice of the non receipt and satisfactory evidence of the loss, then you appoint us as your attorneyin-fact to take any actions we deem appropriate to protect you. This in no way constitutes an acceptance of liability by us.

Such actions may include either:

- notifying the trustee, fiscal or other relevant agent for the issue and requesting publication of the information
- notifying the board of ISMA
- notifying the relevant Depositories
- notifying Clearstream or other relevant clearing systems
- taking all steps to initiate, maintain and cancel any opposition proceedings or related actions in relevant countries
- taking all steps to initiate invalidation and re-issuance procedures
- any other measures we deem necessary.

(f) If you, independently, want to initiate, maintain or cancel opposition proceedings or related actions, you must inform us. We accept no liability for your actions and we will not take any other action on your behalf.

(g) We will take no legal action (other than our obligation to cooperate with the insurer) to recover securities and provide no representation if judicial proceedings are brought against you.

(h) We will inform you of any actions that have been taken in relation to your non-receipt of securities and accept no liability for any loss caused by or arising from actions taken or not taken by us in such instance.

(i) If our insurer (upon payment of any indemnification or replacement of securities) under the insurance policy provides compensation from which you benefit, they will be fully subrogated to all rights and claims you had against third parties, including the rights to obtain the re-issuance of such securities.

We have the right to debit your Cash Account for any fees, costs or expenses incurred by us in connection with any action taken in accordance with this section.

5.2.4.4. Settlement Conditions

5.2.4.4.1. Input, deadlines and validation

(a) We will only accept and process your valid external Instructions if they comply with Part IV (Connectivity) of these Operating Procedures and the Settlement Conditions set out below.

Securities received by a Depository for credit to a New Issues Securities Clearance Account or short and medium-term instruments Securities Clearance Account, will be credited without requiring any Instruction from you.

(b) Instructions must conform to the 'Specific Instruction Requirements' listed in the relevant country section of the <u>Online Market Guides</u>. If no Instructions to receive securities are required from the recipient of the securities, then they

will be automatically credited by us to the relevant Securities Clearance Account upon notice of their receipt from a Depository or Other Settlement System.

(c) The Input Deadlines for settlement are set forth in the 'Settlement Timing Reference Card' available on our website. Instructions received after the Input Deadline will be considered for the next Processing for which they are eligible.

(d) After authentication of the input requirements, validation of an Instruction will take place before selection for processing. The general rules of validation of external Instructions are described in Part IV (Connectivity) of these Operating Procedures but can be affected by local market rules and the security type.

Valid external Instructions will be submitted for further processing. However, if such Instructions are found to be invalid, we will reject them and notify you of this rejection.

You can cancel your successfully validated external Instructions as set out in Section 4.1.5.

5.2.4.4.2. Matching

(a) Where external receipt Instructions require matching, they must match with a notification of a delivery of securities from a Depository or Other Settlement System.

(b) External Instructions may also require matching in the local market (see the <u>Online Market Guides</u>). Matching rules, tolerances and priorities vary depending on local market rules.

(c) If we receive a matching notification from the local market before positioning an external receipt Instruction, the cash countervalue indicated by the seller (if different from that indicated by you as buyer) will be used for execution. Otherwise, we will use your cash countervalue for execution.

We reserve the right to adjust your Cash Account for any difference between the cash amount used for execution in the Euroclear System and that used for settlement in the local market.

5.2.4.4.3. Unsuccessful matching

Receipts from the local market

(a) If we do not receive your matching Instructions, once the Depository or Other Settlement System notifies us of the receipt of securities for your Account, we will credit them to your linked Transit Account. This takes place during the OSSP and RTP. Securities will remain in your Transit Account until:

Input	Our Action
You provide appropriate matching Instructions	We credit the securities to your Securities Clearance Account
You indicate your refusal of the securities	We initiate the return of the securities to the depositor as soon as practicable
The depositor submits a request to us to reclaim the securities	No earlier than 5 Business Days after the initial credit to your Transit Account (unless you agree to an earlier date) we will return the securities to the depositor.
	The Instruction from the depositor must be delivered to us and any Instruction to a Depository or to an Other Settlement System will be disregarded

If none of the above occurs, we will wait 5 Business Days after the initial credit to your Transit Account and then return the securities to the depositor.

(b) In the event that securities are to be returned, we will debit your Transit Account in the first Processing after the initiation of the return. If we receive your matching Instructions in sufficient time, determined by us in our sole discretion, before the return of securities is initiated by us, we may cease processing such return and instead process your matching Instructions.

Deliveries to the local market

(c) Where local market practice requires settlement Instructions to match, the Depository may not deliver the securities in the local market until matching has occurred (if possible).

(d) Where matching is not required, securities already debited will be recredited to the relevant Securities Clearance Account and debited to the related Transit Account during the first Processing following receipt of the notification.

5.2.4.4.4. Selection for processing and positioning

(a) A valid external Instruction which has been matched (if necessary) may be selected for submission to a Processing only if the Settlement Date has been reached. Such Instruction may be selected for submission to a Processing before we have received matching notification from the local market.

(b) If the Execution Date is not a Business Day, the Instruction will be selected for submission to the first Processing in which it is eligible on the next Business Day.

(c) Securities received at a Depository before the Settlement Date in your matched receipt Instruction may be credited to your Transit Account. The securities will be moved to your Securities Clearance Account as a result of either:

- the first Processing after we reinstate a valid matching Instruction by reversing your cancellation
- the OSSP following the Input Date of the Instruction.

(d) Your free of payment Instructions may be submitted to the first Processing following confirmation of the receipt of securities from the Depository or Other Settlement System regardless of your indicated Settlement Date.

5.2.4.4.5. Processing of local market confirmations

(a) We will process confirmations of settlement results that we receive from a Depository or Other Settlement System, either:

- before or during the RTP
- after the closure of the RTP or during the OSSP.

This processing will occur as soon as possible following receipt of securities and/or cash with a resulting credit or debit of securities and cash to or from your Account(s).

(b) Confirmations of receipt of cash we receive from a Cash Correspondent are processed in accordance with <u>Part V:</u> <u>Section 4</u> (Money Transfer Instructions) of these Operating Procedures.

5.2.4.5. Successful and unsuccessful positioning

(a) If the Execution Date is not a Business Day or if the Settlement Conditions are not satisfied, Instructions are executed in the first following Processing dated a Business Day in which the Settlement Conditions are met.

(b) If positioning is successful, against payment external receipt Instructions are executed for:

Security Type	Processing
Local market securities	In the RTP of the Business Day set out in the <u>Online</u> <u>Market Guides</u> for that local market
International securities	In the RTP of the Business Day prior to the Instructions Settlement Date; or
	 - if the Settlement Date has passed, during the RTP in which the Instruction is received (if before the Input Deadline as set out in the Euroclear Documentation); or
	- in the RTP following receipt of the Instruction

(c) The successfully positioned cash is no longer available for other Instructions or operations after execution of the external receipt against payment Instructions even if the corresponding debit to the Cash Account has not yet been made.

(d) If we act on an external receipt against payment Instruction and can no longer revoke or reverse the Instruction, you are obliged to reimburse us for any payment we make for the securities received in the local market. We have the right to debit your Cash Account for such amount.

(e) External delivery Instructions are executed for:

Security Type	Processing
Domestic market securities	In the Processing on the Business Day shown in the relevant market section of the Online Market Guides
International securities	In the OSSP of the Business Day prior to the Instructions Settlement Date; or
	if the Settlement Date has passed, during the OSSP following receipt of the Instruction

(f) If positioning is unsuccessful the external Instructions remain in the backlog of unexecuted Instructions and continue to be entered into subsequent Processings for which they are eligible until executed or cancelled.

5.2.4.6. Cancellation of Instructions

(a) The following rules apply except as otherwise set out in the Online Market Guides.

(b) We automatically cancel external Instructions if they remain in the backlog of unexecuted Instructions 4 Business Days after the intended Settlement Date (S+4).

We will attempt to position valid Instructions (matched if necessary) which we receive after S+4 once before cancellation.

5.2.4.7. Refusal of securities

Receipts from the local market

(a) We will refuse securities if their corresponding Instructions are unmatched or do not meet the Settlement Conditions.

(b) If tendered securities that have been received in the local market are refused:

- external receipt Instructions will remain in the backlog of unexecuted Instructions
- the relevant Transit Account is credited until the issue is resolved.

Deliveries to the local market

(c) If securities you deliver out of the Euroclear System are refused by the recipient we may reattempt to deliver your refused securities as set out in the Euroclear Documentation.

Upon refusal by an intended recipient, securities may be recredited to your Securities Clearance Account (with the related Transit Account receiving a debit). In this case, positioning will take place before we reattempt to deliver the security.

(d) If securities previously delivered out of the Euroclear System are returned to a Depository or Other Settlement System for our account and such return is reported to us as a refusal, then your Securities Clearance Account will be recredited.

In the absence of acceptance or upon confirmation of refusal, the securities are debited from the Transit Account and recredited to your Securities Clearance Account.

(e) You will be notified of any such refusals and credits/debits of securities.

5.2.4.8. Credit and debit of Accounts

(a) Credits and debits which result from the execution of an external Instruction may be final or provisional as set out in Section <u>3.2</u>.

(b) Upon notice of receipt of securities for our account from the Depository, Other Settlement System or the issue r's agent, we will make:

- a credit to your Securities Clearance Account
- a debit to your Cash Account (if against payment).

(c) Upon the successful execution of an external delivery Instruction, we will make:

- a provisional debit to your Securities Clearance Account
- a provisional credit to your Transit Account
- a credit to your Cash Account (if against payment) upon notice that cash has been received for our account.

(d) Securities will remain credited to your Transit Account until the first Processing after one of the following events occurs:

- we receive confirmation of delivery of the securities out of the Euroclear System
- 6 or more Business Days have passed since free of payment external delivery occurred and no refusal notice has been received from the local market
- we have received notification of refusal in the relevant local market. In this case we will also recredit your Securities Clearance Account.

5.2.4.9. Settlement and Finality

Settlement and finality occurs in the local market in accordance with local market rules and practice.

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5.3.1 Custody – General rules

(a) This general rules section applies to all Custody Operations. Section <u>5.3.2</u> sets out any exceptions and additional rules which apply to certain Custody Operations.

(b) The custody services we provide for Remote Market Securities depend on the services offered by the Depository in the Remote Market. These can differ from services offered for Home Market Securities.

(c) We sometimes use third parties to provide certain custody services. Our duties and liabilities with respect to the activities of these third party service providers are set out in Section 12 of the Terms and Conditions. We will inform you of the appointment of third parties in the relevant market section of the <u>Online Market Guides</u>.

5.3.1.1 Information provided for Corporate Actions

(a) We may report information to you about Corporate Actions when we have received notice in a manner and from a source satisfactory to us. We may require a formal announcement to the general public of such information before we do so.

(b) We will decide whether the information we have received is related to a particular Corporate Action.

(c) We do not verify the accuracy or completeness of information we receive and report to you. As such, we accept no liability for any inaccuracy or incompleteness of such information. Neither do we accept liability for your timely receipt of our reported information.

(d) Our reports may be summaries or English translations of information received. Reliance on such reports is at your own risk.

(e) We collect information regarding Corporate Actions on a reasonable effort basis but do not always receive notification for Corporate Actions set out in the original documentation of the issuance. You should therefore be aware of the terms and conditions and characteristics of the securities you purchase, hold or intend to hold in your Account(s).

We accept no liability for failing to provide you with information regarding a Corporate Action set forth in the original documentation of the issuance.

(f) For the avoidance of doubt, we will not contact you via telephone when providing information for Corporate Actions unless specifically stated in these Operating Procedures.

Third Party Offers

(g) You should be aware that it is our policy not to provide information in respect of offers to purchase securities by unrelated third parties (i.e. not the issuer or its agent). These offers are not considered Corporate Actions. We are not licensed to provide a trading platform and we do not provide information related exclusively to trading activity.

(h) If we receive information related to a third party offer to purchase securities which carry voting rights, we will verify that the offer is related to an announced takeover bid. If we determine that it is, we will treat the offer as a Corporate Action and will try to provide you with the relevant information via DACE notice. No other information regarding third party offers is provided.

5.3.1.2 Corporate Action reports

We provide several reports in order to keep you informed of your Corporate Action activity. Information on these reports can be found in the 'Custody Reporting – Quick Card' and on our website under 'How are you informed about corporate actions'.

5.3.1.2.1 Other securities information available

(a) You can access database information for on-line inquiry through EUCLID, EasyWay or our website. The information is not verified for accuracy or completeness and may not be up to date; we accept no liability for this. Use of this resource is at your own risk and we do not recommend you use it as a primary resource.

(b) We have the right to use any of the prices from any source we consider reliable (including any prices from Instructions for settlement in the Euroclear System) for any purpose.

5.3.1.3 Services for securities in default

(a) We will not take any action, legal or otherwise, to enforce your rights against any issuer or any guarantor in respect of a security.

We authorise you and/or the underlying beneficial owners of such securities to maintain proceedings against issuers, guarantors and any other parties. This is to the extent that we, our nominee, a Depository or their nominee acts as registered owner of any security held in the Euroclear System, or in any other relevant situation.

(b) Subject to any applicable law, decree, regulation, order, injunction or request of any governmental agency or body or other authority, we are not required to take any legal or other action.

(c) Upon your request, we will issue a statement of account for the purpose of the filing of a claim. This statement can be issued in paper of in electronic form, depending on the claim filing requirements.

- If in paper form, the statement of account may be notarised or affixed with an apostille if so requested. Upon your request, we will state the name of the beneficial owner on the face of such statement based on the beneficial owner information you provided. Such beneficial owner information is not reflected in our books and records and is not reviewed or verified by us.
- If in electronic form, the statement of account will be sent by us, upon receipt of your instructions, directly to the entity in charge of the claim filing procedure via SWIFT message or fax.

(d) Once we issue the statement of account for the purpose of filing a claim, we will block the relevant securities holding referenced in such statement of account to avoid the potential for multiple claims based on the same securities' position.

This blocking will only be lifted:

- upon receipt of the original statement of account we provided
- or, if such original statement is unavailable, upon receipt of an appropriate indemnity letter from you.

5.3.1.4 Execution of Custody Operations

(a) We execute Custody Operations in the OSSP or RTP. Which Processing is used depends on factors such as:

- the Input Deadline
- the type of Custody Operation
- the time required for validation of the relevant Instruction.

(b) We execute Custody Operations in respect of Corporate Actions either on the basis of your Instruction (where your Instruction is required) or on the basis of the authorisation set out in (d) below. We have no discretion to instruct any Corporate Action, including a voting action, in the absence of your instruction where your Instruction is required.

(c) For Corporate Actions where you have a choice, the following shall apply:

- if you wish to make an election you must send us an Instruction to that effect before the Input Deadline
- if you do not send us an Instruction before the Input Deadline or you send us a 'no action Instruction' before the Input Deadline, we will deem you to have chosen the default action as specified in these Operating Procedures or relevant DACE notice
- you authorise us to take any and all actions required to execute your Instruction or the default action (if you did not send an Instruction), in accordance with these Operating Procedures and the Terms and Conditions without the need of any further authorisation from you

we reserve the right to block or debit securities of the issue concerned by the default action following the
applicable Input Deadline, until the end of the RTP or until such time as we consider necessary for execution
of the default action.

(d) For Custody Operations where you are not required to send an Instruction, you authorise us to take any and all actions required to execute such Custody Operation for you in accordance with these Operating Procedures and the Terms and Conditions without the need of any further authorisation from you. We are not obliged to take an action unless specified in the Operating Procedures or the relevant DACE notice (or similar notice).

You appoint and authorise us, any Depository or any agent or service provider (designated or authorised by us), as your true and lawful agent and attorney-in-fact, for the purpose of completing, executing and delivering any required documents for any Custody Operation on your behalf.

This right does not extend to our completion of paper notices for certain Corporate Actions on your behalf. In order for us to complete such notices you are required to subscribe to our 'Paper Notice Service'.

5.3.1.4.1 Custody Operation Conditions

We can only execute Custody Operations which meet the necessary conditions. These conditions are listed throughout this section and outlined below for each type of Custody Operation:

Type of Custody Operation	Conditions
All Custody Operations	the provision of any required documents
Custody Operations which require your Instruction	deadlines, validation conditions and the input of Instructions
Custody Operations which result in the debit/credit of your Account	the additional Custody Operation Conditions

5.3.1.4.1.1 Input of Instructions

(a) You must send us Instructions as specified in the relevant DACE notice with the format and contents described in such DACE notice and the Euroclear Documentation.

(b) We may however in our sole discretion, accept your Instruction even if it does not fit the standard Instruction type required by the relevant DACE notice.

5.3.1.4.1.2 Deadlines

We must receive your Instructions by the Input Deadline as specified in the relevant DACE notice.

5.3.1.4.1.3 Validation

(a) After authentication of input, Instructions must be validated before being submitted for further processing. The validation rules are described in Part IV (Connectivity) of these Operating Procedures. You may receive notification that your Instruction is in the process of validation by us. If you do receive such notice, you should double-check the Instruction to ensure that the Security Code is correct.

(b) If the validation is successful, we will accept the Instruction for further processing.

(c) Instructions may require additional manual validation. This can result in Instructions passing the computer validation but being rejected after manual validation. We will inform you of the status of your Instructions as specified in the Euroclear Documentation.

(d) The validation of an Instruction may necessitate required documents to be verified as complete. Verification of the contents of any required document is not part of the validation rules.

(e) The time required for validation of Instructions can depend on:

- the means of communication you use to input your Instruction
- the availability, quality and readiness (both as to contents and format) of the information that, in our discretion is required to permit its execution
- the location of the issuer or relevant agents and service providers from whom information is required
- the type of Instruction
- the need for manual intervention.

(f) If validation is unsuccessful, the Instruction is not accepted for further processing and is rejected by us. We will inform you of this. You may not receive a rejection notification until after the Input Deadline for the relevant Corporate Action.

5.3.1.4.1.4 Provision of certifications and other required documents

(a) You are solely responsible for:

- determining whether a required document (including certifications that you may need to transmit to us) is necessary for any of the securities you hold in the Euroclear System
- obtaining and reviewing such documents in line with the governing documentation of the issue and/or provisions of applicable law.

We may inform you, by DACE notice or otherwise, that you need to execute a required document. We do not guarantee that such documents will be accepted by the issuer, its agent or any other relevant person or that no additional documents are required.

DACE notices advising of required documents may contain summaries of the terms of certifications, statements or documents required. Reliance on information contained in such summaries is at your own risk.

(b) You may need to send required documents, either to:

- us, we will then pass on the information to the issuer, its agent or any other relevant person as required
- the issuer, its agent or any other relevant person.

You are responsible for determining who you should send the documentation to in line with the governing documentation of the issuance.

(c) You may provide required documents by:

- sending a completed document form as required by the governing documentation of the issue
- sending a certification Instruction, incorporating by reference the 'Standard Long Form Certification' (available on our website)
- sending a Custody Operation Instruction under the electronic certification procedure (as detailed under point (d) below.
- a combination of the above

The electronic certification procedure may be revoked by the issuer of the relevant securities with little or no notice. You should check the DACE notice for such action on the same day you input your Custody Operation Instruction to ensure the electronic certification procedure is still valid.

(d) We may advise you by DACE notice that the electronic certification procedure applies. In that case, by sending a Custody Operation Instruction to us with the requested certification letter in the certification field or with the certification field left blank, you confirm that you:

- have received from us and reviewed all required documents for the relevant securities
- have been notified by us of the requirement to complete such required documents
- agree (or an underlying beneficial owner agrees) to comply with the certification requirements, the terms and conditions of the required documents and the applicable laws and regulations

 instruct us to confirm your certification of compliance with the terms of the required documents to any relevant third party.

(e) You should be prepared to complete and send any required documents on the same Business Day that you send the Custody Operation Instruction.

Your reliance on the electronic certification procedure is at your own risk.

(f) Under the electronic certification procedure, input of your name or Account number in a Custody Operation Instruction shall be deemed to be equivalent to a manual signature for all purposes.

(g) You are responsible for the accuracy of certifications in respect of any persons or entities you may be acting for. You agree to indemnify us and hold us harmless for acting upon required documents you send which contain a misrepresentation.

(h) Required documents must be received by the relevant Input Deadline as specified in the DACE notice (or similar notice).

If a required document is necessary, you must send us separate Instructions and documents for each Securities Clearance Account. Failure to do so may have the following consequences:

- the Instruction may be rejected after validation
- the execution of such Custody Operation or exercise of rights to which such required document relates may not be effected until you have delivered the completed required document
- if you do not provide the appropriate form of certification in a timely manner, your holding of the securities subject to the certification action may be blocked to the extent they remain uncertified. This blocking can only be lifted once we receive the requested certification.

Securities credited to your Securities Clearance Account after the certification action will not be blocked. Any cash received or to be received by us in respect of any certification action will be credited to the relevant Cash Account upon our receipt and reconciliation of cash and your fulfilment of any certification action.

(i) By sending a Custody Operation Instruction or the required documents, you represent and warrant that you or the beneficial owner(s) comply with all terms and conditions set forth in:

- the governing documentation of the issue or any provision of applicable law
- any certification
- any other required document relating to a Custody Operation

and that we are allowed to act on such representations and warranties without further investigation.

(j) Once we receive a Custody Operation Instruction or required documents, we are entitled to rely on its accuracy and completeness as of the date of delivery or signature (as appropriate). Unless you inform us to the contrary, this reliance will continue until the date of the relevant certification action.

(k) Following our request, you (or an underlying beneficial owner as the case may be) must execute a paper form certification as required in the governing documentation of the issue or as requested by the issuer, agent or any other relevant person.

(I) You irrevocably authorise the production of:

- any certification or record we retain of an Instruction
- any certification or any other documents you deliver to comply with this section
- copies of the above listed documents

to any interested party in any administrative or legal proceeding or official inquiry with respect to matters covered by this section or any such Instruction.

5.3.1.4.1.5 Additional Custody Operation Conditions

(a) The rules in this section only apply to Custody Operations which result in a credit/debit of securities or cash to your Account(s).

(b) Valid Instructions are submitted for cash positioning in the RTP during which the securities positioning for such Custody Operation took place, according to their Execution Date, either as indicated in the Instruction or as required according to the Custody Operation.

Instructions are submitted to a Processing for securities positioning, according to their Execution Date or as required according to the Custody Operation as soon as practicable and once validated.

(c) Once selected for processing, the Custody Operation is positioned. Positioning involves determining whether the following Positioning Conditions have been met:

Securities positioning

- If the execution of a Custody Operation requires a debit for the delivery or blocking of securities, sufficient available securities of the issue must be standing to the credit of your Securities Clearance Account to make the delivery or to effect the blocking
- If the execution of a Custody Operation does not require a debit or a blocking, sufficient available securities of the issue must be standing to the credit of your Securities Clearance Account on the Record Date
- If you have insufficient available securities in your Securities Clearance Account, but have a sufficient amount of securities of the same issue credited to your Record-keeping Account, then the Positioning Conditions will be fulfilled for certain Custody Operation types (see Section <u>5.3.1.4.2</u>)
- Custody Operations which require a blocking of securities do not generate Automatic Borrowings. Such Instructions may be unsuccessfully positioned if you have insufficient available securities in your Securities Clearance Account.

Cash positioning

If the execution of a Custody Operation necessitates a payment then you require sufficient cash (or provision
of cash) or receipt of a credit line from us, as determined by us in our banking capacity, in the relevant
Settlement Currency in your Cash Account for the payment.

Collateral positioning

• You require sufficient collateral if you are to be debited with cash or securities and are granted secured credit that we may make available to you in our banking capacity.

5.3.1.4.2 Processing rules for Custody Operations

5.3.1.4.2.1 Successful positioning

(a) Subject to Section <u>5.3.1.4.1.5</u> and Section <u>5.3.2.6.1.2</u>, if the execution of a Custody Operation requires a debit for the delivery or blocking of securities, then we will execute such Custody Operation:

- at the earliest, on the Execution Date of the Instruction
- at the latest, on the date and time we determine as the deadline for execution of an Instruction.

For some mandatory Custody Operations where no Instruction is required, we will debit or block the securities at the date and time we deem necessary for processing.

We process Custody Operations in accordance with the priority rules set out in Section 5.2.1.

(b) If the execution of a Custody Operation requires a payment from you then cash is debited from your Cash Account and the Value Date is determined either:

- under the governing documentation of the Corporate Action
- as advised by the issuer of the Custody Operation or any agent acting on behalf of such issuer.

(c) If securities positioning is successful, the securities may be debited, blocked and/or Record Date positioned.

If cash positioning is successful, a debit is made to your Cash Account.

(d) If the execution of a Custody Operation requires the delivery of securities, we will automatically generate an external delivery Instruction on your behalf.

(e) For securities that are in global form, if the execution of the Custody Operation requires the delivery of securities, we will automatically generate the required Instructions on your behalf to obtain the mark-down of the global security.

(f) Once the Custody Operation has been successfully executed, we will communicate the appropriate information to the Specialised Depository, Cash Correspondent, issuers' agent or any other relevant person.

5.3.1.4.2.2 Unsuccessful positioning

(a) Subject to specific custody rules, if cash or securities positioning is unsuccessful then the Custody Operation will not be executed.

(b) All Custody Operations that are unsuccessfully positioned continue to be entered for processing until executed or cancelled as follows:

- Custody Operations relating to a holder's options (except put options) which have not met the Custody Operation Conditions will be cancelled by us at the Input Deadline or Record Date (if applicable) and at the latest, after 5 Business Days
- Custody Operations relating to offers and put options which have not met the Custody Operation Conditions
 will be cancelled by us if the Input Deadline for receipt of the Instruction has been reached or the Record Date
 (if applicable) has passed
- any securities debited or blocked in anticipation of a delivery or exercise of your option/right will be recredited or unblocked during the OSSP after cancellation of the Custody Operation Instruction.

We will try to inform you promptly of any non-executed Custody Operation but do not guarantee our timeliness in doing so.

5.3.1.4.2.3 Credits and debits to your Account(s)

(a) For Custody Operations, credits and debits to your Account(s) may take place both in the OSSP and in the RTP.

(b) If a Custody Operation results in the debit of securities from your Account we may credit the securities to a Transit Account until the credit of the Custody Distribution to the relevant Account.

(c) Credits and debits resulting from the execution of a Custody Operation may be final or provisional.

5.3.1.5 Custody Distributions

Custody Distributions can be accepted in the Euroclear System, and subsequently credited to your Account(s), if they conform to the rules set out in Section 5.1.1, 5.1.2 and 5.4.1 and more broadly the Terms and Conditions and Operating Procedures.

5.3.1.5.1 Custody Distributions subject to tax

(a) If we receive a Custody Cash Distribution after withholding or deduction of taxes, duties, fines, penalties or damages or we are required to make such withholding or deductions ourselves, we will credit you with the net Custody Cash Distribution.

(b) If before or after we credit a Custody Distribution to your Account(s) we must make a payment for or on account of taxes, duties, fines, penalties or damages for such Custody Distribution:

- you will indemnify and hold us harmless for such payments, pro rata to the amount you received
- we are authorised to immediately debit your Account(s) for such amounts.

5.3.1.5.2 Entitlement to the proceeds of Custody Distributions

(a) You are entitled to the proceeds of Custody Distributions resulting from a Corporate Action if you hold the relevant securities in your Securities Clearance Account on the Record Date or at any other date or period specified by the issuer.

The Record Date for particular securities may vary due to special circumstances. We will try to inform you of the Record Date information we receive.

Unless we inform you otherwise, the Record Dates are as follows:

Custody Distribution	Record Date
Income and redemption proceeds	The date indicated in the country section of the Online Market Guides
	or
	the Business Day before the Payment Date (for securities not covered by the Online Market Guides)
All other Custody Distributions	The date specified by the issuer

(b) Securities balances used to determine entitlements for Custody Cash Distributions are those balances at the end of the RTP dated the Record Date or any other date/period specified by the issuer. These are then adjusted to reflect the results of receipts and deliveries from the local market received by such date during the RTP.

(c) Securities balances used to determine entitlements for Custody Non-cash Distributions are those balances at the end of the RTP dated the Record Date or any other date/period specified by the issuer.

(d) The Custody Distributions that we receive are credited (or debited, if the amount of Custody Cash Distributions is negative, typically due to a negative interest rate) pro rata to the amount of available securities in your Securities Clearance Account(s) at the time relevant for allocation of entitlements of each issue of securities. This is unless we receive Instructions to the contrary from the issuer or from you.

The calculation of available securities for Custody Distributions does not include those that are:

- blocked or unavailable
- registered in the name of the previous holder.

(e) Custody Distributions may result in a market claim (see Section 5.3.2.6).

(f) If an entitlement calculation rule results in a discrepancy (due to the rounding of amounts), we may recalculate your entitlement by applying the calculation rules used by the issuer or its agent. In case of a recalculation, we reserve the right to reverse Custody Distributions already credited to your Account(s).

5.3.1.5.3 Credit of the proceeds of Custody Distributions

Cash Distributions

(a) Cash to be distributed as a result of a Custody Operation will be either:

- credited to the relevant Cash Account during the OSSP after receipt of the notification that cash has been
 received in our account with the relevant Cash Correspondent and reconciliation of the Corporate Action
 proceeds
- advanced as provisional (see Section 2.3), becoming final once
 - \circ we receive the cash for the distribution in our account with the relevant Cash Correspondent
 - we have reconciled the cash.

Exceptionally, in our sole discretion, and not upon your request, we may credit the cash amount during the RTP.

If the amount of Custody Cash Distributions is negative, typically due to a negative interest rate, we may debit your Cash Account either during the OSSP or during the RTP.

(b) Various factors will be taken into account when considering whether to advance cash following the second option above. These can include the credit rating of the issuer, your own credit rating and whether we have received satisfactory and sufficient notice of the date and amount of the payment for the Custody Cash Distribution.

The provisional credit is recorded in your Cash Account either:

- in the OSSP dated the Value Date with the same day value if the Value Date is a Business Day and is also a business day in the country of the relevant Cash Correspondent and cities set by the governing documentation of the issue
- in the OSSP dated the following business day, valued the Value Date.

(c) We reserve the right to defer the credit of cash from a Custody Distribution to your Account or to block such cash if already credited, until we receive notice of the final receipt of cash from our Cash Correspondent and subsequent reconciliation is completed.

We also reserve the right to block all or part of any cash proceeds credited to your Account in case they are related to Cash Distributions performed in a market whose Settlement Currency transferability, convertibility or availability is affected, as described in Section 16(d) of the Terms and Conditions, until and insofar as said restrictions are removed in the relevant market (as further described in the relevant market sections of the <u>Online Market Guides</u>).

(d) In exceptional circumstances, we may allow you to irrevocably waive your rights to a credit of your Cash Account with a Cash Distribution with respect to a particular Corporate Action. This right extends to situations where we believe that you will not or have chosen not to receive such Cash Distribution through us.

(e) We do not investigate Custody Cash Distributions where the difference between the amount expected and that received in the Euroclear System is less than EUR 200 (or the equivalent amount in another currency). Neither do we initiate claims for delayed interest when such compensation is less than EUR 200 (or the equivalent amount in another currency) or reverse for rounding discrepancies.

Non-cash Distributions

(f) The proceeds of a Non-cash Distribution resulting from a Custody Operation will be credited to your Securities Clearance Account after notification of receipt of the proceeds in our account at the relevant Depository and our subsequent reconciliation of Corporate Action proceeds. The credit may be final or provisional.

(g) The proceeds of a Non-cash Distribution for rights distributions, stock splits, amalgamation or other similar actions will be credited to your Securities Clearance Account in the OSSP dated the Corporate Action date or in the RTP. This is based on information we receive on the rights or securities distribution, not necessarily based on the confirmation of receipt by the Depository.

(h) If the proceeds considered in (g) are not credited to our account with the Depository, we can:

- debit all entries representing holdings in such proceeds in any Account in the Euroclear System
- cancel all unexecuted Instructions for such proceeds
- delete the Security Code assigned to the proceeds from the securities database.

5.3.1.5.4 Custody Distributions received after the Record Date

Custody Distributions we receive into the Euroclear System after the Record Date are distributed as soon as practicable. They are made available in the OSSP or Processing after we have received confirmation of credit of the proceeds of the Custody Distribution to our account and subsequent reconciliation is completed.

5.3.1.5.5 Custody Distributions in respect of securities in Transit Accounts

(a) Custody Distributions we receive in respect of securities credited to a Transit Account on the Record Date will be transferred to the recipient of such securities either:

- on the date of transfer of the securities from the Transit Account to a Securities Clearance Account
- on the date of delivery of the securities credited to the Transit Account out of the Euroclear System.

This will not be earlier than the Business Day on which we receive confirmation of the credit of the proceeds of such Custody Distribution to our account and subsequent reconciliation is completed.

(b) If the securities in the Transit Account are returned to the depositor, the delivery/payment of the proceed securities/cash will be returned by the Depository following local market practice.

(c) When the securities are credited to a Transit Account on the Record Date due to a delivery Instruction, the proceeds will be credited to your Account if the securities have been delivered ex-coupon following local market practice and upon confirmation of receipt of such proceeds from the Depository.

5.3.1.5.6 Custody Distributions in respect of securities in Non-Deposit Accounts

(a) The proceeds of a Custody Distribution we receive for securities temporarily delivered out of the Euroclear System for voting purposes are credited to the Securities Clearance Account or Cash Account associated with the Account which held the securities before their expected return was reflected in a Non-Deposit Account. This is in the absence of directions from the issuer or its agent to the contrary.

The proceeds are credited in the OSSP dated the expected payment date.

(b) The proceeds of a Custody Distribution for securities recorded on a Non-Deposit Account connected to the FundSettle service will be either:

- reflected in the Non-Deposit Account, if it results in an increase in the position registered in your name or your designees' name
- credited to your Securities Clearance Account and registered in the name of Euroclear Bank SA/NV, FundSettle EOC Nominees Ltd. or any other nominee controlled by us, if it results in securities eligible in the Euroclear System
- credited to your Cash Account.

This is in the absence of directions from the issuer or its agent to the contrary.

5.3.1.5.7 Custody Distributions not accepted in the Euroclear System

(a) If the proceeds of a Custody Distribution are not accepted into the Euroclear System in accordance with the Terms and Conditions and these Operating Procedures, we reserve the right to either:

- refuse their acceptance
 - distribute them in accordance with the Terms and Conditions and Operating Procedures and:
 - block such securities in your Account(s)
 - suspend Instructions and requests involving such securities; however, you will be able to send Instructions to dispose of such securities
 - suspend all services related to such securities
- hold the amount received pending our decision on its appropriate distribution
- return them to the issuer or issuer's agent.

You must provide Instructions as to the disposal of a Custody Distribution not accepted for deposit in the Euroclear System by the Input Deadline we specify.

Cash Distributions

(b) If the Custody Cash Distribution is not in a Settlement Currency, we will require you to instruct us as to where the cash should be paid. Until such time, the cash will be held by the Depository or the agent in charge of handling the Corporate Action on the market. Once we receive your Instruction, the cash will be transferred to the extent practicable and as soon as practicable.

Unless you inform us otherwise, we are authorised to provide your name and address to the issuer, its agent or other relevant person so that delivery can be arranged.

We accept no liability for a Custody Cash Distribution that is not in a Settlement Currency, including for consequences relating to the bankruptcy of the Cash Correspondent where such Custody Cash Distribution is temporarily held.

Non-cash Distributions

(c) Where a Non-cash Distribution cannot be accepted into the Euroclear System and you have already provided us with onward delivery Instructions, we will pass such Instructions on to the appropriate agent with the request that they deliver the distribution in accordance with your Instructions.

Where you have not provided Instructions by an Input Deadline we specify, we can either:

- provide your name and address to the issuer, its agent or other relevant person so that delivery to an account you hold outside the Euroclear System can be arranged
- deliver the distribution to such account ourselves.

We accept no liability for the delivery or cost of delivering your Custody Non-cash Distribution.

(d) If you are to receive an Odd Lot which is not accepted in the Euroclear System, we will not credit it to your Account. We will notify you of this and in response, you can request that we deliver the Odd Lot to a recipient outside the Euroclear System in the relevant local market.

If within two weeks of such notice from us you have not provided such a request, we can ask a third party to try to arrange the sale of such Odd Lot notably, but not limited to, cases where such sale is required by law or regulation or subject to penalties, or if such sale is in the interest of the Euroclear System.

If the third party is able to sell such Odd Lot, we will credit your Account with the net proceeds of the sale. We accept no liability for the price obtained for such Odd Lot or for any delay in disposing of it.

(e) If the proceeds of a Non-cash Distribution result in fractional amounts of securities or a number of securities that we cannot allocate in the Euroclear System we can:

- request the issuer or its agent to credit an equivalent amount of cash
- ask a third party to arrange the sale of the distribution and then credit the relevant Accounts with the net
 proceeds of such sale.

(f) Where we attempt to organise a sale we do not guarantee that a sale will be made, nor the terms and conditions (including price) of any sale that is made.

5.3.2 Custody – Specific custody rules

5.3.2.1 Collection of income and redemption proceeds

5.3.2.1.1 Calculation method for income payments

(a) The information we receive is used to calculate the amount of income to be credited to your Cash Account. The amount of interest per 1,000 units of Settlement Currency is calculated using the following formula:

1,000 x published rate x number of days = zzz.zzzzz 100 y

where 'y' is the number of days per year specified in the prospectus.

(b) Any result of this calculation which has more than six decimal places is capped at the sixth decimal place without rounding.

5.3.2.1.2 Final redemption

(a) If you have a secured credit line with us, granted to you in our banking capacity, then you will benefit from the collateral value of securities until the OSSP in which the redemption proceeds become available.

(b) Securities approaching redemption are subject to settlement restrictions (see Section 3.4).

(c) We will reflect the final (extended) maturity date in the Euroclear System for securities with an automatically extendable maturity date. Payment of the redemption proceeds may take place on the initial maturity date if we have received confirmation from the issuer (or its agent) that payment will take place on such date and will not be automatically extended.

5.3.2.1.3 Partial redemption with reduction of nominal value

If a partial redemption requires a reduction of the nominal value:

- we cancel all unexecuted settlement Instructions on the Business Day before the redemption date and you
 must send new settlement Instructions for a nominal amount that is a multiple of the new denomination
 amount
- \circ ~ we debit an amount equal to the portion of the redeemed principal:
 - o during the OSSP on the redemption date
 - \circ $\,$ on a later date if the redemption is processed after the redemption date.

5.3.2.1.4 **Pro-rata redemption and drawing by lottery**

(a) Where there is a pro-rata redemption or a drawing by lottery we will conduct a computerised lottery to allocate the amounts of securities to be redeemed and to determine the impacted Account(s). Debits for these allocations are generated in the OSSP the Business Day after allocation in the Euroclear System.

(b) Under our arrangement with Clearstream concerning book-entry transfers, if up to USD 1,000,000 nominal value (or equivalent) of any issue of securities subject to a drawing by lottery is held in the Euroclear System by Clearstream, then:

- if such securities can be allocated in full to Participants, the securities held by Clearstream will be excluded from the allocation procedure in the Euroclear System
- if such securities cannot be allocated in full to Participants, the securities will be allocated among Participants and Clearstream in accordance with (a) above.

If on the day of the allocation the amount of an issue held on Clearstream's behalf in the Euroclear System is equal to or more than USD 1,000,000 nominal value (or equivalent) then the entire amount of the issue held by Clearstream is included in the allocation process described in (a) above.

This arrangement includes similar allocation procedures in respect of securities held on our behalf with Clearstream.

(c) When there is a pro-rata redemption or a drawing by lottery of a security held in global form, the interests of Euroclear Bank and Clearstream are determined at the end of the RTP on the Business Day before the date of notification of the redemption. The Business Day must be a day when both we and Clearstream are open for business. This provision applies unless an indication to the contrary is included in the governing documentation of the issue.

The principal amount of such security is allocated pro rata between us and Clearstream. The amount allocated to us will be distributed amongst Securities Clearance Accounts.

(d) Euroclear Bank and Clearstream do not always execute drawings simultaneously on a processing date. As such, if you are receiving or delivering securities subject to a drawing through Bridge settlement on or near a drawing date, you may be unable to participate in the drawing or be subject to the drawing twice.

(e) Where a pro-rata redemption or a drawing by lottery takes place in a local market, we will try to inform you as soon as we are aware of it. We may block your positions between the time of local processing and our processing if appropriate.

(f) We cannot process drawings on local market securities until we are provided with the results from the relevant Depository or Other Settlement System. You will be drawn on your positions available at the time we process the drawing. As the timing of our processing may be different from that of the local market, the position used may be from a different Record Date. Our processing rules for drawings may be different from the local market rules.

(g) External settlements of drawn or pro-rata redeemed securities can occur between the time of processing in the local market and our processing of such local market drawing by lottery or pro-rata redemption. This can cause the position in the local market to be greater or smaller than our position at the time of processing.

If this occurs, we will debit the Participant(s) that most recently held the relevant securities and delivered them out of the Euroclear System. This is because those securities will be included in our processing of the drawing or pro-rata redemption and it is possible a shortfall will arise.

Any shortfall in a Securities Clearance Account created by the external settlement of a drawn or pro-rata redeemed security must be covered immediately by the relevant Participant(s). In circumstances such as but not limited to cases where a purchase is required by law or regulation or subject to penalties, or if such purchase is in the interests of the Euroclear System, we may require a third party to buy the relevant securities to cover the drawing by lottery or pro-rata redemption for a period of less than 7 Business Days.

In such a case, we will credit your Securities Clearance Account with the purchased securities, and debit your Cash Account with the corresponding price.

5.3.2.1.5 Currency options on income and redemption

If we do not receive your Custody Operation Instruction to exercise a currency option by the Input Deadline specified in the relevant DACE notice, we can accept payment in the Settlement Currency shown in the DACE notice specifying a default currency or exceptionally the currency received from the paying agent.

5.3.2.1.6 Automatic currency conversion of income

(a) Once you register for the automatic currency conversion service, income credited to your Cash Account can be automatically converted into a Settlement Currency of your choice.

You can choose one of the following options for automatic conversion:

- conversion of either dividends or interest
- conversion of both dividends and interest
- conversion of income credited in a specific Settlement Currency
- conversion of income credited in all Settlement Currencies
- conversion of income up to a specified maximum amount for each Settlement Currency to be converted on each Business Day
- income to be credited from a specific start date.

(b) You must register for the automatic currency conversion service. A change to registration or revocation of a registration by 10:00 on a Business Day will be effective 2 Business Days later.

The automatic conversion can be applied to settlement Instructions received before 17:00 on any given Business Day.

(c) The amount of a Settlement Currency to be converted on a given Business Day is determined as follows:

Amount of income to be credited on the next Business Day

Income amounts resulting from a market claim or other compensation already processed to be credited

Income amounts resulting from a market claim or other compensation already processed to be debited

Income amounts resulting from a market claim or other compensation to be processed to be debited

(d) We execute the conversion on the Business Day before the date on which the income is to be credited, provided that it is either:

- a business day in the countries of both the currencies
- if not such a business day, then the next Business Day

Cash is credited and debited on the day of execution of the conversion and the Value Date of the conversion is the first Business Day after the Execution Date.

5.3.2.2 Taxes

5.3.2.2.1 Provision of information

(a) We may provide you with information on:

- the tax treatment of securities held or to be held in the Euroclear System
- types of tax relief available for such securities
- eligibility criteria and documentation that may be required for obtaining tax relief at source or through refund
- any other tax matter we deem appropriate.

(b) The information we provide is not legal or tax advice and should not be relied upon as such. It is your responsibility to inform yourself of applicable legal, tax or regulatory requirements and to check if the information we provide you with is correct, accurate and complete.

(c) We may provide you with information on the number of securities or amount of Custody Distributions on which you may obtain tax relief services through us. This does not constitute an acknowledgement on our behalf of your entitlement (or the beneficial owner's entitlement) to such tax relief. You are responsible for determining if you or any other beneficial owners are entitled to tax relief and, if so, the number of securities and Custody Distributions to which you are entitled.

(d) You are liable for any taxes, interests, penalties or any other amounts payable in respect of securities held in the Euroclear System or in respect of transactions with securities held in the **Provision of assistance in obtaining** Euroclear System.

5.3.2.2.2 Provision of assistance in obtaining tax relief

(a) We may assist you in obtaining tax relief at source or through a refund procedure. This assistance can include:

- checking whether documents and information you send to justify tax relief appear to be complete
- forwarding such completed documents and information to the relevant intermediary or tax authorities
- reporting the status of your tax relief requests to you
- depending on the procedure, applying the reduced tax rate on payment date or crediting recovered tax amounts to your Cash Account.

(b) In the case of depository receipts, the tax assistance set out in (a) is not systematically offered and generally limited to:

- transmission of the information and documentation received from an issuer or its agent (without independently verifying it)
- where a tax relief service is offered by the issuer or its agent at source or through refund, forwarding the documents to support a tax relief claim we receive from you to an issuer or its agent when required (without independently verifying them)
- crediting any recovered tax amounts to your Cash Account.

(c) We do not guarantee that tax procedures will result in obtaining tax relief either at source or through a refund procedure, neither do we exclude the possibility of additional procedural requirements with which you must comply.

(d) We may withdraw from taking part in any tax procedure, refuse to process any particular tax claim or cancel pending tax claims at any time. We accept no liability for taking such actions for whatever reason.

(e) We are not responsible for the correctness, accuracy, timeliness or completeness of documents to support a tax relief claim we receive from you and process or forward to the relevant persons or authorities.

We may process or forward such documents received after the Euroclear deadline, but accept no liability for errors or omissions resulting from our processing or forwarding, nor for any damages, costs, taxes, penalties, interests or other related amounts.

(f) We are not responsible for the value against which any recovered tax amounts are credited or for any delay in crediting such amounts. The credit of such amounts is provisional until the receipt is final.

(g) If you receive an unwarranted benefit you must refund it along with any interest and penalties. You authorise us to debit your Cash Account for such amount.

(h) You authorise us, the relevant Depository or Other Settlement System to disclose all required information or documentation to the relevant local authorities (including tax authorities) or any other appropriate person.

(i) You must notify us immediately of any change which could render any statement in any declaration connected with tax procedures untrue or incomplete and immediately correct or complete such document.

The above also applies to the 'Proactive Tax Reclaim Service'. We accept no liability for the consequences the 'Proactive Tax Reclaim Service' can have on your standard reclaims. Information about this service can be found on our website.

5.3.2.3 Issues of subscription rights

(a) A separate Security Code will be allocated to subscription rights, accepted for deposit in the Euroclear System, from the parent security for which the rights are issued. This is unless required otherwise by applicable law, issue documentation or when we consider otherwise.

(b) When we become aware of a forthcoming issue of subscription rights, we will accept settlement Instructions for their transfer (subject to their terms) but will not execute such Instructions until the subscription rights' date of issue. We will not accept Custody Operation Instructions in respect of subscription rights until after their issuance.

(c) Deposits into, and deliveries out of, the Euroclear System of subscription rights will be executed by the Depository on the terms we determine.

5.3.2.3.1 Exercise and lapse of rights

(a) Instructions for the sale or purchase of fractional rights will be executed in accordance with market practice. Rights for which we do not receive an Instruction will be allowed to lapse.

Exceptionally, we may sell any rights (which would otherwise lapse) for your benefit, unless you advise us in writing to the contrary, in circumstances such as, but not limited to cases where a sale is required by law or regulation or subject to penalties, or if such sale is in the interests of the Euroclear System.

Such sale will take place in the market and manner, on such terms and for such consideration as we deem appropriate. We accept no liability for the price obtained for such sales or for any delay in the timing of the sale.

(b) Any of your rights sold are debited from the Account where the rights are located. The net proceeds of the sale are then credited to your Cash Account pro rata to the amount sold.

5.3.2.3.2 Deferred payment

(a) When, due to the conditions of a right, you are required to pay the subscription price after giving notice of the exercise, we can accept Instructions to exercise such rights subject to a deferred payment and successful cash positioning.

(b) If we provide notice of exercise and the cash positioning is unsuccessful on the date on which payment is required, we are authorised but not obliged to pay the required amount for your Account. You are not relieved of your liability for such payment or default in these circumstances.

(c) The timing of these payments should correspond to the timings outlined for the appropriate form of money transfer Instruction as shown in Section 5.4.2.4.

5.3.2.4 Detachment and reattachment of warrants

(a) We may agree to detach (or cause to be detached) warrants or similar attachments issued or attached to other securities provided that:

- the warrants or similar attachments, when detached are freely and customarily traded as separate securities
- the detachment will not cause the security from which the warrants or similar attachments are to be detached to become invalid.

(b) We will submit the Instruction to transfer securities during the OSSP in which the new issue is distributed for detachment of warrants from a new issue of securities where:

- the Execution Date is no later than the OSSP in which the issue is distributed
- the Instruction has been input for a Securities Clearance Account which is to receive securities from a new issues Securities Clearance Account.

(c) We process warrants or ex-warrant securities resulting from detachment of warrants as new issues of securities. This is performed by internal settlement against payment for settlement on the Closing Date.

5.3.2.5 Coupon stripping

(a) Detachment of coupons, or coupon stripping, is where interest coupons for future payment dates are separated from the original security (corpus) which entitles the holder to principal repayments.

Once stripped, each of the stripped coupon (coupon only or 'CO') or stripped corpus (principal only or 'PO') are given a separate Security Code, different from the original security.

(b) Coupon stripping in the Euroclear System is by book entry regardless of the form of the original security. The original security is debited and POs and COs are credited separately. The coupons are not physically detached from the principle corpus. All unmatured coupons are detached and resulting COs are given a separate Security Code.

(c) Coupon stripping in the Euroclear System is only done at your request provided it is not foreseen by the governing documentation of the issue. We will not strip coupons where:

- coupon stripping is contemplated by an issuer in the structure of the issue (organised stripping)
- securities are stripped by or on behalf of custodians that repackage long-term securities (repackaging of securities)
- the governing documentation of the issue prohibits coupon stripping.

(d) You are solely responsible for ensuring that local regulations do not prohibit coupon stripping when sending a Custody Operation Instruction. We do not investigate this. If you wish to strip securities or hold stripped securities in the Euroclear System, you do so at your own risk and must consult your tax advisors about tax requirements and consequences of such actions.

In the event of issuer default, the rights of the holders of POs and COs will be determined in accordance with the governing documentation of the issue and applicable law.

(e) If CO rights are not recognised and possession of coupons is required for PO holders to exercise their rights, we will reattach the necessary coupons where possible and CO holders will lose further claims.

5.3.2.5.1 Securities eligible for coupon stripping

Coupons can be stripped from bonds accepted in the Euroclear System that have a fixed rate and frequency of interest payment, unless:

- coupon stripping is contemplated by an issuer in the structure of the issue
- the governing documentation of the issue prohibits coupon stripping.

5.3.2.5.2 Processing of stripped corpus' and stripped coupons

(a) POs and COs stripped outside the Euroclear System, if accepted for deposit in the Euroclear System, are processed in accordance with our usual local market procedures for the relevant market of such POs and COs (see the <u>Online</u> <u>Market Guides</u>).

(b) Custody Operation Instructions for detachment and reattachment are executed (if successfully positioned) in the OSSP dated the Business Day before the Instructions' Execution Date. The securities positioning for the OSSP is based on available securities at the end of the RTP.

(c) POs and COs stripped in the Euroclear System may be transferred through internal settlement but may not be delivered out of the Euroclear System by Bridge or external settlement.

(d) In case of early redemption for tax reasons or partial redemption by drawing, we will take the necessary action to calculate the value of the POs and COs. We will then allocate the redemption proceeds to holders pro rata to their present value.

(e) Where there is a partial redemption by drawing, we will:

- determine the proportion of the issue that has been stripped in the Euroclear System
- allocate the amount of drawn securities in the Euroclear System pro rata to the amounts of stripped securities and securities of the issue that have not been stripped held in the Euroclear System
- carry out a computerised lottery for stripped securities to determine to which Securities Clearance Accounts
 and in what amounts POs and COs to be redeemed will be allocated.

5.3.2.6 Market claims

(a) Market claims can be processed in respect of a Custody Distribution when you have either:

- instructed a transfer of securities cum-distribution which settles ex-distribution
- received a distribution of securities which you purchased ex-distribution

The type of security on which there is a distribution and the type of Instruction used will determine whether we will process a market claim and if we do, when we will do so.

The two procedures we use for market claims are the:

Domestic market claims procedure	Used for processing market claims on internal and external settlements only
Other market claims procedure	Used for processing market claims on certain internal settlements against payment

We do not process market claims for Bridge settlements.

(b) When you receive a distribution on securities, market claims are processed as follows:

For	With
Securities transferred cum-distribution	a debit to the transferor's Account and a credit to the recipient's Account
Securities purchased ex-distribution	a credit to the transferor's Account and a debit to the recipient's Account

Such Accounts will be either Cash Accounts or Securities Clearance Accounts depending on the individual circumstances.

(c) You cannot instruct to transfer securities cum-distribution which you purchased ex-distribution. If, despite this prohibition, you do instruct to transfer securities cum-distribution after receiving them ex-distribution, the market claim will not be processed in the Euroclear System unless it is processed automatically in the local market.

In the latter case, the market claim will (notwithstanding Section 5.3.2.6.1.1) be processed in accordance with (b) above.

(d) A market claim credit to your Cash Account or Securities Clearance Account is subject to:

- for internal settlement, a corresponding debit to your counterparties' Cash Account or Securities Clearance Account
- for external settlement, a payment or delivery of securities from your counterparty.

(e) Market claim credits can be processed before the related debit to, or payment or delivery by your counterparty. In such cases, the market claim credit is provisional.

(f) Market claim debits may represent an extension of credit to you by us in our banking capacity.

5.3.2.6.1 Domestic market claims procedure

(a) Securities which are subject to the domestic market claims procedure are shown in the <u>Online Market Guides</u> under the heading market claims. We will use specific reports to notify you of settlement Instructions that are expected to result or have resulted in market claims. In addition, such reports will indicate which market claims we may process or have already processed.

(b) We may notify you of market claims which will not be processed by reference to the type of Instruction or security.

(c) Market claims resulting from external settlement are made in accordance with local market practice and performed by the Depository or Other Settlement System designated for the issue. Market claim credits and debits in the Euroclear System that result from external settlement reflect the market claim payments or transfers by such Depositories or Other Settlement Systems.

5.3.2.6.1.1 Withholding tax relief

(a) You are responsible for ensuring that withholding tax relief claims are cancelled or amended where necessary.

(b) If you have applied for full or partial relief of withholding tax at source in respect of a Custody Distribution which has already been debited from your Account(s) following the processing of a market claim, we may ask you to amend or confirm the tax relief claim previously introduced. If we do not receive your amendment or confirmation by a specified Input Deadline, we may cancel the tax relief claim and apply withholding tax at the maximum rate.

(c) If you transfer securities cum-distribution that you purchased ex-distribution, then you must (notwithstanding Section 5.3.2.6.1.1(e)) inform the recipient that the resulting market claim does not constitute a dividend for tax purposes.

When you receive securities cum-distribution you must ensure that the distribution represents a dividend for tax purposes. If it does not, we can apply the procedure set out below in (e).

(d) If, in connection with the credit of a market claim, we are required to make a withholding or deduction for or on account of taxes, duties, fines, penalties or damages, we will credit the market claim net of such amounts to your Account.

(e) If we are required to make a payment in connection with a market claim, you indemnify and hold us harmless for any associated taxes, duties, fines, penalties or damages. We are authorised to immediately debit your Cash Account for such amounts.

5.3.2.6.1.2 Processing of market claims

(a) We only process market claims once we have confirmation, which in our sole discretion we deem satisfactory, that the Custody Distribution has been processed in the local market.

(b) If a market claim is processed automatically in the local market without regard to whether sufficient securities or cash is available to process the market claim, our processing may require us to debit, or create a debit position in, your Account. If a shortfall is created, Section 15(c) of the Terms and Conditions will be applicable.

(c) If the processing of a market claim requires a debit or blocking of cash or securities, we can debit or block your Account for such amounts at a time we deem fit.

5.3.2.6.1.3 Custody Distributions

(a) These rules apply for both Cash Distributions and Non-cash Distributions except where stated otherwise.

(b) For a market claim resulting from an internal or external settlement we will create and submit the necessary Instructions on your behalf as described in the relevant country section of the <u>Online Market Guides</u> in the first available Processing.

The expected date of the credit or debit in the local market described in the market claims section of the <u>Online Market</u> <u>Guides</u> is only an indication of the date we expect to be able to make the credit/debit. We do not guarantee that the credit or debit will be made at such date.

(c) Credits of securities to your Securities Clearance Account remain provisional until the related debit to the account of the counterparty or delivery by the counterparty is final.

Credits of cash to your Cash Account remain provisional until related debits to the account of the counterparty or payment by the counterparty is final.

(d) In addition, the following rules apply for Non-cash Distributions only:

- if you are a party to a market claim you must have sufficient available securities in your Securities Clearance Account to avoid a debit position
- local market practice may mean that Non-cash Distributions can be compensated in securities or cash
 depending on when the relevant Instruction settles in the local market. We process such claims in accordance
 with local market practice.

5.3.2.6.2 Other market claims procedure

(a) All securities not subject to the domestic market claims procedure will be subject to the following procedure.

We will not (save in exceptional circumstances) process market claims for international securities and domestic bonds which:

- are subject to a varying rate of withholding tax at source depending on the recipient status
- have an option as to currency of payment
- are domestic bonds indicated as not subject to compensation in the <u>Online Market Guides</u> under the heading 'Market Claim'
- have a date on which the interest rate is fixed on or after the Record Date (provided that we know this date)
- are in default.

(b) All transactions executed after the Record Date are deemed to be ex-coupon.

(c) Processing will include market claims for internal settlement Instructions against payment executed after the Record Date, if the Settlement Date of the matched Instructions is before the last day of the interest period.

(d) All credits and debits in respect of market claims are made to you upon our receipt and reconciliation of the securities or cash.

Credits and debits of cash to Cash Accounts for the other market claims procedure remain provisional until our receipt of the interest payment is final.

(e) A message is produced on the Statement of Transactions indicating we do not process the market claim for securities transactions which:

- settled after the Record Date
- have a Settlement Date indicated by the seller before the last day of the interest period for which no market claim is effected.

(f) For an internal settlement against payment Instruction, debits and credits to Cash Accounts are made once the processing of underlying Instructions is completed.

If settlement takes place:

- on or after the interest Payment Date, the entry is valued the Settlement Date
- before the interest Payment Date, the entry is valued such interest Payment Date.

5.3.2.7 Voting

(a) We provide a voting service for equities and funds which are eligible for this service (qualifying equities and qualifying funds). This is described on our website under 'Proxy Voting - Equities – Basics'. Your right to vote can be affected by:

- local regulations
- local market practice
- the rules of the relevant company.

We are not responsible for your inability to exercise voting rights on securities held in the Euroclear System.

(b) We may allow you to use a Custody Operation Instruction to exercise voting rights for securities which are not qualifying equities or qualifying funds, such as bonds. We can:

- accept your Instructions to block securities standing to the credit of your Securities Clearance Account
- execute or make arrangements for the execution of proxies, powers-of-attorney, entry cards or other certificates for delivery to the issuer or its agent
- require our nominee, the Specialised Depository, its nominee or any other person we designate to vote for securities held in the Euroclear System.

(c) All requests we complete upon your demand for this service are at your full and sole risk. We reserve the right not to take any action in connection with the voting of securities.

We have no discretion to exercise any voting rights in respect of securities held in the Euroclear System. In the absence of any Instruction from you, we will not process voting Instructions for a specific voting action.

(d) As we make no investigation and assume you have obtained the necessary authorisation, you must ensure that:

- your voting Instructions reflect those given to you by any beneficial owner
- you are properly authorised by such beneficial owner
- all documents required from such beneficial owner have been authorised and executed.

(e) We accept no liability for being unable to cast your votes in accordance with your Instructions due to any holding, registration, voting or any other restriction.

(f) In some countries it is customary for custodians to vote in favour of management in the absence of the receipt of timely Instructions to the contrary. We accept no liability with respect to voting rights exercised in line with such local market practice.

(g) A Custody Operation Instruction submitted by you for a voting action authorises us to disclose your name, residency and the amount of securities of the relevant issue which you hold if requested by either:

- the issuer or its agent
- any court or other governmental agency
- a body of competent jurisdiction.

5.3.2.7.1 Processing of Instructions to vote

(a) We make arrangements for voting of securities in accordance with your Instructions as set out in this section. We may use third party providers to facilitate this service. Our duties and liabilities with respect to such third parties are specified in Section 12 of the Terms and Conditions.

(b) The general voting procedures for qualifying equities and qualifying funds held in the Euroclear System at annual and extraordinary general meetings are shown below. Special additional procedures for certain qualifying equities are shown in the <u>Online Market Guides</u>.

(c) Once we receive your Custody Operation Instruction to vote and any required proxy voting form, duly completed and executed before the appropriate Input Deadline, we will act as shown below:

Type of Instruction	Our actions
Instruction is for voting through the Euroclear System	We will take all necessary actions to effect your vote in accordance with your Instructions. This may include:
	 sending a postal vote appointing a proxy to vote requesting the Specialised Depository or any other person to appoint a proxy for such purpose
Instruction is for voting other than through the Euroclear System	We will execute or arrange the execution of: - proxies - powers-of-attorney - entry cards - other similar certificates
	for delivery as shown in the Instruction

(d) For some markets and depending on the event specifics, we can block the securities for which actions shown in (c) are taken. The blocking period varies depending on factors such as, but not limited to, the market, the agent and/or the event.

(e) Provided your securities are blocked, if a meeting is adjourned, we will, in the absence of contrary Instructions from you:

- take actions required to effect your voting Instructions
- continue blocking the securities until the date necessary to confer voting rights at the adjourned meeting.

If your securities are unblocked at the time we process the adjourned meeting advice, you may be required to send new voting Instructions.

(f) Information included in a voting Instruction in the field marked 'Remarks to Euroclear' can be verified by us and may cause Instructions to be rejected. This will depend on the action type and requirements. We may however pass on information contained in this field to the relevant agent or a Depository in the form input by you without verifying it ourselves.

5.3.2.7.2 Non-Deposit Accounts

In some markets we may deliver securities on your behalf, and upon your Instruction, outside of the Euroclear System for voting purposes. In such cases we will record the total positions held outside the Euroclear System on a Non-Deposit Account. We will normally re-credit this position the Business Day after the meeting date.

5.3.2.8 Certification under applicable U.S. law

(a) For securities you hold, where the governing documentation or applicable U.S. law requires the delivery of certifications, you must send us a Custody Operation Instruction which provides for an electronic certification ('Certification Instruction'). The Certification Instruction must comply with the procedures outlined in the DACE notice.

The Certification Instruction provides confirmation from you that the beneficial owner(s) of such securities meet the beneficial ownership requirements under U.S. law as set out in the terms and conditions of the securities. The Certification Instruction may be based solely on certifications you have received.

We do not monitor or enforce transfer restrictions for securities you hold in the Euroclear System where the governing documentation or applicable U.S. law requires the delivery of certifications

(b) A model form of U.S. beneficial ownership certification can be found on our website (the 'Standard Long-Form Certification'). This form is designed as a comprehensive certification for incorporation in automated certification procedures. Certain clauses may not apply for a particular Certification Event. The only clauses which apply in a Certification Instruction you send are those which relate directly to and are applicable to the specific Certification Event.

If the proposed form of any certification required for an issue substantively differs from the model form, we must be advised in writing by the lead manager or issuing agent, as appropriate, when we are first notified of the issue. Without such notice, the Standard Long-Form Certification will be used.

A Certification Instruction only incorporates the Standard Long-Form Certification. Failure to follow such form will result in your inability to use automated Certification Instructions.

(c) The certification date for securities in the Euroclear System is the date shown in the relevant DACE notice for the Certification Event. If you receive securities into the Euroclear System after such date, you will be deemed to have confirmed the required certification previously. This date is usually the last day of the period of offering restrictions, except when the first interest payment date for such securities is before such date.

Depending on the issue of securities, the certification required for such interest payment may be the only certification required. Some issues may require further certifications such as, but not limited to, for interest payments during the life of the issue and/or if temporary global securities are exchanged for permanent or definitive securities. In the latter case, there may be multiple certification dates for the same issuance.

(d) For some Certification Events you may be required to send other documents or Instructions. This will be shown in the governing documentation of the issue.

(e) We will send you notice of any Certification Event of which we have advance notice from the terms and conditions of the issue. You must send us separate Certification Instructions for each Securities Clearance Account which holds securities of the issue subject to the Certification Event.

For the purposes of such Certification Instruction, your name or Securities Clearance Account number will be deemed to be the equivalent of a manual signature.

(f) You are responsible for the completeness, truth and accuracy of all information contained in a Certification Instruction once it is delivered to us. Statements made in the Standard Long-Form Certification are incorporated by reference into your Certification Instruction.

(g) If you do not provide the appropriate form of certification or your Certification Instruction indicates that your securities position (or a portion) remains uncertified, then we will block or flag such securities as uncertified. This blocking or flagging will only be lifted:

- upon receipt of the required certification
- or, if such certification is not possible, upon receipt of consent from the issuer or its agent and an appropriate indemnity letter from you and from any transferee.

Uncertified holdings are blocked or flagged to denote that, after the relevant exchange date, such holdings reflect rights in a temporary form security rather than rights in a permanent form security or definitive securities.

(h) Pursuant to the governing documentation and/or applicable U.S. law, an exercise of rights including, without limitation:

- exchange and delivery of definitive securities
- receipt of payment of interest or principal
- exercise of warrants
- conversion of securities

may not be effected until you have delivered the Certification Instruction required with respect to such Certification Event.

Certain warrants, conversion, subscription or other rights may terminate unless a Certification Instruction and any other required information is received by the date set forth in the governing documentation of the issue.

(i) The date and value of the credit to your Cash Account depends on when we receive the cash. If cash is received no later than the receipt of the Certification Instruction, we will credit your Cash Account as soon as possible after receipt of the Certification Instruction with Value Date the Business Day on which the Certification Instruction is received. This is provided the Certification Instruction is received on such Business Day by 18:30.

If cash is received after the receipt of any certification, you receive the same Value Date as we do.

(j) You irrevocably constitute and appoint us as your true and lawful agent and attorney-in fact for making, executing, dating and delivering a Standard Long-Form Certification (or other required forms) relating to the Certification Event.

(k) Upon our request you must either:

- execute a Standard Long-Form Certification or an issuer defined non-standard certification as required by the relevant governing documentation for any Certification Instruction you send to us
- ratify and confirm any Certification Instruction or Standard Long-Form Certification we execute on your behalf or on behalf of the relevant beneficial owner(s).

(I) You irrevocably authorise the production of:

- these Operating Procedures
- any certification or record we retain based on a Certification Instruction
- any Standard Long-Form Certification
- any other document you deliver to us in accordance with this section
- a copy or copies of the documents listed above

to any interested party in any administrative or legal proceeding or official inquiry with respect to matters covered by this section or any such Instruction.

5.3.2.9 Other forms of certification

We will inform you via DACE notice of other forms of certification required for securities you hold. We may block your securities position subject to certification until such certification is received by us.

5.3.2.10 Global securities

(a) When a security is represented by a single global certificate, the custody of such certificate will be entrusted to a Common Depository or Common Safekeeper.

When the Common Depository or Common Safekeeper acts in this capacity, they:

- are not an exchange agent or registrar and hold global securities for us and Clearstream only
- have no knowledge of the interests of Participants in the Euroclear System or beneficial owners
- will not sign any certification as to interests in a global security without Instruction from us or Clearstream
- cannot accept any certification or confirmation as to ownership or any other matter for any purpose relating to interests in a global security.

(b) If the global security is in registered form, it must be registered in the name of a nominee company of the Common Depository or Common Safekeeper.

(c) After receiving the global security at the closing, the Common Depository or Common Safekeeper is only responsible for holding the global security for us and Clearstream.

(d) The Common Depository or Common Safekeeper's activities regarding the global security are:

- the exchange of the temporary global security for definitive securities in the form of individual certificates or a permanent global security
- the cancellation or surrender of the global security
- any other operations concerning the global security.

(e) The Common Depository, Common Service Provider or Common Safekeeper are contractually bound to follow our and Clearstream's instructions as regards the disposition of global securities. They have no obligation to any other party regarding such disposition.

5.3.2.10.1 Exchange for definitive individual or global certificates

Exchanging temporary global certificates for definitive securities occurs as agreed with the issuer. This includes any relevant mandatory requirements such as the provision of certifications of beneficial ownership as set forth in Section 5.3.2.8.

5.3.2.10.2 Exercises of warrants or other options

(a) In order to exercise warrants or other options you must:

- discuss forms with us before the closing at the time acceptance of the security is requested from us
- provide us with Instructions for exercises of warrants and other options through the Euroclear System. This includes the collection of any certification from holders and the provision of any certifications to the fiscal agent or other party.

(b) We are responsible for instructing our Depository to make global securities available for endorsement to reflect the exercise of options through the Euroclear System.

(c) Documentation must not require the Depository to endorse or mark global securities in its capacity as such.

5.3.2.11 Safekeeping and related services for fractional amounts of funds securities

(a) We can accept fractional nominal amounts of securities issued by international or domestic investment fund companies for deposit in the Euroclear System as described in this section.

(b) We will record fractional amounts of fund securities in a special purpose database. This database is a part and a subdivision of the Securities Clearance Account which holds the whole numbers of securities of such issue. Records of fractional amounts will usually include up to 4 decimal figures.

(c) Acceptance of fractional amounts of fund securities for deposit in the Euroclear System and any subsequent transfer is subject to our prior approval on a case by case basis. You must notify us in advance of the transfer of fractional amounts of fund securities. If we allow such transfer, you must send us specific settlement Instructions which we will inform you of. Internal, Bridge or external settlement Instructions which do not include such specific requirements will not be accepted for fractional amounts of fund securities.

(d) We will not accept voting or subscription Instructions in respect of fractional amounts of fund securities other than voting or subscription Instructions.

(e) On a case by case basis, and subject to our prior approval, we can accept Custody Operation Instructions in respect of fractional amounts of fund securities for Corporate Actions. If you wish to send Custody Operation Instructions in respect of fractional amounts of fund securities you must contact us for the details on the specific Instruction requirements.

(f) If the proceeds of a Custody Non-cash Distribution result in fractional amounts of fund securities in circumstances such as, but not limited to, cases where a sale is required by law or regulation or subject to penalties, we may require the fund company (or its agent) to credit a cash equivalent or organise for a third party to try and sell the fractional amount and then credit you with the net sale proceeds.

We do not guarantee that a sale will be made nor do we guarantee the terms and conditions (including price) of a sale.

(g) Standard reporting on your balances and Instructions does not include decimal fractions of securities.

(h) We can stop any or all of the services described in this section at any time without prior notice.

5.3.2.12 Transformations

(a) Transformations in cash can be processed in respect of certain Corporate Actions, for transactions in equities or in debt securities.

Whether transformations are applicable depends on the relevant market and the type of Corporate Action. The details of the process are set out in the relevant country section of the <u>Online Market Guides</u>.

Where applicable, we detect and generate transformations on all external transactions that are matched and unsettled on the reference date. The reference date is the date used to identify the need for a transformation. It can be different per event type.

We neither detect nor process transformations on internal and Bridge settlements.

If you don't want a transformation to be raised on an external settlement Instruction, you may opt out of the transformation process. If both parties opt out, the settlement Instruction is cancelled rather than transformed.

(b) Upon confirmation from the local market, we process transformations in two steps:

- we cancel the underlying settlement Instruction
- we generate new settlement Instructions, as well as the cash transformation movements as applicable.

If the underlying settlement Instruction was against payment, we generate two new money transfer Instructions:

- for the original settlement amount
- for the proceeds of the Corporate Action.

If the underlying settlement Instruction was free of payment, we only generate an Instruction for the proceeds of the Corporate Action.

(c) To ensure that the new Instructions will be executed, we will block cash on your Account on the reference date of the Corporate Action (in accordance with Section <u>3.3</u>). If the new Instruction is executed successfully, this blocking will be lifted.

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5.4.1 Acceptance of currencies

5.4.1.1 Eligibility criteria

(a) Without prejudice to Section 16(d) of the Terms and Conditions, we may:

- accept any currency as a Settlement Currency
- determine the use of a Settlement Currency within the Euroclear System.

(b) Settlement Currencies are listed in the 'Eligible Currencies Reference Card' (available on our website). Settlement Currencies can be identified by the three letter currency code 'ISO' (International Organisation for Standardisation).

(c) We reserve the right in our sole discretion and without notice:

- not to accept a currency as a Settlement Currency within the Euroclear System
- to withdraw acceptance of any Settlement Currency previously accepted
- to refuse any deposit into the Euroclear System of a Settlement Currency regardless of any deposit of other cash in the same Settlement Currency, or to deliver out of the Euroclear System to any Participant holding such cash in the Euroclear System, if we determine that acceptance of any deposit in such Settlement Currency would not be in the best interests of Participants generally or of the Euroclear System.

5.4.2 Money transfer services

(a) The money transfer services that we offer include:

- the receipt of funds into the Euroclear System, whether preadvised or not
- the transfer of funds between Accounts in the Euroclear System and to accounts outside the Euroclear System
- foreign exchange conversions
- foreign exchange direct dealing.

(b) Money transfer services are offered in respect of all Settlement Currencies.

5.4.2.1 Cash Correspondents

(a) Transfers of funds into and out of the Euroclear System are effected through designated Cash Correspondents. Details of such Cash Correspondents, including Bank Identifier Codes (BIC) and Euroclear Bank account numbers for the Euroclear System, can be found in the 'Quick Cash Card' (available on our website).

(b) We may, in our sole discretion, appoint or disable a Cash Correspondent upon notice to you. We will provide you with notice and deem receipt of such notice in accordance with Part IV (Connectivity) of these Operating Procedures. You should take immediate action to adapt to a disablement as we do not deem payments, made though a disabled Cash Correspondent, to have been received by us.

5.4.2.2 Receipt of funds

(a) Either you or another party (whether a Participant or not) can send us funds to credit to your Cash Account in any Settlement Currency. You must ensure that all such payments are made directly to the designated Cash Correspondent for the Settlement Currency.

(b) We do not accept cheques for payment into the Euroclear System. We will try to return any cheques you send to us but accept no liability for loss, delay or our failure to do so.

5.4.2.2.1 Identification of Accounts to be credited

We will only credit funds to a Cash Account if we can identify such Account. In order for a Cash Correspondent to recognise that the funds are to be credited to a Participant's Cash Account you must ensure the credit advice submitted by the remitter to the Cash Correspondent states:

'For account of Euroclear Bank, Brussels - Euroclear Operations Centre, BIC: MGTC BEBE ECL account number ...*..'

in favour of Participant (BIC or name and location) - Participant Account Number'

*Account numbers and descriptions of fields to be filled/used are shown in the <u>Online Market Guides</u> and the SWIFT/EUCLID data reference manuals (available on our website).

A failure to follow the above template may result in the delay of credit to your Cash Account.

5.4.2.2.2 Credit of funds received by a Cash Correspondent

(a) The timing of the credit of funds to your Cash Account is determined according to the time we receive credit confirmation from the relevant Cash Correspondent (see table below).

Credit confirmation received	Credit to your Cash Account takes place
During the RTP	On the day of receipt*
After the RTP	In the RTP dated the next Business Day*

* This is provided the credit confirmation contains all necessary information.

(b) The funds we receive in respect of credit confirmations from Cash Correspondents are initially credited with the Value Date provided by the Cash Correspondent. We may adjust the Value Date depending on whether the funds have been preadvised or not (see Section <u>5.4.2.5.4</u>).

5.4.2.3 Money transfer Instruction types

Instruction Type	Description
Book transfer	A transfer of funds between two Cash Accounts, effected by the simultaneous debit and credit of a Settlement Currency from one Account to the other
Wire transfer	A payment out of the Euroclear System, effected by the debit of a Cash Account and payment to an account outside the Euroclear System as specified in the money transfer Instruction
Preadvice of funds	An advice to us by or on your behalf that funds from outside the Euroclear System will be deposited at the appropriate Cash Correspondent for credit to a Cash Account in the Euroclear System
Foreign exchange	The conversion of one Settlement Currency to another at a determined rate (see Section <u>2.8</u>) effected by the simultaneous debit and credit of subdivisions of your Cash Account. You can specify either the amount to be converted or the amount of proceeds of such conversion
	You can register for automatic conversion for income proceeds (see Section <u>5.3.2.1.6</u>)

Foreign exchange direct dealing	This is a foreign exchange whereby you contact us directly by telephone or Reuters. The service is only available if you have a credit facility with us and approval from our Credit Department
	Once the exchange has been performed, we will send you a confirmation including the terms of the transaction
	The following additional rules apply:
	- we have the right to refuse any transaction
	 minimum and maximum transaction amounts are specified in the Euroclear Documentation but we can grant exceptions on a case by case and exceptional basis
	- only Settlement Currencies which carry no restrictions regarding their conversion are accepted for dealing
	- we charge costs we incur due to cancellation or failure of an Instruction to you
	- we accept transactions on Business Days during the times shown in the Euroclear Documentation
	 for some Settlement Currencies specific rules may apply. These can be found in the money transfer section on our website
	- we can discontinue this service at any time without notice

5.4.2.4 Conditions for the execution of money transfer Instructions

5.4.2.4.1 Input of Instructions

We only process valid Instructions for this service as set out in this Section 5.4.2.4 and Part IV (Connectivity) of these Operating Procedures.

5.4.2.4.2 Deadlines

(a) The Input Deadlines for money transfer Instructions are set forth in the 'Quick Cash Card' (available on our website) and can vary. Variance can be caused by:

- the communication tool you use to input the Instruction
- whether the Instruction is received in the Euroclear System 'straight through' or whether it required manual intervention.

Instructions received after the Input Deadline will be treated as being received the following Business Day.

(b) Settlement Currencies are grouped as shown in the 'Quick Cash Card' (available on our website) under various categories (Groups A, C and D). This is to reflect the different Input Deadlines for receipt of money transfer Instructions and the Value Date applied when executing such Instructions.

5.4.2.4.3 Impact of holidays and weekends

(a) Money transfer Instructions (book transfer, wire transfer, foreign exchange, foreign exchange direct dealing) and credit confirmations which have a requested Value Date of any non-Business Day will be executed for Value Date the next Business Day unless sent by EUCLID in which case they are invalidated.

Preadvices of funds which have a requested Value Date of any non-Business Day are considered as invalid.

(b) Instructions with a requested Value Date which is a holiday in the city of the relevant Cash Correspondent are processed for Value Date the next business day in such city. An exception to this rule are book transfer Instructions that are accepted and processed for any Business Day regardless of whether the day is a business day in the country of the Settlement Currency or not.

5.4.2.4.4 Validation

(a) After authentication of input, money transfer Instructions must be validated before further processing can take place. The general rules for validation are described in Section <u>4.1.4.3</u>.

(b) Money transfer Instructions which are sent by SWIFT or EUCLID are subject to additional manual validation. As such these Instructions can pass the required computer validation but be rejected or cancelled after manual validation.

(c) If validation is successful, the money transfer Instruction is accepted for further processing.

If validation is unsuccessful due to an incorrect format or incomplete/incorrect contents we may try to repair the Instruction.

Instructions that failed the validation process can be repaired by us with no additional input from you, provided that the incorrectly formatted item of information is available to us. If such information is missing, we cannot repair the Instruction and may notify you and request that such information is subsequently made available to us. We can then amend your Instructions using such additional information.

If we do not receive such information in the required form via authenticated message within 5 Business Days of our request, we will cancel the Instruction (except for preadvice of funds which we will cancel on the Business Day following our request).

(d) For the purposes of (c) above, the Instructions are deemed to be received by us once we have repaired them.

(e) We can reject Instructions where we believe that the information you input into a field demonstrates your intent to carry out a different Instruction type. In such instance we will reject the Instruction and input what we deem to be a correct money transfer Instruction type.

(f) We accept no liability in respect of any Instructions we repair or replace on your behalf.

(g) If validation of a money transfer Instruction is unsuccessful and we cannot repair the Instruction due to such Instruction being unclear or we cannot identify the Instruction type, we will automatically cancel it and notify you of such cancellation.

5.4.2.4.5 Selection for the Real-time Processing

(a) A valid money transfer Instruction is put into the backlog of unexecuted Instructions until submission to the RTP dated its Execution Date. This is depending on the type of money transfer Instruction and the requested Value Date as shown in Section <u>5.4.2.5</u>.

(b) Valid money transfer Instructions are only eligible for the RTP.

(c) Valid wire transfer Instructions are selected for the RTP as determined by us taking into account:

- the nature of the Instructions
- any local market constraints
- other relevant circumstances.

5.4.2.4.6 Positioning

(a) Once a money transfer Instruction has been selected for the RTP, Instructions are sequenced in accordance with Section <u>5.2.1</u> (Processing rules). Positioning is successful if the following conditions are met:

- Cash positioning
 - If the execution of a money transfer Instruction necessitates a payment then you require sufficient cash available or receipt of a credit line from us, as determined by us in our banking capacity, of the relevant Settlement Currency in your Cash Account for the payment
- Collateral positioning
 - You require sufficient collateral if you are to be debited with cash and are granted secured credit that we may make available to you in our banking capacity.

(b) Availability of cash may be affected notably as described in Section <u>3.3.1</u> or Section <u>5.3.1.5.3(c)</u>, or due to specific restrictions which may apply to certain Settlement Currencies or certain local markets. These can be found in the relevant market sections of the <u>Online Market Guides</u>

5.4.2.5 Successful positioning and execution of money transfer operations – Value Date

5.4.2.5.1 General

We will not execute money transfer Instructions with a Value Date earlier than the Input Deadline of the Instruction.

5.4.2.5.2 Book transfer

Book transfer Instructions are executed in the RTP for the date indicated in such Instruction provided this is a Business Day. If not, execution takes place the next Business Day, Value Date the Execution Date.

5.4.2.5.3 Wire transfer

(a) Wire transfer Instructions are executed on the date shown below in relation to the Value Date indicated in the Instruction provided this is a Business Day. If not, execution takes place the next Business Day.

(b) Funds are debited from your Cash Account in the RTP dated the Execution Date (and valued in relation to the Execution Date) as follows:

Currency Group	Date of debit
Group A currencies	at the latest on the Value Date
Group C currencies	at the latest on the Business Day before the Value Date
Group D currencies	at the latest 2 Business Days before the Value Date

(c) As soon as we have acted on a wire transfer Instruction and cannot revoke or reverse such action your rights to the related funds are reduced accordingly even if the corresponding debit to the Cash Account has not been effected.

5.4.2.5.4 Receipt of funds by a Cash Correspondent

5.4.2.5.4.1 Preadvice of funds

(a) You must ensure that all funds to be remitted for the credit of your Cash Account(s) are preadvised according to the rules described below. Where there is more than one Cash Correspondent for a Settlement Currency, you must indicate to us the Cash Correspondent to whom the cash will be sent in the preadvice you send to us.

(b) Once we receive a credit confirmation from our Cash Correspondent of the receipt of preadvised funds we will, in the RTP on the Execution Date, credit your Cash Account with the required amount with the Value Date provided by the Cash Correspondent.

The report of preadvices of funds included in the 'Daily Cash Movement Report' is an acknowledgement of the receipt of the Instruction and does not constitute a credit to your Cash Account for any reported amount.

5.4.2.5.4.2 Funds not preadvised or incorrectly preadvised

(a) A Value Date adjustment will be made to a credit of funds if such credit has either:

- been received after the currency deadline and not preadvised
- been credited to another Cash Account than the one which can be derived from the preadvice
- been in excess of the amount preadvised
- been preadvised after the relevant deadline as shown in the Euroclear Documentation.

The adjustment will be made giving the following values:

Currency Group	Value Date
Group A currencies	the next Business Day
Group C currencies	2 Business Days later
Group D currencies	3 Business Days later

(b) If, having received your preadvice, an additional and/or unexpected credit confirmation (different to the one preadvised) is received for your Cash Account, this credit confirmation will consume a corresponding amount of the received preadvice.

Further credit confirmations (including the one for which the preadvice was originally received) will only receive good value up to the amount left of the preadvice following the earlier credit confirmation. Excess amounts will be value adjusted in accordance with (c) below.

(c) In the case of a Value Date adjustment we reserve the right to debit a Cash Account for an amount we calculate:

- by applying the debit interest rate for the relevant Settlement Currency for the period between the credit of the funds and the adjusted Value Date
- to compensate for losses associated with such failure to preadvise correctly.

We will apply whichever amount is higher.

(d) Funds which are preadvised but not received are subject to a penalty supplemental fee.

(e) If you hold funds, or funded your Cash Account, in a Settlement Currency with us then you bear the risk of default of the Cash Correspondent to which the funds have been remitted to the extent that either:

- funds credited have not been preadvised or have been incorrectly preadvised by you
- funds credited are in excess of the amount you preadvised
- the preadvice of funds has been received after the relevant Input Deadline as included in the Euroclear Documentation.

In such situations, if the Cash Correspondent is unable to return funds we hold with them due to the Cash Correspondent's bankruptcy, insolvency proceedings or similar situations, we are not obliged to return to you an amount corresponding to the funds you hold with us in that Settlement Currency, or for which you funded your Cash Account.

5.4.2.5.5 Foreign exchange conversion

(a) A foreign exchange Instruction is executed in the RTP dated the second Business Day before the Value Date in the Instruction. This is provided that it is a business day in the countries of both currencies and if not, the next Business Day that is.

(b) On the Execution Date of the Instruction, proceeds from a foreign exchange conversion are credited to your Cash Account from which the currency to be converted was debited.

(c) If the proceeds are to be paid or transferred to another Account or bank you must submit a separate book transfer or wire transfer Instruction.

(d) The Value Date is the second calendar day after the Execution Date provided it is a business day in the countries of both currencies.

(e) Specific rules may apply to certain currencies. These can be found in the relevant market sections of the Online Market Guides and other Euroclear Documentation.

5.4.2.5.6 Foreign exchange direct dealing conversion

(a) A foreign exchange direct dealing Instruction is executed in the RTP dated the second Business Day before the Value Date in the Instruction. This is provided that it is a business day in the countries of both currencies and if not, the next Business Day that is.

You can request short dated forward transactions up to 3 Business Days in advance. Same day or next day transactions can be provided if technically feasible.

(b) On the Execution Date of the Instruction, proceeds from the execution of the conversion are credited to your Cash Account from which the currency to be converted was debited.

(c) We will not authorise third party payments resulting from foreign exchange direct dealing transactions. All cash payments will be cleared via your Cash Account(s).

(d) The Value Date is the second calendar day after the Execution Date provided it is a business day in the countries of both currencies.

(e) Specific rules may apply to certain Settlement Currencies. These can be found throughout in the relevant market sections of the <u>Online Market Guides</u> and other Euroclear Documentation.

5.4.2.6 Unsuccessful positioning and recycling

(a) If positioning is unsuccessful then the Instruction remains unexecuted in the backlog of unexecuted Instructions. Such Instruction will be re-entered into subsequent RTPs for 5 Business Days until executed or cancelled. If after 5 Business Days the Instruction is yet to be successfully positioned it will be refused.

(b) For foreign exchange Instructions, the 5 Business Days on which positioning is re-attempted following the initial unsuccessful positioning must also be business days in the countries of both currencies.

5.4.2.7 Cancellation of money transfer Instructions

5.4.2.7.1 Cancellation by us

We will cancel any Instruction that remains unexecuted after 5 Business Days (see Section 5.4.2.6).

5.4.2.7.2 Cancellation by you

(a) You can cancel valid Instructions which we have received but not executed provided that the cancellation request is received before the cancellation deadline set out in the 'Quick Cash Card' (available on our website) for money transfer Instructions.

(b) Cancellation will take place as soon as we have validated your cancellation request.

(c) If we cannot find the Instruction you wish to cancel among those due for execution, the cancellation request and any associated replacement Instruction will lapse.

5.4.2.8 Credits and debits

Credits and debits are performed in the RTP dated the Execution Date of a money transfer Instruction. Such credits and debits may be final or provisional as shown in Section <u>2.3</u>. Section <u>3.2</u> sets forth the circumstances in which we can reverse such credits and debits.

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5.5.1 Securities Lending and Borrowing Program overview

5.5.1.1 Introduction

(a) Our automated Securities Lending and Borrowing ('SLB') Program is an integral part of our settlement service. Whenever a settlement failure is detected due to a lack of securities in the Borrower's Account, the SLB Program automatically generates a Borrowing, provided that sufficient relevant securities are available in the lending pool.

Lenders can make securities held in their Securities Clearance Accounts available for lending on an automatic basis and at any time. Their Lendable Position is automatically determined during each SLB Processing run and Loans are allocated amongst Lenders according to set rules, preventing arbitrary selection.

(b) In order to participate in the SLB Program you must acknowledge receipt of and agree to the Supplementary Terms and Conditions. The Supplementary Terms and Conditions are an integral part of the Terms and Conditions.

You must also:

- inform us in writing as to whether you wish to become an Automatic Lender, Automatic Borrower, Opportunity Lender and/or Opportunity Borrower
- register your options for Lending and Borrowing
- designate one or more of your Securities Clearance Accounts as being available for the Lending or Borrowing
 of securities.

(c) We will notify you of your acceptance as an Automatic Lender, Automatic Borrower, Opportunity Lender and/or Opportunity Borrower and of the date on which you may begin to participate in the SLB Program.

(d) Requests to borrow securities may be submitted by:

- Automatic Borrowers who authorise us to identify their Borrowing needs and to arrange Borrowings to meet such needs
- Opportunity Borrowers who identify their own Borrowing needs and submit specific requests for us to arrange Borrowings.

(e) Loan Securities to meet Borrowing requests are provided by:

- Automatic Lenders who agree to make securities available for lending
- Opportunity Lenders who may be called upon by us to make securities available for lending when needed to supplement the supply of securities made available by Automatic Lenders.

5.5.1.2 Securities Lending and Borrowing Processing

5.5.1.2.1 Securities Lending and Borrowing Processing runs

(a) Loans and Borrowings may be generated and reimbursed as a result of each Securities Lending and Borrowing Process ('SLB Processe'). These SLB Processes are shown in the table below.

Process	Timing	Comments
'Batch SLB Process'	During the OSSP dated S	
'First real-time SLB Process'	50 minutes after the opening of the RTP	
'Second real-time SLB Process'	During the RTP at approximately 03:30	

'Third real-time	During the RTP at	
SLB Process'	approximately 07:15	
'Fourth real-time SLB Process'	During the RTP at approximately 14:00	Last opportunity to Borrow for same-day settlement
'Fifth real-time SLB Process'	During the RTP at approximately 17:00	Generates reimbursements of Borrowings for CBF eligible securities with a Value Date of the same day
'Sixth real-time SLB Process'	During the RTP at approximately 17:30	First chance to Borrow CBF eligible securities with a Value Date of the next day
		Generates reimbursements of Borrowings, except for:
		 CBF eligible securities with a Value Date of the same day Borrowings of CBF eligible securities with a Value Date of the next day

CBF eligible securities are those securities which are eligible within Clearstream Banking Frankfurt.

(b) The SLB Processes taking place in the RTP are cumulatively known as the 'Real-time Securities Lending and Borrowing Processes'. The fifth and sixth real-time SLB Processes are known as the 'End-of-Day SLB Process' when they are the last opportunity for a Borrowing of a particular type of securities to be reimbursed.

(c) We only create a Borrowing for an issue of CBF eligible securities in the sixth real-time SLB Process and only reimburse such Borrowing in the fifth real-time SLB Process.

(d) Although we endeavour to perform the SLB Processes as described above, we reserve the right to omit any SLB Process or to perform the SLB Process at such time and include such data as we in our sole discretion determine.

(e) We do not guarantee the timing of the execution of the SLB Processes.

5.5.1.2.2 Recording of Loans

When a Loan is granted, securities are debited from the Lender's Securities Clearance Account and credited to their Record-keeping Account. The Borrower's Securities Clearance Account is credited with the securities and their Record-keeping Account is debited to reflect the Loan.

5.5.1.2.3 Irrevocability

Any Instruction you enter into the Euroclear System which requires a Loan cannot be cancelled as from the time stated below:

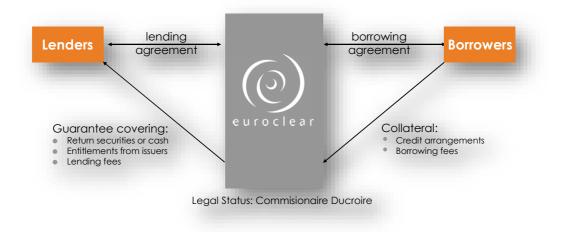
Your participation	Irrevocable from
Automatic Lender	the time we determine your Lendable Position
Automatic Borrower	the time we determine your Borrowing need

5.5.1.3 Our role

(a) We will act as 'commissionaire', meaning we will act in our own name but on behalf of Borrowers (when borrowing securities from Lenders) or in our own name but on behalf of Lenders (when lending securities to Borrowers) to arrange Loans.

In addition, we act as a commissionaire *ducroire* (guarantor) to Lenders and will step in to fulfil Borrowers' obligations should they fail to perform.

(b) Lenders are protected by the Euroclear Bank Guaranty as described in Section 14 of the Supplementary Terms and Conditions.



5.5.1.4 Credit aspects

(a) At the time of each Borrowing, you must have a credit arrangement in place with us in our banking capacity and have sufficient credit available under such arrangement in order to make such Borrowing.

(b) As a Lender, you will continue to benefit from the collateral value of Loan Securities for any credit arrangement you have in place with us in our banking capacity. This will be for the duration of the Loan.

5.5.1.5 SLB Eligible Securities

(a) 'SLB Eligible Securities' are securities accepted in the Euroclear System that have no legal, fiscal or liquidity constraints that preclude them from being used in the SLB Program. For more information, please consult the SLB section of our website and the <u>Online Market Guides</u>.

We reserve the right at any time to make securities in the Euroclear System eligible for the SLB Program and/or to withdraw or postpone the eligibility of securities already accepted for use in the SLB Program.

(b) Defaulted securities are not eligible in the SLB Program. If a security eligible for the SLB Program defaults, we will ensure that no new Loans are created but we will not automatically recall outstanding Loans unless there is a Requested Recall from the Lender. The standard recall process applies in such instance.

5.5.1.6 Borrowing limits

Certain discretionary limits apply to determine the percentage quantity of outstanding securities of an issue that:

- you, individually, are allowed to borrow
- Participants, as an aggregate, are allowed borrow.

Type of Borrowing	Borrowing limit (as a percentage of the quantity of outstanding securities of any issue)
Individual Borrowings	10%
Aggregate Borrowings	20%

We reserve the right at any time to change these limits for all SLB Eligible Securities, any group of securities or a particular security.

We will determine the quantity of outstanding securities of an eligible issue on the basis of information obtained from publicly available information sources.

We reserve the right to determine the total amount of Borrowings that will be generated in the sixth real-time SLB Process.

5.5.1.7 Reporting

For information on reporting functions, please see the 'Securities Lending and Borrowing – Quick Card', available on our website.

5.5.1.8 Resigning from the Securities Lending and Borrowing Program

If you no longer wish to participate in the SLB Program in any capacity you must notify us in writing. The notification will take effect in the Batch SLB Process dated the Business Day after such notification is received by 14:00.

5.5.2 Lending

5.5.2.1 Lender profile

(a) As an Automatic Lender, you agree to make available for lending all or part of the securities available for delivery credited to the Securities Clearance Account you designate for Automatic Lending. This will take into account any operational limitations you specify on securities available for lending.

(b) In such capacity, you authorise us to:

- lend up to a maximum of your Lendable Position
- take the necessary actions to generate the requested Loans
- ensure the amount of outstanding Loans does not exceed your Lendable Position.

(c) You may, as an Automatic Lender, elect to limit the securities you wish to make available for lending in the SLB Program ('Lending Level Monitored Amount'). This can be done by providing us with written notice. We automatically take into account such limitations when calculating your Lendable Position for each SLB Process.

(d) You may:

- specify when pending delivery Instructions and Custody Operation Instructions will reduce your Lendable Position by modifying the Pending Delivery Period default value for your Securities Clearance Account
- specify that only a certain percentage of your securities is available for lending. This can be done for all issues or a particular issue. Any lendable percentage specified for an individual issue will be used regardless of any lendable percentage specified for all issues
- exclude certain categories of securities from lending (e.g. security type, denomination currency, issuer type)
- include certain categories of securities for lending (as above) where they would otherwise be excluded by defining exceptions
- temporarily exclude availability of all securities in your Securities Clearance Account from the lending pool.

(e) We have no obligation to enter more than 20 amendments on your behalf on any Business Day. Changes become effective in the Batch SLB Process dated the Business Day after we receive notice of such amendment by 14:00.

We can accept such notifications if sent via email provided that all required information is contained in such email in the correct format. Information about the format we require is available upon request from the SLB operations team.

5.5.2.1.1 Monitoring level

(a) We will notify you if your Lending Level Monitored Amount is exceeded. You may then instruct us to:

- increase the Lending Level Monitored Amount as appropriate
- implement a Requested Recall of Loan Securities in order to bring the amount of Loan Securities below your Lending Level Monitored Amount. We will recall outstanding Loans in a USD equivalent and issues of securities which we, in our sole discretion, deem appropriate.

(b) We reserve the right to discontinue this Lending Level Monitored Amount procedure at any time.

5.5.2.1.2 Pending Delivery Period

(a) For each delivery Instruction a 'Pending Delivery Period' begins a number of Business Days before the Settlement Date of each Instruction.

For the following Corporate Actions, the Pending Delivery Period begins at the latest in the Batch SLB Process dated the Execution Date of the Instruction:

40, 42, 43, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 62 and 63 (or their equivalent as set out in the SWIFT specifications).

(b) Your Lendable Position is reduced during the Pending Delivery Period by the total quantity of securities included in such Instructions.

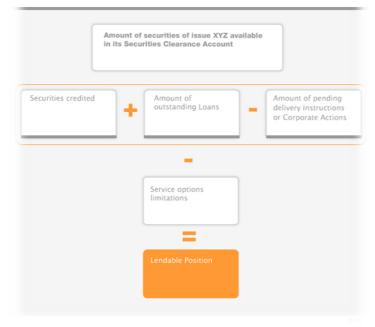
(c) In the absence of any election made by you, the default value for the Pending Delivery Period is set forth in the relevant country section of the <u>Online Market Guides</u> under 'Notice Periods'.

5.5.2.2 Determining Lendable Positions

(a) The calculation of the Lendable Position for each issue of securities available for lending in each of your Securities Clearance Accounts is made by us.

(b) Your Lendable Position is determined as follows:

Determination of Lendable Position of an Automatic Lender



5.5.2.3 Allocation among Lenders

(a) Loans are allocated among Automatic Lenders based on the quantity of securities credited to all Securities Clearance Accounts made available for lending.

(b) We apply a fair allocation principle when allocating Loans among Lenders. As a Lender, you are assigned priority based on the size of your global lendable portfolio and the holding you have of the security for which there is a Borrowing need.

The thresholds of SLB Eligible Securities we use when allocating priorities are as follows:

Priority	Aggregate balance of securities of all issues for lending is	Lendable position for the particular issue is
First priority	≥ USD 50 million	≥ USD 1,000,000
Second priority	< USD 50 million	≥ USD 1,000,000
Third priority	≥ USD 50 million	< USD 1,000,000
Lowest priority	< USD 50 million	< USD 1,000,000

(c) Priority in the allocation process can vary from issue to issue and from time to time based on your Lendable Position for each issue in each SLB Process.

(d) If you have the same priority as another Lender, Loans will be allocated on a pro rata basis based on the holdings of the issue for which there is a Borrowing need.

5.5.3 Borrowing

5.5.3.1 Borrower profile

(a) As an Automatic Borrower, you participate in the Automatic Borrowing Program in which we will continuously evaluate your Borrowing needs throughout each SLB Process for each of your Securities Clearance Accounts.

(b) You authorise us to fulfil your Borrowing needs and to take any necessary action to generate requested Borrowings.

(c) You may, as an Automatic Borrower, elect to limit the type of securities you wish to Borrow in the SLB Program. This can be done by providing us with written notice. We automatically take into account such limitations when calculating your Borrowing needs for each SLB Process.

(d) You may:

- exclude certain categories of securities from your Borrowing (e.g. security type, denomination currency, issuer type)
- include certain categories of securities from your Borrowing (as above) where they would otherwise be excluded by defining exceptions
- temporarily exclude any Borrowing.

(e) We have no obligation to enter more than 20 amendments on your behalf on any Business Day. Changes become effective in the Batch SLB Process dated the Business Day after we receive notice of such amendment by 14:00.

We can accept such notifications if sent via email provided that all required information is contained in such email in the correct format. Information about the format we require is available upon request from the SLB operations team.

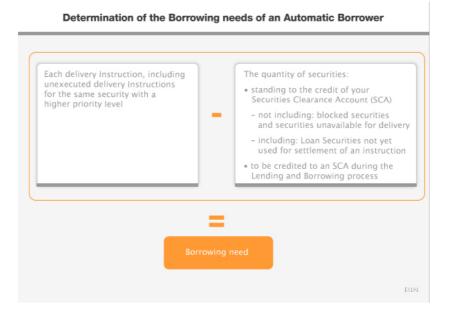
5.5.3.2 Identification of Borrowing needs

(a) When determining your Borrowing needs for a particular issue of securities we will take into account the following:

- all matched internal delivery Instructions with a Settlement Date not later than the date of the SLB Process
- all external and Bridge delivery Instructions submitted for execution for which the date of the SLB Process is not earlier than the Execution Date
- certain Custody Operation Instructions* with Execution Dates not earlier than the SLB Process
- any shortfall in your Securities Clearance Account.

* Instruction types 40, 43, 44, 45, 48, 49, 54, 62 and 63 (or their equivalent as set out in the SWIFT specifications) when their processing does not require a blocking of securities.

(b) A request to borrow is generated to cover a shortfall as shown below:



(c) To be taken into account, we must have received and validated the Instructions listed in (a) above (with a priority level other than lowest) as follows:

SLB Process	Received and validated by…
Batch SLB Process	the Input Deadline on the Business Day prior to the Batch SLB Process
Real-time SLB Process	the start of the real-time SLB Process or by the relevant Input Deadline (whichever one is earlier)

(d) As we calculate your Borrowing needs on a continuous basis, the amount of securities you borrow may be insufficient to settle all Instructions with the same priority level.

(e) Your request to borrow will result in a Borrowing but will not result in the execution of a delivery Instruction if, after the Borrowing has been effected:

- there is a delay in the local market
- execution is unsuccessful due to the counterparty's lack of cash or credit
- you have insufficient collateral for the execution of the Instruction.

(f) We will not identify a Borrowing need in your Securities Clearance Account for any issue against which a total blocking has been recorded.

Linked delivery Instructions

(g) When the linking of Instructions is applicable to your Securities Clearance Account, Borrowing needs will be identified as follows:

Option	Borrowing need identified?
Segregation of activities option	No: for a linked delivery Instruction that forms part of a linked set if such linked set includes any unexecuted linked receipt Instruction.
	Yes: if the total quantity of securities of any unexecuted linked delivery Instruction exceeds the quantity of any linked securities and there remain no unexecuted linked receipt Instructions (all securities and Instructions being part of the same linked set).
Back-to-back trade management option	Yes

5.5.3.3 Allocation of Borrowings

(a) If the quantity of SLB Eligible Securities is sufficient to cover all outstanding Borrowings, net of reimbursements, then all requests to borrow will be granted.

(b) Requests to borrow generated through the Automatic Borrowing Program have first priority in the allocation of Borrowings after all Requested Recalls by Automatic Lenders and Opportunity Lenders have been granted.

(c) If Borrowing requests cannot all be satisfied, Borrowings will be allocated based on the priority and chronological settlement rules set out in Section <u>5.2.1</u>.

5.5.3.4 Automatic reimbursement

(a) The calculation of whether your Borrowing can be reimbursed takes account of:

- all securities of the issue credited to your Securities Clearance Account
- all the Instructions in the backlog of unexecuted Instructions for such issue and such Securities Clearance Account (excluding linked Instructions).

(b) For each issue of securities for which a Borrowing is outstanding, we will calculate whether the quantity of securities credited to each Securities Clearance Account exceeds the quantity needed to permit the execution of:

- matched internal delivery Instructions
- external and Bridge delivery Instructions being examined for settlement for which the Settlement Date in the Instruction is the date of processing or earlier
- Custody Operation Instructions*.

* Instruction types 40, 43, 44, 45, 48, 49, 54, 62 and 63 (or their equivalent as set out in the SWIFT specifications).

We will cause your Borrowing to be reimbursed in the SLB Process during which we identify such excess up to an amount appropriate in light of such excess.

(c) Where an Instruction has generated a Borrowing but the delivery is not executed due to a counterparty's lack of cash or credit, the Borrowing will be maintained until the next Batch SLB Process when it will be re-assessed.

(d) Where an Instruction has generated an Automatic Borrowing but securities are not required to execute the Instruction due to either:

- your lack of collateral to support the credit facility we make available to you in our banking capacity
- a delay in the local market,

the Automatic Borrowing will be maintained until the first real-time SLB Process following the Execution Date when the Instruction is no longer available for settlement.

(e) The last opportunity to reimburse a Borrowing for the same day is 17:00 for CBF eligible securities and 17:30 for all other securities.

5.5.4 Recalls

5.5.4.1 Automatic detection

(a) If the aggregate outstanding Borrowings of securities of a particular issue will exceed the aggregate Lendable Positions of such securities in an SLB Process, then no further requests to Borrow securities of that issue will be granted.

(b) To the extent that a Loan exceeds an Automatic Lender's Lendable Position, such excess will result in the generation of a Requested Recall. A Requested Recall will be granted first by attempting to use SLB Eligible Securities from other Lenders available in the SLB Process in which the Requested Recall is granted. All Requested Recalls have equal priority.

(c) To the extent that we are unable to substitute Lenders, one or more Borrowers will be required to repay their Borrowings. We will send the Borrower(s) a recall notice for the quantity of securities in the Requested Recall.

5.5.4.2 Recall process

(a) A recall notice requires the repayment of Borrowings in the quantities of securities within the following 'Recall Periods':

For	Recall Period
Debt securities	Settlement period + 1 Business Day
Equities	Settlement period

We will try to grant the Requested Recall in each succeeding SLB Process. However, they will not be generated or granted:

- in the fifth real-time SLB Process for non-CBF eligible securities (this process is only used to reimburse CBF eligible securities)
- in the sixth real-time SLB Process for CBF eligible securities (new borrowings are generated for these securities for next day value in CBF).

(b) The Recall Period starts the Business Day following the sending of the recall notice and ends with the End-of-Day SLB Process on the Repayment Date.

(c) If, during the RTP, a Borrower receives securities of the same issue for which there is a Requested Recall, the quantity of securities required to reimburse such Requested Recall will be reserved for reimbursement in the next SLB Process.

5.5.4.3 Failure to return Loan Securities

(a) We may allocate securities for which a Borrowing has not been fully returned to one or more Lenders in the following order:

- Intra-family Borrowings will be allocated to a 'related' designated Lender
- Lenders that have submitted a Requested Recall (in order of the submission of such Requested Recalls)
- any other Lenders (in order of decreasing quantity of securities of outstanding Loans).

In the event that two Lenders fulfil any of the criteria above to an identical extent, securities will be reallocated at random.

(b) If, as a Borrower, you fail to make recalled Loan Securities available in the relevant Lender's Securities Clearance Account by the Repayment Date given in the recall notice, we will take the actions set forth in Section <u>5.5.6</u> and debit any costs incurred to your Cash Account.

(c) If a Requested Recall lapses we will inform the Lender and the selected Borrower(s) in such manner as we deem appropriate through standard EUCLID and SWIFT reports.

5.5.5 Corporate Actions

(a) In case a Corporate Action occurs with respect to any Loan Securities while a Loan is outstanding, we will either:

- create a manufactured income and enter Instructions to transfer it from the Borrower's Cash Account to the Lender's Cash Account
- recall the Loan Securities
- allow the Lender to recall the Loan Securities, depending on the type of Corporate Action.

(b) In addition to the general rules on Corporate Actions in <u>Part V: Section 3</u> (Custody), the main principles applicable to Corporate Actions affecting Loan Securities are as follows:

Corporate Action type	Principle
Income	Loan remains outstanding
	We will automatically return the income to the Lender
	We will enter Instructions to debit the Borrower's Cash Account with the relevant cash and credit the Lender's Cash Account with the relevant cash on the income payment date
	In the event that we would need to reverse any income payment made to the Borrower's Cash Account, the Lender having provided the Loan Securities to which the income payment relates, authorises us to reverse any credit made to their Cash Account in respect to this income payment
Redemptions	Loan is closed prior to the redemption taking place
	If this is not possible, then we will make a payment to return the redemption proceeds due to the Lender. We will enter Instructions to debit the Borrower's Cash Account with the relevant cash and credit the Lender's Cash Account with the relevant cash on the redemption date
Voting	Lenders wishing to exercise their voting rights must recall their Loan Securities

Mandatory Corporate Actions	We will automatically recall the Loan Securities provided there is sufficient time between the DACE notice and the Corporate Action Input Deadline for the Loan to be recalled and the Loan Securities to be returned to the Lender
Voluntary Corporate Actions	The Lender may recall the Loan Securities. If they decide to do so, they must make the Requested Recall sufficiently in advance (i.e. the Repayment Date should be before the Corporate Action Input Deadline) to be able to participate to the Corporate Action
Taxable Cash Distributions	Cash distributions subject to withholding tax at source will be paid gross to the Lender (unless specified otherwise in the <u>Online Market Guides</u>)
	Where Borrowers are required by law, decree, regulation or order of government or governmental body to make a deduction or withholding, for or on account of tax or other duties, the amount due to the Lender will be increased to equal the gross Cash Distribution made by the issuer
	Where we are required by law, decree, regulation or order of government or governmental body to make a deduction or withholding, for or on account of tax or other duties, the amount due to the Lender will be net of all deductions and/or withholding
Consent fees	Compensation for consent fees (including incentive fees) paid by an issuer or its agent as an incentive to holders of securities to participate in a Corporate Action will be provided to Lenders where:
	 the Lender has recalled the securities we received the Lender's Requested Recall or change in options during the Recall Period for the Loan Securities the Borrower fails to return the Loan Securities by the end of the Recall Period for such securities
	Compensation will not be provided to Lenders for voting events with a past Record Date or a future Corporate Action Input Deadline where the number of Business Days before the Input Deadline is less than the Recall Period for the Borrowed Securities
	We will debit the Borrower and credit the Lender for the cash amount equal to the consent fees

(c) If a Non-cash Distribution or the product thereof is not eligible for the SLB Program but is eligible in the Euroclear System, we will create a temporary Loan in the SLB non-eligible securities. No new Loans will be created and this temporary Loan will only be recalled from the Borrower where the Lender sends a Requested Recall.

Upon a Requested Recall from the Lender, we will send a recall notice to the Borrower or will, in our sole discretion, provide cash compensation to the Lender for the Market Value of such distribution.

In the event that the Borrower does not return the Non-cash Distribution by the Repayment Date, pursuant to Section 14(b) of the Supplementary Terms and Conditions, we will attempt to purchase such Non-cash Distribution in such markets, in such manner, on such terms and for such consideration as we consider appropriate.

(d) Compensation for Non-cash Distributions which are not accepted for deposit in the Euroclear System is a cash amount equal to the Market Value of such distribution.

(e) For additional information please see the 'How corporate actions impact securities lending and borrowing' page on our website.

5.5.6 The Euroclear Bank Guaranty

Under the guaranty we provide to Lenders in accordance with Section 14 of the Supplementary Terms and Conditions, we undertake the following.

5.5.6.1 Purchase of replacement securities

(a) When a Borrower fails to return Loan Securities by the Repayment Date and when the Lender has not requested a cash compensation before 10:00 on the Business Day following the Repayment Date, we will make a reasonable effort, during a period of 2 Business Days starting on the Business Day following the Repayment Date, to purchase replacement securities in such a manner and on such terms as we consider appropriate.

(b) We will always attempt to purchase securities of the same issue and of an identical type, nominal value, description and amount as the Loan Securities, unless a request for equivalent securities has been received from the Lender. If we are not successful in purchasing replacement securities for the same amount as the unreturned Loan Securities, we may in our sole discretion purchase only a portion of replacement securities and continue our reasonable effort to purchase additional replacement securities if the period of 2 Business Days has not yet expired. In such a case, the amount of Loan Securities under the relevant Loan shall be reduced pro rata.

(c) Once our treasury department has executed a trade to purchase replacement securities, we will inform the Lender and the Borrower by MT599 SWIFT message or email. The notification will include details of the security, nominal amount, price and intended Settlement Date. Replacement securities will be credited to the Securities Clearance Account of the Lender as soon as practicable after the securities are received by us. All costs incurred by us in connection with the purchase of replacement securities will be debited from the Cash Account of the Borrower and the Loan will be terminated.

If, at the end of the period of 2 Business Days mentioned above, all or part of the replacement securities cannot be purchased on the market, the Loan will continue in default for the amount of Loan Securities which have not been replaced. The Loan recall remains outstanding for the same amount until either:

- the Loan is returned
- the Loan is covered by lender re-allocation
- the Lender requests cash or equivalent securities.

5.5.6.2 Cash compensation

(a) A Lender may request cash compensation for Loan Securities at any time after the Repayment Date, provided that:

- the Loan has not yet been reimbursed
- a trade to purchase replacement securities has not yet been executed by our treasury department.

This can be done by sending an MT599 SWIFT message or email to us. Any request received before 10:00 on the Business Day following the Repayment Date will be considered same day, otherwise it will be considered the next Business Day.

(b) If at the time of receipt, the conditions listed above are met, we will advise the Lender of the amount of the cash compensation (Market Value) via MT599 SWIFT message or email. The Lender must confirm by MT599 SWIFT message or email its agreement to the cash amount to be credited no later than 10:00 on the second Business Day after being advised of the amount.

(c) Upon Lender confirmation of the cash amount, we will credit the Lender's Cash Account with the agreed cash amount at the latest on the second Business Day after the Lender's confirmation, with same-day value.

The amount of cash credited to the Lender's Cash Account together with any other expenses incurred by us will be debited from the Cash Account of the Borrower on the same day and the Loan will be terminated.

If no confirmation is received by the deadline, the Loan will continue and remain in recall. A Lender not having confirmed its request for cash compensation by the deadline may make further requests for cash compensation at a later date.

5.5.6.3 Equivalent securities

(a) A Lender may request compensation in the form of equivalent securities (similar characteristics) as the Loan Securities at any time after the Repayment Date, provided that:

- the Loan has not yet been reimbursed
- a trade to purchase replacement securities has not yet been executed by our treasury department.

This can be done by sending an MT599 SWIFT message or email to us. Any request received before 10:00 will be considered same day, otherwise it will be considered the next Business Day.

(b) If at the time of receipt, conditions listed above are met, we will advise the Lender of our agreement to pursue the request further via MT599 SWIFT message or email. If a Lender informs us of the Securities Codes of equivalent securities that it would be willing to accept instead of the Loan Securities, then we will advise the Borrower. The Borrower must confirm via MT599 SWIFT message or email that an outstanding Loan can be covered with such equivalent securities.

(c) If the Borrower has the equivalent securities in its Securities Clearance Account, we will transfer such securities to the Lender's Securities Clearance Account.

If the Borrower does not have the equivalent securities in its Securities Clearance Account, we will purchase them. Any purchase of equivalent securities shall be made in such a manner and on such terms as we consider appropriate. We will credit the Securities Clearance Account of the Lender as soon as possible after such securities are received by us.

All costs incurred by us in connection with the purchase of equivalent securities will be debited from the Cash Account of the Borrower and the Loan will be terminated.

5.5.7 Billing

5.5.7.1 Failed Return Fee and supplementary fee

(a) In the event that one or more Borrowers does not reimburse its Borrowing by the Repayment Date, the following fees will be credited to the Cash Account of each Lender:

- a Failed Return Fee
- a supplementary fee calculated using the Market Value of Loan Securities which have not been returned as a result of the End-of-Day SLB Process.

The Failed Return Fee is a fixed amount determined in our sole discretion .The supplementary fee is calculated at a rate we determine in our sole discretion with reference to overnight rates in the currency of the Loan Securities for a period starting on the Repayment Date until the date that either:

- the Loan is reimbursed
- the Requested Recall is cancelled.

5.5.8 Specific features

5.5.8.1 Participating on an opportunity basis

5.5.8.1.1 Lending

(a) We may contact one or more Opportunity Lenders if the quantity of securities made available by all Automatic Lenders is expected to be insufficient to fill all requests to borrow and to recall Loans of such securities.

(b) Your Lendable Position as an Opportunity Lender is the quantity of securities you agree to make available for Loans upon our request and does not take into account any deliveries of securities or Custody Operations.

You can also define a lending profile similar to that explained for Automatic Lenders in Section <u>5.5.2.1</u>, but you cannot define a Pending Delivery Period or any blanket exclusions.

Priorities

(c) As an Opportunity Lender you will have priority over Automatic Lenders in the allocation process. If the total supply of securities supplied by Opportunity Lenders exceeds the total demand, Loans will be allocated in order of increasing quantity of securities of such issue made available by Opportunity Lenders.

(d) If all Requested Recalls for Opportunity Lenders cannot be executed, such Requested Recalls will be granted in order of increasing quantity of securities.

5.5.8.1.2 Borrowing

(a) As an Opportunity Borrower, you may submit a request to borrow as shown in the Euroclear Documentation. Requests to borrow may also be submitted by Automatic Borrowers in addition to requests generated by the Automatic Borrowing Program.

(b) We must receive Borrowing requests for an SLB Process before the Input Deadline for such Process. Requests received after such Input Deadline will be considered for the next SLB Process.

We will initially examine a Borrowing request containing a Start Date during the Batch SLB Process dated such Start Date. We will keep requests with a future Start Date in the backlog of unexecuted requests until such Start Date has been reached.

If the request does not include a Start Date or if the Start Date has passed, we will examine the request in the first SLB Process run where new Borrowings are allowed.

Priorities

(c) Your request to borrow as an Opportunity Borrower will only be considered after all Requested Recalls and requests by Automatic Borrowers have been granted.

If sufficient SLB Eligible Securities are available to satisfy all outstanding Borrowings, then we will attempt to grant Opportunity Borrowing requests but do not guarantee our success.

If all Opportunity Borrowing requests for a particular issue cannot be satisfied, allocation will be determined in the following order:

- the Start Date in the request (or if there is no Start Date in the request, the date of the SLB Process in which we first consider the request)
- decreasing quantity of securities.

If a request with an earlier Start Date (or date of first consideration) cannot be granted, a request with a later Start Date (or date of first consideration) may be granted.

If a request with a larger quantity of Eligible Securities cannot be granted, the granting of a request with a smaller quantity of securities may be granted.

Conditions

(d) A request to borrow results in a Borrowing if sufficient securities are available and, subject to the satisfaction of the Settlement Conditions, the granting of the request permits the execution of a delivery Instruction or Custody Operation Instruction. This decision is dependent on whether the Securities Clearance Account of the Borrower is registered for the linking of Instructions option as shown below:

Securities Clearance Account registered for linking?	Borrowing permits the execution of
No	A delivery Instruction or Custody Operation Instruction (Instruction types 40, 43, 44, 45, 48, 49, 54, 62 or 63 or their equivalent as set out the SWIFT Specifications)
Yes	A delivery Instruction that is not linked or a Custody Operation Instruction (Instruction types 40, 43, 44, 45, 48, 49, 54, 62 or 63 or their equivalent as set out in the SWIFT Specifications)
	or
	An unexecuted linked delivery Instruction in the OSSP, if the total quantity of securities of any unexecuted linked delivery Instructions exceeds the quantity of any linked securities and there remain no unexecuted linked receipt Instructions (all securities and Instructions being part of the same linked set)
	A request to borrow does not result in a Borrowing in the Securities Clearance Account of an Opportunity Borrower if such linked delivery Instruction forms part of a linked set if such linked set includes any unexecuted linked receipt Instructions

(e) Such request to borrow will be reported as executed. The Borrowing is for the quantity of securities necessary to permit the execution of the relevant delivery Instruction or Custody Operation Instruction. This is regardless of whether the request to borrow is for a greater quantity of securities.

(f) A request to borrow will not result in a Borrowing as shown below:

lf	Then
Insufficient securities are available for lending	Such a request to borrow will be reported as unexecuted and will be attempted again in the next SLB Process. A request to borrow that remains unexecuted after attempts for 10 subsequent Business Days lapses automatically and we take no further action in respect of any such lapsed request.

Sufficient securities are available for lending, but the granting of the request does not permit the execution of a delivery Instruction or Custody Operation Instruction, either because:

- there is no such Instruction

there is such an Instruction but the quantity of securities in the request to borrow is not sufficient to permit its execution in the same SLB Process
there is insufficient collateral available in the Borrower's Account. Such a request to borrow is reported as executed but there will be no Borrowing. The request to borrow is allowed to lapse during the SLB Process in which it is reported as executed and we take no further action. In particular, we will not attempt to re-submit the request in the next SLB Process.

5.5.8.2 Intra-family Borrowing

A 'Family' is a grouping of Participants that comprises parents, branches and/or subsidiaries with direct ownership links of more than 50%.

A request by an Automatic Lender or Automatic Borrower who is identified as being part of a Family for the purpose of intra-family Borrowing will be given preferential priority over any other request. As such, the Lendable Position of an Automatic Lender will be used first to satisfy the Borrowing request from an Automatic Borrower of the same Family and an Automatic Borrower will have preferential access to the Lendable Position of an Automatic Lender of the same Family.

5.5.8.3 Dedicated services

(a) Opportunity Borrowing for dedicated services in the fourth real-time SLB Process is subject to the general rules for Opportunity Borrowing in Section <u>5.5.8.1.2</u> except as modified below.

(b) Instructions for Borrowings required to cover debit positions created by our release of an external delivery Instruction to the French market before you have sufficient available securities will only be considered in the fourth real-time SLB Process.

(c) Instructions to borrow securities referred to in (b) above are generated by us on your behalf. Each Instruction from you is deemed to have been entered into the Euroclear System and becomes irrevocable when we have identified a Borrowing need in accordance with (b) above.

5.5.8.4 Recognition as a centralised lending system for Belgian withholding tax

The SLB Program has been partially recognised as a centralised lending and borrowing program foreseen in Article 261, third paragraph of the Belgian Income Tax Code. We rely on this recognition as of 1 March 2005 with respect to all securities eligible for Lending through the SLB Program. The current recognition is valid until 31 December 2016, subject to renewal.

The recognition as centralised lending and borrowing system does not apply to intra-family Borrowing transactions as described in Section <u>5.5.8.2</u>.

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5.6.1 General section

5.6.2.1. FundSettle services

(a) We provide services for Fund Shares supported by the FundSettle platform. The FundSettle services are part of the services we offer as operator of the Euroclear System.

The rules and procedures described in this Section must be read in conjunction with all other Sections of these Operating Procedures unless specified otherwise.

(b) For more information on the FundSettle services, please consult our website, the 'FundSettle International – service description' and other Euroclear Documentation we make available.

(c) FundSettle services may differ depending on factors such as:

- whether we have entered into an agreement with the Fund or its agent
- whether securities are held in the Euroclear System or recorded on a Non-Deposit Account
- the nature of the relevant Fund Shares.

(d) Upon notice to you, we may limit our FundSettle services to you.

5.6.2.2. FundSettle user requirements

In order to use the FundSettle services you must:

- be a Participant
- subscribe to the service by completing and sending to us the relevant application form
- enter into an agreement with us to communicate via the internet by subscribing to the FundSettle Browser.

5.6.2.3. Accepted securities and currencies in FundSettle

Securities

(a) We may accept Fund Shares for deposit into the Euroclear System in accordance with Section <u>5.1.1</u> (Acceptance criteria). We may also provide FundSettle services for Fund Shares which are not accepted for deposit in the Euroclear System.

(b) Accepted Fund Shares are listed in the FundSettle funds database as described in the 'FundSettle International – service description'.

Currencies

(c) Settlement Currencies accepted for FundSettle Instructions depend on the settlement currencies offered by the Fund and the operational agreement with the Fund's agent. FundSettle does not guarantee that all currencies accepted by the Fund will be available in FundSettle.

5.6.2.4. Termination of FundSettle services

In order to terminate your subscription to the FundSettle services you must provide us with notice and send FundSettle Instructions to transfer out all Fund Shares held in your FundSettle account(s).

5.6.2.5. Set-off

We may at any time, without prior notice to you, set off any liability of you to us under, or resulting from any action taken pursuant to, this Section <u>5.6</u> against any liability of us to you under, or resulting from any action taken pursuant to, this Section <u>5.6</u>. Any exercise by us of our right of set off under this Section <u>5.6.1.5</u> shall not limit or affect any other rights or remedies available to us under the Terms and Conditions or otherwise.

5.6.2 FundSettle holding structures

5.6.2.1. Held in the Euroclear System

(a) Fund Shares registered in the name of Euroclear Bank SA/NV, FundSettle EOC Nominees Ltd. or any other nominee controlled by us, are securities held in the Euroclear System. Records of such holdings are shown in your Securities Clearance Account(s).

(b) If, for any reason, the records on a Securities Clearance Account do not correspond to the recorded position on the Fund's shareholder register or records, we will adjust the records on the Securities Clearance Account provided we have, what we deem to be, sufficient notice of the discrepancy. We are not liable for the consequences of such adjustment.

(c) Transfers between Participants are reflected on a Securities Clearance Account:

- for Real-time Settlement (RTS) eligible Funds, upon successful positioning and matching of the transfer Instructions in FundSettle, we will forward requests for re-registration or recording to the relevant Fund. The Fund will reflect all settled transfer Instructions with the same trade date as FundSettle. The settlement will be considered as final once the movements are reflected in the Fund's shareholder register or records.
- for non-RTS eligible Funds, after we receive confirmation of the amendment to the shareholders register or records.

5.6.2.2. Held outside the Euroclear System

5.6.2.2.1. General rules

(a) Fund Shares registered or recorded in a name other than Euroclear Bank SA/NV, FundSettle EOC Nominees Ltd. or any other nominee controlled by us, are not held in the Euroclear System. Information on such Fund Shares will be recorded in a Non-Deposit Account.

We decide, in our sole discretion, whether to register Fund Shares in the name of Euroclear Bank SA/NV, FundSettle EOC Nominees Ltd., any other nominee controlled by us, or otherwise.

(b) In accordance with your FundSettle Instructions, when it is required to effect the registration or recording of Fund Shares in the name of your designee, we will forward the details you provide for such registration or recording to the relevant Fund.

5.6.2.2.2. Non-Deposit Accounts

(a) Non-Deposit Account records may show information for securities or other rights or entitlements to receive securities. You should consult your own advisers to determine:

- the nature of such rights or entitlements
- in whose name such rights or entitlements should be recorded with the Fund.

We will not provide advice on the above subjects and are not responsible for any losses related to entitlements held outside the Euroclear System.

(b) If for any reason the records on a Non-Deposit Account do not correspond to the recorded position on the Fund's shareholder register or records, we will adjust the records on the Non-Deposit Account provided we have, what we deem to be, sufficient notice of the discrepancy. We accept no liability for such adjustment.

(c) Transfers can only be reflected on a Non-Deposit Account after we receive confirmation of the amendment to the shareholders register or records of the Fund if applicable. We will forward requests for re-registration or recording to the relevant Fund.

(d) We have no liability for losses caused by Fund Shares recorded on your Non-Deposit Account being found to be fraudulent, forged or invalid. Upon such discovery, we will debit your Non-Deposit Account for such Fund Shares.

5.6.2.2.3. Processing conditions for Non-Deposit Accounts

(a) The execution of FundSettle Instructions in respect of Non-Deposit Accounts is subject to the same settlement and custody conditions for processing and execution as for any other Instruction. This will include a positioning to determine whether you have a sufficient quantity of securities to execute your FundSettle Instruction.

We can refuse to process a FundSettle Instruction if you have an insufficient quantity of securities to permit its execution.

(b) We accept no liability if, for any reason, the Fund refuses to:

- make or receive payment in relation to Fund Shares for which information is recorded on a Non-Deposit Account
- process any voting or any other FundSettle Instruction in respect of such Fund Shares.

5.6.3 Additional FundSettle services

5.6.3.1. FundSettle Order Routing Service

(a) For the FundSettle Order Routing Service, no holdings are recorded in a Securities Clearance Account or Non-Deposit Account. If you use this service without already having a Securities Clearance Account, we will open such an Account for you for purposes such as identification, user access management and invoicing.

(b) The following rules apply to the FundSettle Order Routing Service in addition to the other relevant provisions of these Operating Procedures:

- you must agree with the power of attorney outlined in Section 5.6.4.1 for your Account(s)
- Fund Shares which we accept for the provision of this service are identified as such in the FundSettle funds database
- it is your sole responsibility to execute payments in a timely manner and to perform all obligations which stem from Instructions routed through this service.

5.6.3.2. Hedge funds

We may accept Fund Shares of hedge funds. For information on the services we offer in respect of hedge funds, please consult the 'FundSettle International Hedge Fund service - Service Description' which is available on our website.

5.6.3.3. EMX Message System

(a) We can use the EMX Message System to support FundSettle services for certain Fund Shares (identifiable in the FundSettle funds database). You are considered as a 'consolidated intermediary' by Euroclear UK & Ireland as operator of the EMX Message System.

(b) Depending on your domicile, we may or may not use the EMX Message System for your activity.

(c) Contracts for sales and purchases of Fund Shares for which we use the EMX Message System will be made on the following terms except to the extent that the parties to the contract have previously agreed other terms, in which case such other terms will prevail. 'Unit' means a unit in a unitized collective scheme. 'Fund Provider' means a Fund.

- Products and funds listed by a Fund Provider on the EMX Message System constitute an invitation to treat
- A message from an intermediary to buy or sell is an offer. The offer is made when the message is received by the Fund Provider through the EMX Message System on its screen in legible form
- The intermediary's offer is to buy or sell at the next or previous price following the acceptance of the offer, calculated in accordance with the relevant regulations and constitutional documents of the scheme in question and the Fund Provider's published practices. The offer is subject to any other terms and conditions set out on the web page allocated to the Fund Provider within the EMX Message System

- The offer is accepted when the Fund Provider's acceptance message (transaction booked) leaves the Fund Provider's system for transmission to the EMX Message System
- The Fund Provider executes the contract after the next valuation point, and the process is completed when a contract note message is sent by the Fund Provider. Exact valued contained within the message represent the governing contract note for the executed trade (and ancillary activities) for the purpose of the regulatory rules between professional counterparties
- In a contract for an intermediary to buy Units through the EMX Message System, the intermediary warrants that it is authorised to enter into the contract and that cleared funds shall be available to settle the purchase within the time required by the regulations
- In a contract for an intermediary to sell Units through the EMX Message System the intermediary warrants that it is authorised to enter into the contract and that the product (i.e. Fund Shares) will be delivered within the time required by the regulations
- As between the intermediary and the Fund Provider, the intermediary deals as principal unless the intermediary has informed the Fund Provider that it is acting as agent and disclosed for whom it is acting as agent
- The intermediary will give the Fund Provider such information as the provider is entitled to require pursuant to the terms of issue of any product to supplement any instructions given through the EMX Message System, including information required to satisfy nationality declaration requirements
- All contracts placed through the EMX Message System shall be governed by English law.

(d) You must provide an investor identification code when using the EMX Message System. If you do not want any specific terms to be applied to your deals, nor receive any special commissions, charges or other fees, you may input the code "EBAC" in your FundSettle Instruction to open an account with the Fund. If you use this code, you will not ask for corrections or changes to the conditions applied to your deals.

5.6.4 Rights and responsibilities

5.6.4.1. Power of attorney in favour of Euroclear Bank

(a) You hereby irrevocably constitute and appoint us as your true and lawful agent and attorney in fact for the purpose of making, executing, dating and delivering, on your behalf, subscription forms, share application forms, redemption forms, transfer forms, account opening agreements, acknowledgements that KIID was received, read and understood, or any other agreements or documents required by a Fund or any relevant third party further to a FundSettle Instruction or as we deem necessary.

You are bound to the terms and conditions, including any indemnity, penalty or similar provisions, of all documents we execute on your behalf pursuant to this power of attorney.

(b) You hereby irrevocably constitute and appoint us as your true and lawful agent and attorney in fact for the purpose of:

- cancelling a subscription order (where possible) or redeeming newly subscribed or newly issued Fund Shares, if: (i) there is insufficient cash on (or, if we have extended credit to you in our banking capacity, there is insufficient credit linked to) your Cash Account on Settlement Date; and (ii) we determine in our sole discretion that such order is required
- cancelling a subscription order (where possible) or redeeming newly subscribed or newly issued Fund Shares, if you: (i) have entered into liquidation, bankruptcy or any other insolvency proceedings; or (ii) have applied for a composition with your creditors or for deferment of your debts, whether in or out of court.

This irrevocable power of attorney will remain in full force and effect notwithstanding the opening of liquidation, bankruptcy or any other insolvency proceedings. We accept no liability for any loss suffered as a consequence of a cancellation or redemption of Fund Shares in accordance with this Section <u>5.6.4.1(b)</u>.

(c) The powers of attorney in (a) and (b) above are exclusive, meaning that in respect of securities for which FundSettle services are being provided, you must not directly instruct the Fund or any Depository or Other Settlement System, unless you have a prior agreement for such instruction in place with us.

If, in the process of performing any actions under the powers of attorney in (a) and (b) above, we require any additional information, you must provide such information upon our request. We are not responsible for any delay in processing your FundSettle Instructions caused by the need for additional documentation.

In exceptional circumstances for the FundSettle Order Routing Service, a Fund may not accept Instructions from FundSettle. In such exceptional circumstances, you are obliged to instruct the Fund directly.

(d) You represent and warrant that:

- you have full power and authority to grant us the above powers of attorney
- the granting of such powers of attorney does not, and will not, violate any provision of your constitutional documents (including articles, charter or by-laws) or any law, regulation, ordinance, rule or statute of the jurisdiction by which you are bound or governed
- the powers of attorney are enforceable against you in accordance with their terms.

5.6.4.2. Agreement with Funds

(a) In order to provide FundSettle services, we may, in our sole discretion, enter into agreements with Funds, entities acting for such Funds or other third parties.

We accept no liability for:

- failing to enter into such agreements
- the Fund's, an entity acting for the Fund or any other third party's breach of the agreements
- termination of such agreements.

(b) You agree to hold us harmless and indemnify us from and against any and all claims, demands, liabilities and expenses which may be incurred by or brought or made against us, by a Fund or any other third party, whether arising directly or indirectly in connection with our having acted upon your FundSettle Instructions or where we have otherwise entered into agreements such as those envisaged in (a) above.

5.6.4.3. Your authority to act on behalf of beneficial owners

(a) You must have authority from

- any person for which you send (a) FundSettle Instruction(s)
- the beneficial owner of Fund Shares credited to your Securities Clearance Account
- any person registered as the direct holder of Fund Shares recorded in your Non-Deposit Account

to:

- send FundSettle Instructions
- make and receive payments in respect of FunsSettle Instructions and Fund Shares
- grant us the powers of attorney set out in Section <u>5.6.4.1</u>.

You must act within the scope of such authority and inform us immediately if such authority is impaired or revoked. We make no investigation in regards to such authority and assume that you have obtained such authority.

(b) Upon our request, the request of a Fund or any relevant third party, you must provide the required documentation which evidences your authority to act on behalf of

- a person for which you send (a) FundSettle Instruction(s)
- a beneficial owner
- any person registered as the direct holder of Fund Shares

in respect of FundSettle Instructions or otherwise under this Section 5.6.

You indemnify us, upon demand, for any loss, claim, liability or expense asserted against or imposed upon us in connection with:

- your lack of authority to grant the powers of attorney set out in Section <u>5.6.4.1</u>
- your lack of authority to send FundSettle Instructions
- your failure to produce or execute any required documents.

(c) The FundSettle 'client information function' allows you to input names in your FundSettle Instructions other than your own for your convenience. Referrals to the identity of any other person on the screen pages of the FundSettle website or any Instruction, report or communication we receive from you, will not imply or create a contractual relationship between us and such named person.

5.6.4.4. Certification and other required documents

(a) Funds may require you, or beneficial owners, to certify compliance with holding or investment restrictions, or make certain representations, warranties, covenants, acknowledgements or other requirements (including indemnities) for the holding of Fund Shares or execution of:

- subscriptions forms
- share application forms
- account opening agreements
- any other agreement or document required by the Fund.

(b) By sending us a FundSettle Instruction, you confirm that:

- you (or an underlying beneficial owner) have read, and agree with all provisions of, the account opening form, application form or any other document that is used to subscribe to the relevant Fund.
- you (or an underlying beneficial owner) have read, are bound by, and will comply with the terms and conditions of all documents required by the relevant Fund.
- you (or an underlying beneficial owner) are, and will remain, compliant with all certification requirements of the relevant Fund.

For some Instructions, the Fund may require a written form containing certification requirements. We may sign this document based on your Instructions.

(c) The Fund may require that certification must be executed directly by you or the beneficial owner. We are not responsible for any delays this may cause. You are responsible for obtaining certification from beneficial owners and verifying the accuracy of such certification. You indemnify and hold us harmless for any damage we incur due to your (or an entity acting for you) misrepresentation.

(d) Once we receive a FundSettle Instruction from you, your name or Account number will amount to a manual signature for all purposes related to such FundSettle Instruction.

Your delivery of such FundSettle Instruction constitutes affirmation of the completeness, truth and accuracy of the certification with reference to all documentation of the issue or as determined by the Fund.

Upon our request, you must promptly execute (or have executed by a beneficial owner) a paper form certification as required by the governing documentation of the Fund.

(e) You are responsible for providing any additional information or documentation from yourself or from the underlying beneficial owner if required by us or the Fund. We are not responsible for any delay in processing your Instructions caused by the need for additional documentation. Acceptance of FundSettle Instructions is always at the discretion of a Fund.

5.6.4.5. Application of local market rules

For the purposes of Section <u>5.2</u>, in relation to Funds local market rules include:

- the rules of the country in which the Fund or any relevant agent is established
- the rules applicable to Fund Shares under their governing documentation
- any practice imposed by the Fund.

5.6.4.6. Application of the Net Asset Value and reversals

(a) We will place your Instructions for the next available dealing date provided your FundSettle Instructions are valid and received by the relevant FundSettle Input Deadline and in accordance with the provisions of this Section <u>5.6</u>.

(b) You must verify whether the correct 'Net Asset Value' and dealing date have been applied to your Instructions. You must advise us promptly upon discovery of any error or omission related to the application of the Net Asset Value.

(c) Where we make an error which causes a delay in the processing of your FundSettle Instruction and which results in a different Net Asset Value and dealing date, upon discovery, we will adjust entries to your Accounts in order to apply your initially instructed Net Asset Value and dealing date, provided that your FundSettle Instructions were valid and received by the relevant FundSettle Input Deadline.

(d) We can reverse any credit or debit made to your Accounts following:

- any error of the Fund, which resulted in application of an incorrect Net Asset Value
- any erroneous order confirmation we receive from the Fund
- the reversal by the Fund of a transfer of Fund Shares at a later date.

5.6.4.7. Blocking of Fund Shares and settlement restrictions

Securities can be blocked in your Account in accordance with Section <u>3.3</u>. In particular, Fund Shares will be unavailable:

- if required for any circumstances affecting the Fund
- if Fund Shares are to be debited following a redemption or re-credited following our cancellation
- if we deem it necessary for Custody Operations
- between the date we credit Fund Shares into your Account and the settlement and related cash payment for such Fund Shares to the Fund
- if we deem it necessary in connection with your Instructions.

5.6.4.8. Limitations of liability

We accept no liability for:

- any loss suffered as a consequence or a cancellation of a subscription or of a redemption of Fund Shares in accordance with Section <u>5.6.4.1(b)</u>
- being unable to process your FundSettle Instructions see Section <u>5.6.6.5(d)</u>
- any delay caused by manual intervention of your FundSettle Instruction see Section <u>5.6.6.5(e)</u>
- the failed execution of your Instruction due to incorrectly completed application forms see Section <u>5.6.6.5(g)</u>
- any delay or failure in the processing of a cancellation or amendment request see Section <u>5.6.6.2</u>.

5.6.5 Connectivity

5.6.5.1. Means of sending FundSettle Instructions to us

You can communicate with us in the ways shown below in accordance with provisions described throughout these Operating Procedures (in particular <u>Part IV – Connectivity</u>), in the 'FundSettle International – service description' and in the service documents listed throughout this Section <u>5.6.5.</u>

General connectivity	FundSettle Instructions
FundSettle Browser	FundSettle Browser
SWIFT	SWIFT
Fax	Fax*
H2H (file transfer)	H2H (file transfer)
EUCLID	
Mail	
Email	
Courier	
Internet	
Telephone	

*in contingency situations or where specifically agreed with us.

5.6.5.1.1. FundSettle Instructions through the FundSettle Browser

Information on how to subscribe and communicate with us via the FundSettle Browser is contained in the following documents, available on our website:

- User Access Management Guide
- Upload guide for Participants
- How to connect to FundSettle Browser access
- FundSettle testing guide for Participants

5.6.5.1.2. FundSettle Instructions through SWIFT

FundSettle Instructions sent via SWIFT must conform to the rules and procedures described in Section 4.1.2.1.1.

5.6.5.1.3. FundSettle Instructions by fax

(a) You may use fax to communicate with us for FundSettle services. We will process FundSettle Instructions sent by fax in accordance with Section 4.1.2.2.1 and (b) below.

(b) A FundSettle Instruction sent by fax must:

- be sent to the correct address, as confirmed via telephone with our FundSettle client services team
- be on the standard fax format, as confirmed via telephone with our FundSettle client services team, and have all fields completed
- be signed by authorised signatories (see below) and clearly indicate the name of such authorised signatories
- be preceded by you informing us, via telephone, of your intention to use fax as a means of communicating FundSettle Instructions (not applicable for Corporate Action Instructions).

(c) Sending FundSettle Instructions via fax will result in a delay in our processing.

Authorised signatories

(d) Upon registering for FundSettle you must provide us with a list of signatories authorised to send FundSettle Instructions. This is in addition to the signatory list you must send in accordance with Section <u>4.1.1.3.</u>

(e) It is your responsibility to ensure such FundSettle Instructions have been signed by your authorised signatories.

Deemed receipt

(f) FundSettle Instructions sent by fax are deemed to be received when we receive the fax at our address marked to the attention of the 'FundSettle Operations Team' and you receive the appropriate transmission report. You must contact us via telephone to inform us of your receipt of such transmission report.

5.6.5.1.4. Contingency procedures

(a) You must have in place appropriate back up to transmit FundSettle Instructions in contingency situations as follows:

Primary means of communication	Back up
SWIFT or H2H (file transfer)	FundSettle Browser
FundSettle Browser	Fax (you must request authorisation to use fax*)

* Should you be unable to use the FundSettle Browser you must inform us via telephone of your intention to use fax as a means of communicating FundSettle Instructions.

(b) In contingency situations, we will process your FundSettle Instructions on a reasonable effort basis and may not be able to process all faxed FundSettle Instructions from all Participants in due time even if they were sent before the relevant FundSettle Input Deadline.

5.6.5.2. FundSettle reporting

(a) Information on reporting for FundSettle services is provided in the 'FundSettle International - service description'.

(b) We will send DACE notices for Fund Shares accepted for FundSettle services standing to the credit of your Account(s). You should continue to consult DACE notices sent through EUCLID or SWIFT even if you input some FundSettle Instructions through the FundSettle Browser.

5.6.6 **Operational information**

5.6.6.1. Input of FundSettle Instructions

(a) We only process valid FundSettle Instructions received in accordance with <u>Part IV</u> and <u>Part V – Section 6</u> of these Operating Procedures and the 'FundSettle International – service description'.

(b) You cannot input a FundSettle Instruction for a future Execution Date.

(c) We accept no liability for delay in the processing of FundSettle Instructions if your placement of an order with a Fund requires the opening of a new account with such Fund.

(d) For cleared Funds, you must ensure that:

- the cash Settlement Date indicated in your FundSettle Instruction, if any, is in accordance with the requirements of the Fund
- you have sufficient cash in your Cash Account (or provision of cash) to meet the FundSettle Instruction or you receive a credit line from us (as determined by us in our banking capacity) to allow for timely execution.

(e) Input Deadlines for FundSettle Instructions are available on the FundSettle funds database and in DACE notices we provide.

5.6.6.2. Recycling, cancellation and amendment of FundSettle Instructions

Should your cancellation request arrive after we have passed on the FundSettle Instruction to the Fund, we will, on a reasonable effort basis, forward it on to the Fund but accept no liability for:

- our delay in the processing of the cancellation/amendment request
- the request not being processed by the Fund.

5.6.6.3. Notification of invalid and rejected FundSettle Instructions

We will notify you if a FundSettle Instruction is found to be invalid or is rejected by the Fund, provided we have been duly notified of the rejection by the Fund.

We are not responsible for any delay in relaying rejections from the Fund or for any erroneous rejection by the Fund.

5.6.6.4. Transfers

(a) For a transfer of Fund Shares, we will reflect your re-registered FundSettle portfolio through a record in your Securities Clearance Account or Non-Deposit Account depending on the type of registration.

- for Real-time Settlement (RTS) eligible Funds, when we have successfully positioned and matched the Instructions in FundSettle
- for non-RTS eligible Funds, when we receive confirmation from the Fund that re-registration is completed.

(b) During the processing of a transfer you will be unable to instruct on the affected Fund Shares.

5.6.6.5. Processing

(a) With the exception of maintenance periods, FundSettle Instructions input through FundSettle are generally processed on an STP basis (not applicable for Corporate Action Instructions or account opening Instructions).

(b) Our obligation in respect of processing FundSettle Instructions is limited to our relaying such Instructions (provided they are valid) to the relevant Fund and making or receiving payments in accordance with this Section <u>5.6.6.</u>

We are not liable for the non-receipt by a Fund of an Instruction sent via unsecure means (fax, mail, etc) provided that we can evidence our proper relay of the Instruction to such Fund. Such evidence can be fax confirmations or courier delivery confirmations.

(c) You bear the risk of loss or delay in the process of transfer of Fund Shares under your FundSettle Instruction from the moment it has been communicated by us to the Fund or any Depository or Other Settlement System. The Fund is responsible for arranging re-registration in the name you designate and for confirming the amendment of the shareholder's register of the Fund.

The timing of re-registration of Fund Shares is dependent on the Fund. In general, forms must be completed by the transferor and transferee. Delays can occur for the re-registration of Fund Shares that only allow updates to the register on dealing dates.

As the case may be, the agents acting as Depository, the Depository or any Other Settlement System are responsible for arranging and confirming delivery or transfer of Fund Shares to or from the persons or accounts you designate.

(d) We accept no liability for being unable to process your FundSettle Instruction for any reason, including but not limited to:

- any holding, registration, voting or any other restriction established in the Fund Shares governing documentation, subscription agreement or any other agreement or form
- any relevant law, decree or judgement of any government, court or other governmental agency or body of competent jurisdiction
- the refusal of any Fund or intermediary to process a FundSettle Instruction.

(e) Some FundSettle Instructions will require manual intervention if information necessary for execution is missing.

If manual intervention is required, there may be a delay in processing. This will depend on the type of intervention required and on factors such as whether information is directly accessible or if we are dependent on input from you or external parties such as the Fund.

You can check the status of your FundSettle Instructions by consulting:

- the FundSettle Browser
- H2H (file transfer)
- SWIFT reporting
- other means we deem appropriate.

You are kept informed of the expected delay for execution, depending on the missing type of information or other requirements.

(f) We do not validate the field 'Narrative to transfer agent' when validating and processing your FundSettle Instructions. We are not responsible for a Transfer Agent failing to comply with any comments contained in such field.

(g) We will, on a reasonable effort basis, complete application forms on your behalf. The acceptance of an Instruction is at all times at the discretion of the Fund.

We are not responsible if the Fund refuses to accept an Instruction due to a wrongly filled out application form or any other forms. It is your responsibility to keep us informed with up to date information to fill out application forms.

5.6.6.5.1. **Positioning conditions, matching and dumps**

(a) Positioning for securities and cash is subject to the same Positioning Conditions as set out in Section <u>5.2.1</u> – Processing rules.

(b) Instructions for transfers are deemed to match if any discrepancy between Fund Share amounts is not greater than 1 Fund Share. In the case of a discrepancy of 1 Fund Share or less, the Fund Share amount indicated by the Transfer Agent will be used for execution. In the case of discrepancy of more than 1 Fund Share, the Instructions will not be processed.

(c) Dumps can occur when a Fund books a transfer to an Account without a matching FundSettle Instruction from the Account holder. We will notify you if we process dumps relating to incoming transfers for your Account. If you receive any erroneous dumps, you should instruct an outgoing transfer to return the Fund Shares to the counterparty. Failure to do so within 5 Business Days of receipt of notification is evidence of your approval of the dumps.

5.6.6.5.2. Execution

(a) We will execute your FundSettle Instruction once positioning is successful and the Processing Conditions are met.

(b) Execution of a FundSettle Instruction entails effecting any required credit, debit or blocking and generating any required transmission of Instructions to the Fund or appropriate Cash Correspondent.

(c) Some Funds confirm FundSettle Instructions via fax, mail or email. We accept no liability for the absence of, delays or errors in confirmations and in the execution of reporting. As a result of such reporting, we may be required to effect reversals or corrections to your Account.

(d) A Fund can elect to process a FundSettle Instruction by instalments. Should they do so, we are authorised to send further FundSettle Instructions on your behalf to fully effect your initial FundSettle Instruction.

5.6.6.6. Settlement

5.6.6.6.1. Use of code numbers for distributor identification

(a) We do not validate code numbers or other forms of identification you input to identify the distributor of the Fund. We will however make this information available to the relevant Fund.

(b) We accept no liability if the code number you input is incomplete or incorrect, and this results in rejection of the Instruction by the Fund or incorrect or undue payment of commissions or fees or any other consequences.

5.6.6.2. Trading limit

You may set a trading limit for your FundSettle Account in order to monitor and manage your exposure from trade date to cash Settlement Date. You can set this limit for individual Accounts or link multiple Accounts. We accept no liability for delay or failure in the processing or settlement of Instructions due to the application of your trading limit.

5.6.6.3. Cash redemptions

(a) You may instruct a redemption expressed as a cash amount provided:

- such Instruction type is accepted by the Fund for such Fund Shares
- you have sufficient Fund Shares available in your Account and held in your name/on your behalf with the Fund.

(b) We will position your cash redemption Instruction by determining the relevant number of Fund Shares required for the instructed cash amount.

We can, in our sole discretion, add a margin for a cash redemption Instruction to avoid the possibility that you attempt redemption for a greater number of Fund Shares than you have in your Account. This may cause positioning to be unsuccessful and we accept no liability for the consequences of this action.

(c) The value of Fund Shares will be determined by us, based on information contained in the FundSettle funds database. We accept no liability for such information being incorrect and causing your cash redemption Instruction to fail to be positioned.

(d) We are authorised to initiate a subscription at any time to cover Fund Shares that have been redeemed in excess of the available balance in your Account and held in your name/on your behalf with the Fund. You must cover the cost and expense of this subscription.

(e) A cash redemption Instruction, processed on behalf of any other Participant, can cause Fund Shares standing to the credit of your Account to be blocked. We accept no liability for the loss of use of such Fund Shares.

(f) Delays and/or discrepancies in the payment of proceeds can occur due to, without limitation:

- Fund Shares with specific requirements
- the way payments are processed by the Fund.

(g) Specific features regarding partial redemption are provided in the FundSettle International – service description. When a Fund confirms a redemption order for part of an instructed amount, we will credit you with the relevant percentage of the redemption proceeds received. Your FundSettle Instruction will remain pending in the Euroclear System. We will settle such FundSettle Instruction once we receive confirmation from the Fund of the redemption for the total remaining amount of Fund Shares and of the remaining redemption proceeds.

(h) We accept no liability for delay or failure in the settlement of FundSettle Instructions due to the delay or failure of the Fund to confirm the remaining part of the order and/or to credit the outstanding redemption proceeds.

5.6.6.4. Subscription proceeds

If you place a subscription, credits to your Account are provisional until we have made the necessary payment to the Fund. You should be aware that your positions with the Fund may only become available, once the Fund has successfully reconciled our payment.

5.6.6.5. Order and transfer confirmations

(a) Order confirmations are provided to us by the Fund. Contract notes are usually sent to us electronically but may sometimes be sent by unsecured means. The availability of such contract notes is dependent on the Fund and can cause delays in settlement.

(b) It is your responsibility to verify the order confirmation and details of orders/transfer are correct and to advise us in the case of any error.

5.6.6.7. Custody

5.6.6.7.1. Corporate Actions

We will handle Corporate Actions affecting Fund Shares provided we have been duly notified by the Fund.

5.6.6.7.2. Custody Distributions

(a) For the purposes of FundSettle, a Custody Distribution includes any distribution of Fund Shares or other securities/cash payments made by a Fund.

(b) The Record Date for Fund Shares is specified by the Fund. Fund Share balances used to determine entitlements for Custody Distributions are those at 24:00 on Record Date.

(c) You are entitled to the product of Custody Distributions for Fund Shares recorded on a Non-Deposit Account if on the Record Date they are registered in your name or the name of your designee. We will credit you with Custody Distributions for such Fund Shares unless we receive contrary instructions from the Fund.

(d) We should receive Custody Distributions for Fund Shares recorded on a Non-Deposit Account if upon registration, you or your designee provided the relevant documentation and details in respect of the FundSettle service. We are not liable should a Custody Distribution not be made by the Fund.

(e) The credit of Custody Distributions to your Account(s) is made as shown below:

Custody Cash Distributions	Custody Non-Cash Distributions
Upon receipt and reconciliation of cash for our account	Upon receipt of the relevant confirmation from the Fund
at the relevant Cash Correspondent	

Annex I: Definitions

In these definitions, where appropriate and unless the context implies otherwise, references to the singular will include the plural.

Within the Operating Procedures we may define a term for a specific section. These definitions will be capitalised and placed in inverted commas.

Capitalised terms which are not included in the list of defined terms below have the meaning given to them in the Terms and Conditions or the Supplementary Terms and Conditions.

List of defined terms

Back Value / backvalue – the use of a Value Date for the cash side of an against-payment securities transaction involving Newly-Issued Securities corresponding to an earlier contractual Settlement Date rather than the date on which actual settlement occurs.

Board – our board of directors.

Bridge – the name used for the processes established between Euroclear Bank and Clearstream that permit crosssystems settlement of a trade between a Participant and a customer of Clearstream.

Bridge Agreement – the Amended and Restated Bridge Agreement concluded by us and Clearstream as amended from time to time.

Bridge Currency – a Settlement Currency which has been accepted by both Euroclear Bank and Clearstream for Bridge settlement.

Cash Correspondent – a correspondent bank which holds cash on our behalf for the Euroclear System.

Cash Distribution – any interest, dividend or other payment distributed by any issuer, or any agent on behalf of an issuer, on any issue of securities, other than a payment in full or a retirement of securities.

Certification Event – an event which requires a certification in connection with the governing documentation or laws and regulations applicable to certain issues of securities.

Clearstream - Clearstream Banking S.A. (Luxembourg).

Clearstream Delivery Transmission – a transmission from Clearstream to Euroclear Bank of proposed Bridge deliveries.

Clearstream Feedback Transmission – a transmission from Clearstream to Euroclear Bank indicating which proposed deliveries in the previous Euroclear Delivery Transmission are accepted and which are rejected.

Closing Date / Issuance Date – in relation to any distribution of Newly-Issued Securities, the date set by the issuer, lead manager or agent as the date when a security or new tranche of securities is issued on the market and as of which settlement in that security can become effective.

Common Code – a nine-digit number allocated jointly by Euroclear Bank and Clearstream to identify each issue of securities accepted for deposit in the Euroclear System and/or Clearstream.

Common Depository – an entity appointed by Euroclear Bank and Clearstream to provide safekeeping and asset servicing for certain securities.

Common Safekeeper – an entity appointed by Euroclear Bank and Clearstream to provide safekeeping for certain securities in NGN form.

Common Service Provider – an entity appointed by Euroclear Bank and Clearstream to provide asset servicing for certain securities in NGN form.

Corporate Action – an event which may occur during the lifespan of a security. Some take place on fixed dates whereas others occur on an ad hoc basis. For purposes of the SWIFT ISO 15022 standard it means:

'an event affecting holders of an issue of securities which Euroclear Bank considers to be a corporate action event'.

Custody Cash Distribution – any redemption amount, interest, dividend or other cash payment distributed by an issuer, or any agent on behalf of an issuer, in respect of an issue of securities held in the Euroclear System or in respect of which we provide services.

Custody Distribution - a Custody Cash Distribution or a Custody Non-cash Distribution.

Custody Non-cash Distribution – any bonus securities, rights or other entitlements in the form of securities, distributed by an issuer, or any agent on behalf of an issuer, in respect of an issue of securities held in the Euroclear System or in respect of which we provide services.

Custody Operation – an action we take on your behalf in respect of, or resulting from, a Corporate Action, which includes a market claim. For the purposes of the SWIFT ISO 15022 standard this is a 'Corporate Action'.

Custody Operation Conditions – conditions that must be met (according to the type of Custody Operation) in order for a Custody Operation to be executed.

DACE – Deadlines and Corporate Events. For the purposes of the SWIFT ISO 15022 standard this is a 'Corporate Action Notification'.

Daily Cash Statement - The official statement of balance for cash you hold in the Euroclear System.

Daylight Indicator – SETD and, for purposes of the SWIFT ISO 15022 standard, means the override indicator =/RTGS/. This indicator cannot be added to an Instruction that is already input. You should cancel and replace the Instruction with a new Instruction including the Daylight Indicator.

Delivery Transmission – a communication by a delivering settlement system to a receiving settlement system requesting the acceptance of a transfer of securities from the delivering settlement system to the receiving settlement system.

(EPIM) European Pre-Issuance Messaging System – a central messaging system for facilitating the allocation of ISIN and Common Codes and for the exchange of issuance information between issuers' agents, securities dealers, Euroclear Bank and Clearstream.

EPIM Documentation – the EPIM Getting Started Pack and any other EPIM-related documents published by Euroclear Bank.

EPIM Message – a message sent or received using EPIM.

ESSC – Euroclear Self Service Centre, a web based interface that you may use, subject to prior agreement with us, to receive reports and exchange files with us. ESSC is available over the internet and secured via user access management either via smart card or soft certificate.

EUCLID - a data transport network and processing system that you may use, subject to prior agreement with us,

- to input certain Instructions and requests
- to access information and receive reports.

It uses the GEIS (General Electric Information Services) Mark III time-sharing network for data transport and the EUCLID gateway computer for processing. Instructions are validated by us and reports are prepared on the EUCLID gateway computer for your retrieval.

EUCLID PC – a computer software application which provides access to EUCLID.

EUCLID Server - a computer software application which provides access to EUCLID.

EUCLID User – a person, or application running on a computer, identified by the correct combination of network user number, network password, EUCLID user number and EUCLID password.

Euroclear Delivery Transmission – a transmission from Euroclear Bank to Clearstream of proposed Bridge deliveries.

Euroclear Documentation – all documentation we publish and/or make available on the Euroclear Bank website and to which these Operating Procedures refer, as may be amended or supplemented from time to time. The Euroclear Documentation includes among others the Online Market Guides or the individual service guides.

Euroclear Feedback Transmission – a transmission from Euroclear Bank to Clearstream indicating which proposed deliveries in the previous Clearstream Delivery Transmission are accepted and which are rejected.

Ex-distribution Date – the first day of owing (underlying) securities upon which there is a Non-cash Distribution without the right to such Non-cash Distribution.

Execution – the successful implementation within the Euroclear System of an Instruction or operation. For internal Instructions or operations, execution coincides with settlement.

Execution Date – the Business Day when an Instruction is submitted for execution, with reference to the date you set out in your Instruction, or a number of days before such date, depending on the type of Instruction or operation.

For Custody Operation Instructions, the Execution Date is the date you specify, or in the absence of such specification, the date that we attribute to the Instruction or operation depending on the type of Custody Operation.

Feedback Transmission – a communication from a receiving settlement system to a delivering settlement system notifying the delivering settlement system of the status of each proposed delivery Instruction, and the time of the acceptance, rejection or refusal of such Instruction, in the delivering settlement system's corresponding Delivery Transmission.

Free of Payment Delivery Without Matching Instruction – an internal or Bridge delivery Instruction which does not require matching.

Fund – an investment company which has issued shares or a management company, trustee or similar entity representing or acting in respect of a pool of assets represented by Units. References to a Fund also refer to such Fund's agent(s) and Transfer Agent(s). A Fund is referred to as an issuer of securities in all sections other than the FundSettle Section of these Operating Procedures.

FundSettle Browser - a computer software application providing browser access to FundSettle.

FundSettle Instruction – an Instruction from a Participant to Euroclear Bank in respect of FundSettle services. FundSettle Instructions include, but are not limited to, all account opening forms, orders and Instructions set out in the FundSettle International - service description.

FundSettle Order Routing Service - the service described in the FundSettle Section of these Operating Procedures.

FundSettle Nominee – a Euroclear nominee that is used to register Fund Shares that are held in the Euroclear System.

Fund Shares – securities representing the rights of investors in a Fund company or in a pool of assets managed by a Fund management company. Fund Shares include both shares and Units issued by a Fund.

H2H (file transfer) – A connectivity tool which allows you to send all your instructions in a single file directly to the FundSettle platform through an automated interface with your own system. For more information, please consult our website.

Home Market – the market where the issuer of a security has deposited such security for settlement in that market's Other Settlement System.

Home Market Security – a Multi-listed Security eligible for settlement in the Home Market's Other Settlement System.

Input Deadline - the time on a Business Day by which we must have received your Instructions.

Instructions – all instructions as set out in the Euroclear Documentation including cancellation Instructions.

Issued Outstanding Amount (IOA) – with respect to each debt security issued in NGN form the total remaining indebtedness (other than interest) of the issuer as determined from time to time by the records of Euroclear Bank and Clearstream; where relevant, the IOA is the result of the product between the nominal amount and the pool factor of the security.

Issuer ICSD Agreement - The agreement that must be entered into before any NGNs can be accepted by the ICSDs.

KIID – the Key Investor Information Document introduced by the Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities ("UCITS IV Directive").

The KIID provides the following information:

- identification of the Collective Investment Scheme
- short description of the investment objectives and policy
- historical performance or, if applicable, profitability scenarios
- costs and expenses associated
- risk/reward profile of the investment.

Management Committee – our management committee which has received authority from the Board in order to manage our affairs.

Market Value – the market value of securities as determined by us on a given Business Day for the purposes of the SLB Program. Such determinations will be conclusive and binding on each Lender and Borrower. This value is determined on the basis of information obtained from independent sources including, but not limited to:

- the offered price obtained from the lead manager of the issue
- the offered prices obtained from recognised market participants in the issue traded for settlement in the Euroclear System
- the cost of a buy-in (passed on to the Lender) under the rules of any relevant regulated securities market
- other outstanding issues with a similar credit rating, maturity and characteristics.

Multi-listed Securities – securities listed on, or traded in, more than one stock exchange and therefore eligible for settlement in more than one Other Settlement System.

Net Asset Value – the net price of a Fund Share. This is calculated by dividing the total value of the Fund by the total number of outstanding Fund Shares.

Newly-Issued Securities – securities, including a new tranche of an existing issuance, during the period from the Closing Date up to the second Business Day after the Closing Date.

Non-cash Distribution – any additional securities, rights or other entitlements accepted for deposit in the Euroclear System, distributed by an issuer, or any agent on behalf of an issuer, on any issue of securities.

Odd Lot(s) – quantities of securities other than the minimum number of securities usually traded in a local market.

<u>Online Market Guides</u> – a web based resource providing specific legal and operational information for individual domestic markets. This resource can be found on our website www.euroclear.com

Optional Bridge Settlement Processing – the Processing on each Business Day as agreed by Euroclear and Clearstream for Bridge Settlements of securities transactions where you have included the Daylight Indicator in your Instructions and the Clearstream customer has included an equivalent flag in its instructions to Clearstream.

Overnight Securities Settlement Processing ('OSSP') – a Processing for securities transactions or operations with related cash movements and confirmations from Depositories and Other Settlement Systems, where the execution of transactions or operations is simulated, but such transactions or operations are executed only when we decide to complete such Processing.

Participant-linked settlement Instructions – instructions for which you have completed a specific linking reference (see Section <u>5.2.1.7</u> of these Operating Procedures).

Payment Date - The date on which the Custody Distribution is to take place (cash and/or securities).

Pending Delivery Period – a number of Business Days preceding the Settlement Date during which we can recall an outstanding Borrowing.

Positioning Conditions – conditions which must be met in order for an Instruction or operation to be positioned in accordance with the relevant services sections.

Pre-Released / Prerelease – Newly-Issued Securities held at a Common Safekeeper, Common Depository or at an entity appointed as Common Depository acting as Specialised Depository that are made available in the Euroclear System (either directly or via the Bridge) by the issuer during the OSSP normally beginning on the Business Day preceding the Closing Date for such Newly-Issued Securities.

Processing - the Overnight Securities Settlement Processing and/or the Real-time Processing.

Quick Refund – a tax relief process, handled by the withholding agent before withholding tax for a particular Custody Cash Distribution has been paid to the tax authorities. This process generally results in the excess withholding tax being refunded within a shorter period of time as compared to refunds received via the standard refund process.

Real-time Processing ('RTP') – a Processing for securities transactions or operations with related cash movements, cash transactions or operations and confirmations from Depositories, Other Settlement Systems and Cash Correspondents, where the execution of transactions or operations takes place as soon as the applicable Positioning Conditions and Settlement Conditions have been met.

The Real-time Processing may be referred to as the 'real-time process' in Euroclear Documentation other than these Operating Procedures.

Real-time Settlement ('RTS') – internal settlement in FundSettle of transfers between Participants, in accordance with the rules set out in the 'FundSettle International - service description'. Funds eligible for RTS are identified as such in the FundSettle funds database.

Record Date – the Business Day upon which the relevant amount of securities credited to your Securities Clearance Account is taken into account in the Euroclear System in order to determine entitlements to the product of Custody Distributions.

Record-keeping Account – an account we open to record Borrowings and Loans in the name of each Borrower and each Lender on our books. A Record-keeping Account may be divided into different sub-accounts to record different types of Borrowings or Loans. Each such sub-account may be named a Record-keeping Account but will be considered for all purposes, except as otherwise set forth in the Operating Procedures, as being part of one single and indivisible Record-keeping Account.

When referred to, the Record-keeping Account of a Lender means the Record-keeping Account associated with the Securities Clearance Account to which loaned securities were debited, and the Record-keeping Account of a Borrower means the Record-keeping Account associated with the Securities Clearance Account to which Borrowed Securities were credited.

Relief at Source – a tax relief process by which there is a reduction of, or exemption from, withholding tax applied at the time when a Custody Cash Distribution is paid.

Remote Market – a market other than the Home Market where Multi-listed Securities are settled in an Other Settlement System.

Remote Market Security – a Multi-listed Security eligible for settlement in a Remote Market's Other Settlement System.

Securities Lending and Borrowing (SLB) Process – a process during which your Instructions for Lending and Borrowing are considered and in which the Lendable Position of each Lender and the Borrowing needs of each Borrower are calculated and, where relevant, related Instructions are generated.

Security Code - either the Common Code or ISIN used to identify an issue of securities.

Settlement Conditions - the conditions that must be met in order for a settlement Instruction to be executed.

Settlement Date – the date of settlement set forth in the contract between the parties to such transaction.

Start Date – the date recorded in a Borrowing request indicating the Business Day on which the Borrowing should begin.

Statement of Transactions - The official statement of balance for securities you hold in the Euroclear System.

Supplementary Terms and Conditions – the Supplementary Terms and Conditions Governing the Lending and Borrowing of Securities through Euroclear, as amended or supplemented from time to time.

SWIFT Specification – the technical specifications for securities clearance and settlement and custody SWIFT ISO 150222 compliant messages that we publish in the relevant Euroclear Documentation.

Transfer Agent – an agent appointed by the Fund to perform certain functions, such as order processing.

Triparty Notices - all notices as set out in the applicable Triparty Service Agreement and cancellations thereof.

Triparty Service Agreement – an agreement between us, acting as triparty agent, you and a Participant, governed by either:

- Repurchase Service Agreement Terms and Conditions and Repurchase Service Agreement Operating Procedures
- Collateral Service Agreement Terms and Conditions and Collateral Service Agreement Operating Procedures
- Securities Lending Service Agreement Terms and Conditions and Securities Lending Service Agreement Operating Procedures
- Loan Service Agreement Terms and Conditions and Loan Service Agreement Operating Procedures
- Derivative Service Agreement Terms and Conditions and Derivative Service Agreement Operating Procedures
- Collateral Allocation Interface Service Agreement Terms and Conditions and Collateral Allocation
 Interface Service Agreement Operating Procedures.

Value Date – the date used for the calculation of interest or fees.

Verification Communication – a transmission sent by us or Clearstream as a delivering settlement system over the Bridge to the receiving settlement system. The transmission confirms that the cash countervalue of an accepted delivery does not exceed the amount of the applicable letter of credit plus the cash countervalue of the next deliveries to be proposed by the receiving settlement system.

List of terms defined in Sections of the Operating Procedures

Each of the following terms when used in these Operating Procedures has the meaning specified in the Section as set out below.

Term	Section
Aggregate Cash Account	
CBF Eligible Securities	
Certification Instruction	
CO (Coupons only)	
Cross-market Realignment	<u>5.2.4.</u>
Effectuation Authorisation	<u>5.1.2.</u>
EMX Message System	
End-of-Day SLB Process	
EUCLID Administrator	
Failed Return Fee	<u>5.5.7.1.</u>
Family	<u>5.5.8.2.</u>
Fund Provider	
Issuer Memorandum Account	
Lending Level Monitored Amount	
Linked Reimbursement	<u>5.5.2.1.</u>
Loan Securities	
Lowest Priority	
New Issues Cash Account	
New Issues Non-Syndicated Distribution Cash Account	
New Issues Non-Syndicated Distribution Securities Clearance Account	
New Issues Securities Clearance Account	
Pivot Securities Clearance Account	
PO (Principal only)	
Priority	
Real-time Securities Lending and Borrowing Processes	
Recall Period	<u>5.5.4.2.</u>
Regular	
SLB Eligible Securities	
SLB Process	
Specific Participant	
Specific Regulated Participant	
Standard Long Form Certification	
Standard Participant	
System-linked Instructions	
Top Priority	

Unit	

Abbreviations

The following abbreviations are used in the Operating Procedures.

A.I.B.D. - Association of International Bond Dealers, now ISMA.

BIC - Bank Identifier Code as defined by I.S.O.

ISIN – International Security Identification Number, a code which identifies a specific issue of securities, designed by ISO (Standard 6166) to be a single global standard identity for each issue. In ISINs allocated by Euroclear Bank and Clearstream after September 1989, the prefix is "XS" and for any issue accepted in either or both clearing systems the basic number repeats the Common Code.

ISMA – International Securities Market Association.

- **ISO** International Organisation for Standardisation.
- **OSSP Overnight Securities Settlement Process**

RTP - Real-time Processing



Post-trade made easy

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Euroclear is a carbon neutral company PAS2060 certified

EUROCLEAR BANK SA/NV

FORM CA-1

Attach as **Exhibit F** a brief description of any material pending legal proceeding, other than ordinary and routine litigation incidental to the business, to which the registrant or any of its subsidiaries is a party or to which any of its or their property is the subject. Include the name of the court or agency in which the proceeding is pending, the date instituted and the principal parties thereto, a description of the factual basis alleged to underlie the proceeding and the relief sought. Include similar information as to any such proceeding known to be contemplated by governmental agencies.

* * *

Please see Exhibit F-1.

EUROCLEAR BANK SA/NV

FORM CA-1

Attach as **Exhibit G** copies of all contracts with any national securities exchange, national securities association or clearing agency or securities market for which the registrant acts as a clearing agency or performs clearing agency functions.

* * *

Euroclear Bank provides the Clearing Agency Activities to its U.S. Participants, and not to any national securities exchange, national securities association or clearing agency or securities market ("**Described Entities**") that is not acting as a participant for those services.

However, it is possible that Clearing Agency Activities can have an impact on certain Described Entities, either because they provide services to Euroclear Bank that support Euroclear Bank's ability to offer the Clearing Agency Activities to its U.S. Participants (such as acting as Euroclear Bank's depository in the U.S. for U.S. Equity Securities) or as a participant in the Euroclear System that may interact with U.S. Participants who are using the Clearing Agency Activities (such as accepting Eligible U.S. Government Securities or U.S. Equity Securities from U.S. Participants as collateral). Therefore, attached to this Exhibit G are agreements with national securities exchanges, clearing agencies and securities markets that are registered in such capacity (or a similar capacity) with the Commission or the Commodity Futures Trading Commission ("CFTC"), and may interact with the Clearing Agency Activities pursuant to a contract with Euroclear Bank.

<u>Exhibit G-1</u>	The Depository Trust Company Participant's Agreement
<u>Exhibit G-2</u>	The Depository Trust Company Special Undertakings Agreement
<u>Exhibit G-3</u>	The Depository Trust Company Addendum to Membership Questionnaire, DTC – CSD Participant
Exhibit G-4	JPMorgan Chase Bank Appointment of Settling Bank and Settling Bank Agreement

In addition to the foregoing, Euroclear Bank has entered into agreements that have been attached or otherwise described in <u>Exhibit G-5</u> through <u>Exhibit G-14</u>.

Euroclear Bank also has arrangements with securities market infrastructure providers that are not registered with the Commission or the CFTC as such. These arrangements are not provided as part of this application. This <u>Exhibit G</u> does not include agreements in which Euroclear Bank is not a party, including agreements that involve an affiliate of Euroclear Bank.

EUROCLEAR BANK SA/NV

FORM CA-1

Attach as **Exhibit H** a balance sheet and statement of income and expenses, and all notes or schedules thereto of registrant, as of registrant's most recent fiscal year for which such information is available, certified by an independent accountant. (If certified financial information is not available, uncertified financial information should be submitted).

* * *

Attached as <u>Exhibit H-1</u> are Euroclear Bank's stand-alone annual financial statements for fiscal year 2015.

Euroclear Bank

Stand-alone financial statements at 31 December 2015

Directors' report

The directors of Euroclear Bank SA/NV (the 'company') are pleased to present their report, together with the audited financial statements of the company for the year ended 31 December 2015.

Principal activities

Euroclear Bank provides settlement and related securities services for cross-border transactions involving domestic and international bonds, equities, investment funds and derivatives.

The company is based in Brussels and is part of the Euroclear group. The Euroclear group is the world's leading provider of post-trade services. The group provides settlement, safekeeping and servicing of domestic and cross-border securities, with asset classes covered including bonds, equities, derivatives and investment funds. The Euroclear group includes the International Central Securities Depositary (ICSD), Euroclear Bank, based in Brussels, as well as the domestic Central Securities Depositaries (CSDs) Euroclear Belgium, Euroclear Finland, Euroclear France, Euroclear Nederland, Euroclear Sweden and Euroclear UK & Ireland. Euroclear Bank is the only credit institution in the Euroclear group. Euroclear SA/NV provides system development and support services to the other companies of the group. Euroclear plc is the holding company which owns, directly or indirectly, the entire issued share capital of these companies.

Euroclear Bank SA/NV is rated AA+ by Fitch Ratings and AA by Standard & Poor's, with stable outlook. It operates two branches in Hong Kong and Krakow.

Euroclear Bank's branch in Krakow, Euroclear Bank SA/NV (Spółka Akcyjna) - Oddział w Polsce, officially opened in January 2013. By the end of 2015, it had grown to over 400 employees who serve our global client base. The Krakow branch will continue to grow over the coming years, providing a dual-office arrangement with Euroclear Bank's existing operations in Belgium.

With more than 100 employees, Euroclear Bank SA/NV (Hong Kong Branch) is an important contributor to client satisfaction levels in Asia. Through the Hong Kong office, we are able to provide clients with a global service offering, despite the time zone difference with our headquarters in Europe.

On 26 September 2014, Euroclear SA/NV and The Depository Trust & Clearing Corporation (DTCC) became owners of DTCC-Euroclear Global Collateral Ltd, a joint venture shared equally between both shareholders, specialised in Collateral services (i.e. Margin Transit services and Collateral Management services). Euroclear Bank will provide operating services to the joint venture.

In June 2015, Euroclear Bank exercised its optional redemption rights on all of its Upper Tier 2 note with Euroclear Finance 2 at base redemption price. At the same time, Euroclear Finance 2 redeemed the outstanding Hybrid Tier 1 instrument issued by Euroclear Finance 2 on the Luxembourg stock market. Subsequently, Euroclear Finance 2 was liquidated in December 2015.

Business review

Our strategy to support the evolving capital markets

Euroclear is committed to supporting its clients in an operating environment that is being shaped by two major trends. First, market authorities and regulators, particularly in Europe, have played an increasingly active role in defining capital markets since the last financial crisis. Secondly, over the medium term, globalisation continues to be a major driver of economic growth.

Our ambition remains to reduce risk and complexity for the market as well as reducing clients' cost and improving operating efficiency. The group continues to invest in regulation-driven initiatives that ensure compliance with the market infrastructure regulatory framework and foster open access. Furthermore, we continue to make the necessary investments to ensure our cyber-resilience, as evidenced in the risk section of this report.

Clients and other market participants are seeking greater access to liquidity and collateral mobility, and the operational benefits of increased process automation. We continue to invest in developing products and services that fulfil these evolving requirements.

Investing in our European franchise

Europe is becoming a single marketplace as a result of a broad range of regulations that impact every facet of its financial markets and, in particular, through the development of a Capital Markets Union (CMU). The post-trade sector has already taken some important steps towards becoming a single market, with the new CSD Regulation providing a single, pan-European rulebook for the sector, while the launch of the ECB's Target2-Securities platform will provide a single settlement environment for the Eurozone.

The longer-term effects of the many new regulations that have been implemented since 2008 continue to drive the operating environment. The cost of regulatory compliance and the de-leveraging of balance sheets have spurred the quest for further operating efficiencies and cost savings. This, in turn, is driving market participants to consolidate and rationalise market access, and embrace services that help realise latent efficiencies.

At the same time, authorities have been playing a more active role as market participants since the financial crisis. Most notably, the ECB continued to undertake its quantitative easing programme, while moving interest rates beyond their historic low levels and into negative territory.

These unprecedented developments, along with continued historically low interest rates and meagre economic growth in Europe, have proven a further challenge to clients, prompting many to adapt their approach to funding and collateral management activities.

Capital Markets Union

On 30 September 2015, the European Commission published its Action Plan for the CMU. The plan sets out a wide range of steps that aim to remove barriers between investors and businesses, through better integration of Europe's capital markets. In addition, the Commission began an important review of the cumulative impact of recent legislation.

Although the post-trade environment is not the central focus of the plan, there are potential implications for the sector in two core areas. First, the Commission will gather evidence on the main barriers to the cross-border distribution of investment funds. Secondly, it will take forward previous work to clarify securities ownership and conflict of law rules. Euroclear fully supports the Commission's plans to efficiently link savings with growth, while enhancing financial stability.

CSD regulation

CSD Regulation (CSDR) not only introduces a complete review and standardisation of regulation that applies to (I)CSDs in the European Union, but also standardises settlement cycles and settlement discipline procedures across Europe.

It is also anticipated that (I)CSDs' capital requirements will significantly increase under CSDR. In all likelihood, the constraint that Euroclear Bank will face under CSDR will not exceed its current Pillar II requirements, even considering a conservative view. As a result, we believe that the company already complies with the capital requirements stemming from CSDR as of 31 December 2015.

In 2016, CSDR will be a major focus for the group as the Euroclear (I)CSDs will apply for authorisation under the new regulation. CSDR will also require changes by our clients to comply with record keeping requirements, in particular. The introduction of standardised settlement discipline and buy-in regimes across Europe will occur in mid-2018. Euroclear is well advanced with its CSDR implementation projects and detailed discussions with regulators are underway.

TARGET2-Securities

The launch of the TARGET2-Securities (T2S) platform will significantly alter the European post-trade landscape. In June 2015, the first wave of Eurozone CSDs successfully migrated to T2S.

In the T2S environment, Euroclear will provide the same level of asset servicing across asset classes, regardless of the service access option and the asset location. The group will offer a range of harmonised services across all T2S markets, despite the continuing coexistence of varying market practices.

Optimising pan-European liquidity and collateral management

The investments that we are making in our European franchise are aimed at helping clients to further optimise their liquidity across European markets.

We have already completed a number of investments to increase interoperability between Euroclear Bank and the ESES CSDs. Once the ESES CSDs' migration to T2S has been completed, Euroclear's clients will benefit from access to both global commercial and European central bank liquidity, a unique proposition that will enable clients to improve management of their short-term liquidity requirements.

In addition, €GCPlus, which successfully launched in 2014, enables clients to manage their medium-term funding requirements using standardised baskets of securities, complementing the global collateral management services offered through Euroclear Bank.

Realising opportunities in the global capital markets

As an open financial market infrastructure, Euroclear supports the evolving requirements of participants as they look to benefit from the opportunities created by globalisation and an increasingly interconnected global economy.

Global collateral management

Financial market participants are increasingly demanding collateral that can be mobilised across borders and time zones. With new global regulations in the un-cleared, over-the-counter (OTC) derivative market coming into force in 2016, demand for collateral is poised to accelerate in the years ahead.

A key tenet of our strategy has been to support the financial market's requirement for a neutral, inter-operable utility to source, mobilise and segregate such collateral. This led us to launch the Euroclear Collateral Highway in 2012, the world's first open architecture global infrastructure for collateral management.

The Collateral Highway provides a comprehensive solution for managing collateral, offering clients a complete view of exposures across the full spectrum of asset classes. In addition to more traditional collateral management functions (typically repos, securities lending, derivatives and access to central bank liquidity), our range of collateral management solutions includes dedicated services for corporate treasurers, and a specialised equity financing service. By the end of 2015, average daily collateralised outstandings on the Collateral Highway reached €1,068 billion, up 20% on the prior year.

Our joint venture with the Depository Trust & Clearing Corporation (DTCC), DTCC-Euroclear GlobalCollateral Ltd, is connecting two of the largest pools of collateral to provide a truly global, end-to-end collateral management solution. By leveraging our European OTC derivative solutions, we will enable the automatic transfer and segregation of collateral, through DTCC-Euroclear GlobalCollateral, based on agreed margin calls relating to OTC derivatives and other collateralised contracts.

In 2016, we will begin to rollout GlobalCollateral's collateral margin utility, bringing unprecedented operating efficiencies to market participants and improving the stability and soundness of financial markets.

In addition, we took a further step to consolidate our collateral management offering, through our investment in AcadiaSoft, an industryleading provider of electronic messaging for the OTC derivatives market.

International markets

Across the globe, growth economies are establishing international market infrastructure links to attract foreign investors, to help fund longterm development needs. At the same time, international investors are seeking opportunities to diversify and increase the profitability of their investments around the world, particularly during a period of historically low yields in Europe and North America.

To this end, we made further progress in bringing benefits to domestic capital markets that might otherwise have more limited access to global participants, enabling more efficient capital flows while seeking to provide stability in the domestic markets. Over the course of 2015, a number of banks added 'Euroclear eligibility' as a criteria for inclusion in their emerging market bond indices, further illustrating the strength of our global franchise.

Asia is widely expected to be a driving force of global economic growth in the coming decades. As an open post-trade infrastructure, Euroclear is committed to supporting the growth and stability of the region's financial markets, building on an unwavering presence in Asia for over 25 years. Euroclear was delighted to be recognised as CSD of the Year in The Asian Banker's Financial Market Awards 2015.

During the course of 2015, we established a partnership with the China Construction Bank in support of the offshore Renminbi capital market.

Our increased focus on growing the Asia Pacific franchise was demonstrated by Frédéric Hannequart's relocation to Asia in his continuing roles as Chairman of Euroclear Bank and Euroclear UK & Ireland, and the group's Chief Business Development Officer. The group also established a new position of Head of Government Relations and Strategy for Asia, based in Hong Kong. These moves allow us to further develop the open and collaborative approach that has helped the group become a trusted and relevant partner for many of the world's authorities and market infrastructures.

We made further progress in strengthening our franchise around the world, with continued success in bringing 'Euroclearability' to domestic capital markets. We took an important step by reaching agreement with Indian autorities to provide access to India's government bonds through our platform. We also supported Mexico in the launch of a corporate bonds asset class, Cebures, following the setup of that market's link to Euroclear in late 2014.

Global Funds

Funds are increasingly the means by which investors are choosing to participate in international markets, and a way for issuers to efficiently access a global investor base.

Through its expanding network of funds markets, Euroclear is establishing itself as the place for funds, providing a single entry point for the effective distribution of cross-border, offshore and domestic funds.

In early 2016, we launched Euroclear FundsPlace, our new umbrella brand for our fund solutions. Our range of trade and post-trade services for funds is fully automated, to drive out the cost, risks and complexity associated with the manual processing of fund trades. These services include order routing, account opening, settlement and asset servicing, providing access to a network of over 900 fund administrators.

In Europe, we are now one of the largest providers of fund processing services in Europe, with over 12.7 million orders routed through our platforms in 2015. Our fund services have continued to grow in the Swedish market, following the launch in 2014 of a link from Euroclear Sweden to FundSettleTM. In the UK, we have been supporting clients in achieving compliance with the new Clients Asset Sourcebook regulations for their own client reporting.

In 2015, we further expanded our network outside of Europe, opening an account with Hong Kong's Central Securities Depositary, the Central Moneymarkets Unit. This opening coincided with a decision by Hong Kong and China's regulatory bodies to allow eligible Hong Kong-domiciled funds to be sold to retail investors in China. Qualifying Chinese funds will also be available to the retail investor base in Hong Kong. As a result, Euroclear Bank clients will be able to access China-domiciled funds through FundSettle, as well as Hong Kong-domiciled funds.

In addition, working closely with the China Construction Bank, the group supported the launch of the first ever RMB-denominated money market international ETF, listed in London in March 2015. This was followed in June by the first in mainland Europe, listed in Paris.

We also made further progress in supporting existing users of the international ETF structure in 2015. BlackRock, the world's largest provider of ETFs, was the inaugural issuer of international ETFs in 2013. With investors from across European markets benefitting from the simplified issuance structure, BlackRock migrated another 20 ETFs to the international form, in the first ever corporate action of its type.

Simplifying the client experience

Clients around the world expect a user-friendly client experience, and we continue to meet this demand through the growth of our EasyWayTM communication tool. With the launch of new corporate action and settlement functionality in the first quarter, as well as a new more user-friendly and mobile compatible web interface, client uptake for EasyWayTM increased substantially in 2015. There are now over 300 clients using the service, with users ranging from investment banks to corporate treasury teams.

Launched in 2012, in close collaboration with many of our clients, EasyWayTM allows users to work in real time through dashboards, alerts and intuitive navigation. Over the coming year, we plan to further enhance the settlement and corporate actions dashboards, as well as additional collateral management features through EasyWayTM, to create an unparalleled digital client experience.

Operating highlights

Euroclear Bank delivered robust business performance in 2015, a year that is characterised by increased activity levels leading to higher revenue and slight increase in operating expenses.

The value of securities held for Euroclear Bank clients at the end of 2015 rose by 5% to €12.4 trillion compared to €11.8 trillion in 2014.

The turnover, or the value of securities transactions settled, reached €442.6 trillion in 2015, up by 12% compared to €394.6 trillion in 2014.

The number of netted transactions settled in the Euroclear Bank amounted to 83.3 million in 2015, a 11% increase compared with the 75.2 million reported in 2014.

The average daily value of collateral provision outstanding at the end of 2015 was \in 511 billion, a 14% increase compared to \in 450 billion at the end of 2014. The growth in collateral provision outstanding was sustained throughout 2015, reflecting strong needs from market participants to ensure high levels of efficiency when switching from unsecured to secured activity, in line with new regulatory requirements.

Average overnight cash deposits stood at €25.3 billion, an increase of 23% compared to €20.5 billion in 2014. Year-end cash deposits stood at €20.7 billion compared to €23.4 billion the previous year.

Key business parameters

Euroclear Bank SA/NV's financial performance is mainly influenced by the following parameters:

- Net fee and commission income is mainly a function of the value of securities deposited, the number of settlement transactions and the daily value of collateral provision outstanding. The value of bonds is based on nominal value whilst for equities, their market value is taken into consideration.
- Interest income stems principally from Euroclear Bank's clients' cash balances invested partially in overnight deposits and in money market short term securities and from the investment of Euroclear Bank's capital, together with retained earnings.
- Administrative expenses include staff costs, depreciation and amortization as well as other operating expenses. Administrative
 expenses are impacted to a certain level by business volume levels as well as by inflation.

Financial performance highlights

The detailed results for the year are set out on page 10 of the financial statements.

Net interest income (interest and similar income less interest and similar charges) amounted to €122.8 million, an increase of 22% compared to last year due to high level of average client's balances invested partially in short term securities.

Net commission income (commissions received less commissions paid) increased by 5% to €569.1 million in 2015 driven by higher business volumes.

Other income amounted to €9.0 million in 2015 compared to €8.7 million in 2014.

General administrative expenses grew marginally to €428.2 million, a 3% increase compared to last year resulting from higher activity and investments in growth initiatives while maintaining a constant focus on cost management.

Current profit before taxes was €232 million, 24% higher compared to last year, reflecting higher operating income which exceeds the slight increase of administrative expenses reported end 2015.

Taxes: The effective tax rate slightly decreased in 2015 to 29% compared to 30% in the prior year.

Profit for the year: The profit after tax for the year ended 31 December 2015 reached €164.5 million, compared with a profit of €131.9 million in the prior year.

Balance sheet: Total assets stood at €19,756 million on 31 December 2015, down €4,198 million compared to previous year. Loans and deposits decreased by 14% and 19% to €17,401 million and €17,831 million, respectively. Total shareholders' equity increased to €1,447 million compared to €1,428 million in 2014.

Share capital remained unchanged at the end of 2015 at €285 million represented by 70,838 shares.

Key performance indicators

Net fee income margin (net fee income minus administrative expenses compared to net fee income) has increased from 22.5% to 24.8% in 2015 reflecting continued control of expenses, and growth of fee income.

Operating margin (profit before tax compared to operating income) has increased from 29.0% in 2014 to 33.1% in 2015.

Unit cost ratio (administrative expenses compared to the average value of securities held) has improved from 0.37 bps in 2014 to 0.35 bps in 2015 resulting from material evolution of depot in 2015 which exceeds the slight increase of administrative expense.

Return on equity (net profit compared to average shareholder's equity) has improved from 9.2% in 2014 to 11.4% in 2015 as a result of the higher net earnings and almost stable capital base.

Asset performance (net profit compared to total assets) increased slightly from 52bps in 2014 to 55bps in 2015.

Related parties

Euroclear Bank is controlled by Euroclear SA/NV, incorporated in Belgium, which owns more than 99.9% of its shares. The ultimate parent of the group is Euroclear plc, incorporated in the United Kingdom. Euroclear Bank enters into several transactions with its parent companies as well as with other entities in the Euroclear Group, as described below. All transactions are at arm's length.

Bank accounts and term deposits

The company provides banking services to other companies in the Euroclear group. Deposits are remunerated at market rates of interest.

Securities settlement and custody services

In its normal course of business as an International Central Securities Depository, Euroclear Bank provides banking services to, and provides and receives settlement and custody services to and from, the Euroclear group's Central Securities Depositories. Terms and conditions applying to these depository links are the same as those applying to depositories outside the Euroclear group.

Software development, data centre and support services

Euroclear Bank has entered into agreements with Euroclear SA/NV and the group's CSD subsidiaries, whereby Euroclear SA/NV provides software development, data centre and a variety of non-operational and administrative support services to the (I)CSDs. Furthermore, Calar Belgium SA, a wholly-owned subsidiary of Euroclear Bank, leases premises in Brussels to Euroclear SA/NV at market rates.

Licence agreements

Under a licence agreement, Euroclear plc has granted to Euroclear Bank the right to operate the Euroclear System and the right to use and sub-licence the Euroclear trademark. The agreement may be terminated by either party with 3 years notice. Euroclear Bank pays Euroclear plc a royalty fee computed on certain qualifying revenues. Euroclear Bank has granted sub-licences to other companies in the group that use the Euroclear trademark, the rates depending on the use of the trademark by the sub-licencee.

Post balance sheet events

There are no important post-balance events to report for the company and its subsidiaries.

Information on circumstances that might materially influence the development of the consolidated perimeter

No circumstances occurred that might materially influence the development of the company.

Research and development

The company has continued investing in research and development. These investments are linked to product and services development activities as well as performance and resilience of our systems. Euroclear Bank also continues investing in market research in line with its mission to provide increasingly commoditised market infrastructure services.

Risk management in Euroclear

Risk management framework and governance

Euroclear has always tried to nurture a culture that supports a high standard of business ethics and risk awareness. We base our Enterprise Risk Management framework (ERM) on relevant market and regulatory standards. The ERM framework captures the key risks in the group.

To manage these risks, Management develops a Euroclear risk appetite consistent with Euroclear's short- and long term strategy. It ensures the risk appetite is appropriately communicated and monitored in the organisation through limits, processes and controls.

Approved Board policies define the overall framework. The full roll-out of the framework, along a three lines of defence model, gives all stakeholders comfort that risks in delivering settlement and custody services, as well as settlement-related banking activities, are well managed.

A clear governance defines accountability for identifying, monitoring and controlling the risks related to the business. Sufficient measures are in place to ensure the Risk Management, Compliance and Internal Audit Divisions are independent from the business lines they monitor. These functions operate independently from each other but where relevant, do coordinate initiatives to ensure proper coverage whilst minimising overlap.

The first line of defence is the main provider of assurance on the adequacy and effectiveness of the control environment to Senior Management and Board. The first line of defence provides this assurance through supporting documents and processes, like regular self-assessments, 'positive assurance reports' and 'assurance maps'. The assurance maps are complemented by Risk Management (2nd line of defence) and Internal Audit (3rd line of defence), who each, independently from the first line of defence and from each other, add their opinion and provide their own assurance on the adequacy and effectiveness of the control environment.

This regular reporting by the three lines of defence allows a frequent, effective and comprehensive monitoring of the control environment. It includes and confronts the views of the three lines of defence, where Risk Management plays its role as an independent challenger to the first line of defence and where Internal Audit provides comprehensive assurance based on the highest level of independence and objectivity.

Risks affecting the company

Euroclear Bank faces *operational* risk (the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events). Effective monitoring, appropriate reporting and the maintenance of a database of operational risks containing more than a decade of data enable us to manage operational risk well. Cyber is an operational risk high on the agenda. Being a market infrastructure, the integrity, confidentiality and availability of our and our clients' data, and the continuous availability of our services, is very important.

Euroclear is designated as critical national infrastructure in seven countries. Therefore as security and resilience is a key aspect of our approach to operational risk we developed and tested comprehensive processes in all entities to ensure the security and continuous availability of business-critical services, including effective management response to incidents and crises. All locations have appropriate security and contingency arrangements for recovery from workplace disruptions, and have three data centres to sustain operations in the event of a local and regional- scale disaster. Disaster recovery response capability is proven through regular switches of activity between the primary data centres. We also regularly exercise and test our operational and management response and provide adequate training at all levels of the organisation.

Financial risks are borne by Euroclear Bank in its role as single-purpose settlement bank.

As a settlement bank, Euroclear Bank mainly faces collateralised intra-day *credit* exposures on its clients. In addition, it runs credit risk resulting from the intra-day use of a high-quality correspondent network and from short-term placements, mainly by using reverse repos, of clients' end-of-day cash positions in the market with high-quality counterparties.

Because liquidity is key for the efficient functioning of Euroclear Bank, it has built a strong framework to ensure smooth day-to-day operations and a high level of preparedness to cope with unexpected and important liquidity shocks.

A very low level of market risk (interest rate and foreign exchange rate risks only) arises as a by-product of the investment of Euroclear Bank's capital (interest rate risk) and future earnings (interest rate and foreign exchange rate risks). There is no trading book. A hedging strategy was put in place to mitigate interest rate risk and foreign exchange risk.

Compliance

The group concluded a three-year review cycle that reinforced the group-wide ethical and compliance risk management framework that allows us to adequately identify, monitor and manage the full spectrum of legal and compliance risks. These include, amongst others, fraud, market abuse and money laundering. In addition, a specific focus has been devoted to re-assess our controls linked to economic sanctions

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taken by authorities. This framework is supported by a major communication effort (e-learning, case-based compliance tests, etc.) that undoubtedly increases the awareness of staff on compliance matters.

Supervision and regulation

The National Bank of Belgium and the Financial Services and Markets Authority are the supervisors of Euroclear Bank.

Recovery plan

In line with regulatory rules and guidelines, we prepared recovery plans for Euroclear Bank SA/NV. These plans are re-approved by the Board of Directors, upon recommendation of the Risk and Audit Committees on a yearly basis. These recovery plans are designed to allow Euroclear Bank SA/NV to recover its financial health in the face of extreme stress scenarios and thereby avoid going into resolution. To that aim, they identify and analyse a number of recovery options that the entity could take in order to restore its capital base, liquidity position or profitability, over a short- to- medium timeframe.

Detailed information on the risks faced by Euroclear, as well as its risk management strategies, policies and processes can be found in Euroclear's yearly Pillar 3 report on www.euroclear.com as well as in Note III to the Consolidated financial statements.

Authorised capital

On 24 April 24 2014, the Extraordinary General Meeting decided to renew the authorised capital amount of €350 million for a 5 years period.

Dividends

The Board is pleased to propose to the Annual General Meeting of shareholders a final ordinary dividend of €145 million (or €2,047 per ordinary share) of which €100 million (or €1,412 per share) was already paid to shareholders as interim dividend in September 2015. The remaining €45 million (or €635 per share) will be paid early May 2016.

This dividend evidences that the group stays committed to delivering long-term value to shareholders whilst leaving sufficient means for the group to fund its activity going forward.

Acquisition of own shares

During the financial year, neither the company nor any directly controlled subsidiary or person acting in his own name but on behalf of the company or a directly controlled subsidiary of the company acquired any shares of the company.

Conflict of interests

Board members

During 2015, the Board has applied Article 523 of the Companies Code on conflict of interest at its meeting of 12 January 2015. Excerpts of the minutes of the Board held on that day are reproduced below:

"Approval of the total amount of Management Committee Remuneration

The Chairman noted that Belgian legal requirements provide that the Board should approve the overall compensation of the Management Committee as reviewed and recommended by the Remuneration Committee. He noted that the members of the Management Committee present declared an interest in connection with the proposed decision on their remuneration and did not participate in the discussion or the voting.

The Chairman noted that the proposed remuneration for members of the Management Committee had been set in accordance with the applicable remuneration policies of the company and the Group. The Remuneration Committee also concluded that the proposal reflects the individual and collegial commitment and performance of the members of the Management Committee in line with Belgian legal requirements.

Upon the recommendation of the Remuneration Committee, the Board approved the total amounts for 2014 incentive compensation and 2015 fixed remuneration for the members of the Management Committee."

The 2014 Incentive Compensation and 2015 Fixed Remuneration for the members of the Management Committee will not exceed 0.26% of the net operating income of the company in 2014.

Management Committee members

During the financial year, the Management Committee did not take any decision whereby any one of its members had a conflict of interest within the meaning of Article 524ter of the Belgian Companies Code.

Non-statutory audit services

The amount of fees charged to Euroclear Bank SA/NV and its subsidiaries for non-statutory audit services amounted to \in 180,000 relating to the ISAE 3402 report. Further details of fees for audit and non-audit services are provided in Note XXIX of the financial statements.

Publicity of external mandates

Details of the reportable directorship mandates and managerial functions exercised in companies outside the Euroclear group by the members of the Board and the management are posted on Euroclear's website.

Individual and collective Committee member skills

All members of the Audit Committee, the Risk Committee, the Nominations and Governance Committee and the Remuneration Committee are non-executive directors of the Company and at least one member of each of these committees is independent within the meaning of Article 526ter of the Belgian Companies Code. The committees have the correct knowledge base and skills among their members and each

member has the adequate personal attributes in order for each committee to fulfil its role efficiently.

Audit Committee

In 2015, the Audit Committee (AC) was comprised of two non-executive directors of the Company and as from October is also now supported by an observer. All members of the AC collectively have in-depth knowledge of the financial markets and services and also collectively have an understanding of the company's business, accounting and audit matters. At least one member is competent in accounting and/or audit matters.

Risk Committee

In 2015, the Risk Committee (RC) was comprised of two non-executive directors of the Company and as from October is also now supported by an observer. The RC assists and advises the Board of Directors in its oversight of the Company's risk management governance structure, risk tolerance, appetite and strategy and key risks as well as the processes for monitoring and mitigating such risks. The RC members have the skills and experience to be able to understand and oversee such risk strategy, risk appetite and risk tolerance of the Company.

Nominations and Governance Committee

In 2015, the Nominations and Governance Committee (NGC) was comprised of two non-executive directors of the Company. The NGC is composed in such a way so as to be able to properly and independently advise the Board of Directors on the composition and the functioning of the Board and Board Committees of the Company and, in particular, on the fit and proper character of their members.

Remuneration Committee

In 2015, the Remuneration Committee (RemCom) was comprised of two non-executive directors of the Company, supported by an advisor who is the Group Chief Executive Officer. He attends meetings upon invitation of the RemCom Chairman when necessary. The RemCom is composed in such a way to be able to properly and independently advise the Board of Directors on remuneration policies and practices as a whole taking into account the risks and liquidity needs of the Company.

By order of the Board

annepua

Frederic Hannequart Chairman of the Board

29 February 2016

Euroclear Bank Board and Committees - composition as at 31 December 2015

Members	Euroclear Bank C	Audit Committee	Risk Committee	Management Com.	Governmentee Governmenters &	Remuneration Committee	
Frédéric Hannequart (Chairman)	•				• (chair)	(chair)	
Pierre Berger Independent Director	•	(chair)	(chair)				
Mike Martin Independent Director	•				•	•	
Lieve Mostrey	•	•	•				
Jo Van de Velde	•						
Valérie Urbain Executive Director CEO Euroclear Bank	•			(chair)			
Pierre Yves Goemans Executive Director	•			•			
Pierre Slechten Executive Director	•			•			
Luc Vantomme Executive Director	•			•			
Tim Howell CEO Euroclear SA/NV						• (advisor)	
OBSERVER							
Franco Passacantando		•	•				

Balance sheet

For the year ended 31 December

(€'000)	Notes	2015	2014
Assets			
I. Cash in hand, balances with central banks and post offices		-	539
I. Government securities eligible for refinancing at the central bank		1,343,481	2,542,486
III. Amounts receivable from credit institutions A. On demand B. Other amounts receivable (at fixed term or period of notice)	I	13,484,627 1,833,978 11,650,649	15,937,366 2,415,968 13,521,398
V. Amounts receivable from customers	I	3,968,812	4,280,116
V. Bonds and other fixed-income securities A. Of public issuers B. Of other issuers	III	809,729 566,610 243,119	1,027,948 677,860 350,088
VI. Corporate shares and other variable-income securities	N	-	-
 VII. Financial fixed assets A. Participating interests in affiliated enterprises B. Participating interests in other associated enterprises C. Other shares or stakes constituting financial fixed assets D. Subordinated loans with affiliated enterprises and with other associated enterprises 	V, VI	31,242 23,200 - 8,042 -	35,127 27,699 - 7,428
/III. Formation expenses and intangible fixed assets	VI	13	12
X. Tangible fixed assets	VIII	2,998	3,838
X. Own shares		-	-
XI. Other assets	IX	15,765	18,779
XII. Deferred charges and accrued income	Х	99,697	107,783
Total assets		19,756,364	23,953,994

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Balance sheet (continued) For the year ended 31 December

(€'000) Liabilities	Notes	2015	201
Liabilities			
I. Amounts payable to credit institutions	XI	12,957,520	18,289,035
A. On demand		12,552,002	16,620,153
B. Resulting from refinancing by rediscounting of trade bills		-	-
C. Other amounts payable at fixed term or period of notice		405,518	1,668,882
II. Amounts payable to customers	XII	5,104,978	3,888,694
A. Savings deposits		-	-
B. Other amounts payable		5,104,978	3,888,694
1. On demand		4,634,310	3,799,183
2. At fixed term or period of notice		470,668	89,511
3. Resulting from refinancing by rediscounting of trade bills		-	-
III. Debt securities in issue	XIII	-	-
A. Bills and bonds in circulation		-	-
B. Other		-	-
IV. Other amounts payable	XIV	159,573	160,272
V. Accrued charges and deferred income	XV	81,538	79,784
VI. A. Provisions for risks and charges		5,714	6,109
1. Pensions and similar obligations		1,065	889
2. Fiscal charges		-	
3. Other risks and charges	XVI	4,649	5,220
B. Deferred taxes		-	-
VII. Fund for general banking risks		-	-
VIII. Subordinated liabilities	XVII	-	102,505
Shareholders' equity		1,447,041	1,427,595
IX. Capital	XVIII	285,497	285,497
A. Called up share capital		285,497	285,497
B. Uncalled capital		-	-200,407
		550.000	550 000
X. Share premium account		558,008	558,008
XI. Revaluation reserve		-	-
XII. Reserves		94,047	94,047
A. Legal reserve		28,549	28,549
B. Non available reserve		-	-
1. For ow n shares		-	-
2. Others		-	-
C. Untaxed reserve		-	-
D. Available reserve		65,498	65,498
XIII. Profit (loss (-)) carried forward		509,489	490,043
Total liabilities		19,756,364	23,953,994

Off-balance sheet items

For the year ended 31 December

Notes	2015	2014
XXII	18,576,063	11,231,337
	-	-
	18,576,063	11,133,237
	-	98,100
	-	-
	-	-
XXII	2,195,948	8,403,579
	2,195,948	8,403,579
other assets	-	-
	-	-
	-	-
nts	-	-
	12,550,755,920	12,080,967,521
	-	-
	12,550,755,920	12,080,967,521
	-	-
	XXII	XXII 18,576,063 - 18,576,063 - - - XXII 2,195,948 2,195,948 2,195,948 - - - - - - - - - - - - - - - - - - -

Under the terms of the Euroclear Securities Lending and Borrowing Programme, Euroclear Bank provides a guarantee to securities lenders whereby if a securities borrower is unable to return the securities, Euroclear Bank guarantees the lender to receive replacement securities or their cash equivalent. A similar guarantee applies to Euroclear Bank's GC Access Programme. The guarantee is valued at market value of the loan securities plus accrued interest. Euroclear Bank's policy is that all securities borrowings are covered by collateral pledged by the borrowing banks and customers.

Profit and loss statement As at 31 December

(€'000)	Notes	2015	2014
Income statement (list form)			
I. Interest and similar income Of w hich : from fixed-income securities	XXIII	149,000 (4,203)	124,106 1,583
II. Interest and similar charges (-)		(26,216)	(23,257)
 III. Income from variable-income securities A. Corporate shares and other variable-income securities B. Participating interests in affiliated enterprises C. Participating interests in associated enterprises D. Other shares or stakes representing financial fixed assets 	XXIII	39 - - - 39	1,225 - 1,007 - 218
 IV. Commissions received A. Brokerage and similar commissions B. Management, advisory and safekeeping services C. Other commissions received 	XXIII	977,219 269,765 494,565 212,889	916,023 268,844 453,035 194,144
V. Commissions paid		(408,094)	(378,706)
 VI. Profit from (loss on) financial operations A. Foreign exchange transactions and transactions in securities and other financia instruments B. Sale of investment securities and similar operations 	XXIII	3,771 3,771 -	1,453 847 606
VII. General administrative expenses A. Wages and salaries, social charges and pensions B. Other administrative expenses		(428,209) (119,736) (308,473)	(416,627) (120,398) (296,229)
VIII. Depreciation and amounts written off (-) on formation expenses and intangible and tangible fixed assets		(1,409)	(1,135)
IX. Write-back of amounts written off (amounts written off (-)) on amounts receivable and write-back provisions (provision (-))for headings "I. Contingent liabilities" and "II. Commitments which can give rise to a credit risk" in the off-balance sheet section		(288)	202
X. Write-back of amounts written off (amounts written off(-))on the investment portfolio of bonds, shares and other fixed-income or variable-income securities		-	-
XI. Uses and write-back of provisions for risks and charges other than those referred to in heading "I. Contingent liabilities"and "II. Commitments which can give rise to a credit risk" in the off-balance sheet section		224	140
XII. Provisions for risks and charges other than those covered in headings "I. Contingent liabilities" and "II. Commitments which can give rise to a credit risk" in the off-balance sheet section (-)		(1,764)	(4,343)
XIII. Transfers from (Appropriation to) the fund for general banking risks		-	-
XIV. Other operating income	XXIII	4,696	6,050
XV. Other operating charges (-)	XXIII	(37,239)	(37,401)
XVI. Current profit (loss) before taxes		231,729	187,730

Profit and loss statement (continued) As at 31 December

(€'000)	Notes	2015	2014
Income statement (continued)			
(list form)			
XVII. Exceptional income		513	-
A. Write-back of depreciation and amounts w ritten off on intangible and tangit	le	-	-
fixed assets			
B. Write-back of amounts written off on financial fixed assets		-	-
C. Write-back of provisions for exceptional risks and charges		-	-
D. Capital gains on disposal of fixed assets		513	-
E. Other exceptional income	XXV	-	-
XVIII. Exceptional charges		(39)	(3)
A. Exceptional depreciation on and amounts written off on formation expense	S.	(38)	-
intangible and tangible fixed assets			
B. Amounts written off on financial fixed assets		-	-
C. Provisions for extraordinary risks and charges		-	-
, ,		(1)	(3)
D. Capital losses on disposal of fixed assets E. Other exceptional charges	XXV	(1) -	(3)
D. Capital losses on disposal of fixed assets E. Other exceptional charges	XXV	-	<u> </u>
D. Capital losses on disposal of fixed assets	XXV	(1) - 232,203	(3) - 187,727
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes	XXV	-	<u> </u>
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes	XXV	-	-
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-)	XXV	-	<u> </u>
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-) B. Transfers from deferred taxes		- 232,203 - - -	
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-) B. Transfers from deferred taxes XX. Taxes on profit	XXV	- 232,203 - - (67,752)	- - - - - - (55,835)
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-) B. Transfers from deferred taxes XX. Taxes on profit A. Taxes (-)		- 232,203 - - - (67,752) (68,704)	187,727 - - - (55,835) (56,084)
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-) B. Transfers from deferred taxes XX. Taxes on profit		- 232,203 - - (67,752)	- - - - - - (55,835)
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-) B. Transfers from deferred taxes XX. Taxes on profit A. Taxes (-)		- 232,203 - - - (67,752) (68,704)	187,727 - - - (55,835) (56,084)
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-) B. Transfers from deferred taxes XX. Taxes on profit A. Taxes (-) B. Adjustment of income taxes and write-back of tax provisions XXI. Profit (Loss (-)) for the year		- 232,203 - - - - (67,752) (68,704) 952	187,727 - - (55,835) (56,084) 249
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-) B. Transfers from deferred taxes XX. Taxes on profit A. Taxes (-) B. Adjustment of income taxes and write-back of tax provisions XXI. Profit (Loss (-)) for the year XXII. Transfers to the non taxable reserve (-)		- 232,203 - - - - (67,752) (68,704) 952	187,727 - - (55,835) (56,084) 249
D. Capital losses on disposal of fixed assets E. Other exceptional charges XIX. Profit (Loss (-)) for the year before taxes XIX. Bis. Deferred taxes A. Transfers to deferred taxes (-) B. Transfers from deferred taxes XX. Taxes on profit A. Taxes (-) B. Adjustment of income taxes and write-back of tax provisions XXI. Profit (Loss (-)) for the year		- 232,203 - - - - (67,752) (68,704) 952	187,727 - - (55,835) (56,084) 249

EUROCLEAR BANK SA/NV

Appropriation and transfer As at 31 December

(€'000)	2015	2014
Appropriation and transfer		
A. Profit (loss (-)) to be appropriated	654,494	635,403
1. Profit (loss (-)) of the year to be appropriated	164,451	131,892
2. Carried forw ard profit (loss (-)) of previous financial years	490,043	503,511
B. Transfer from shareholder's equity	-	-
1. From capital and share premium	-	-
2. From reserves	-	-
C. Appropriation to shareholder's equity (-)	-	-
1. To the capital and to the share premium	-	-
2. To the legal reserve	-	-
3. To the other reserves	-	-
D. Carried forward result	(509,489)	(490,043)
1. Carried forw ard profit (-)	(509,489)	(490,043)
2. Carried forw ard loss	-	-
E Shareholders' intervention in the loss	-	-
F. Profit to be distributed (-)	(145,005)	(145,360)
1. Shareholders (a)	(145,005)	(145,360)
2. Directors (a)	-	-
3. Other beneficiaries (a)	-	-

(a) solely in Belgian limited companies

Notes to the stand-alone financial statements

I. Amounts receivable from credit institutions (Heading III of balance sheet assets) As at 31 December

(€'000)	2015	2014
(heading III of the assets)		
A. For the heading as a whole	13,484,627	15,937,366
1. Amount receivable from affiliated enterprises	-	-
Amount receivable from other enterprises linked by participating interests	-	-
3. Subordinated amounts receivable	-	-
In terms of nature, the follow ing additional analysis is relevant		
- Surplus funds with banks	13,065,021	14,962,946
- Loans to banks	419,606	974,420
	13,484,627	15,937,366
B. Other amounts receivable (with a term or period of notice) from credit	11,650,649	13,521,398
institutions		
(heading III B. of the assets)	-	-
 Bills eligible for refinancing at the central bank of the country or countries of establishment of the credit institution 	-	-
2. Breakdow n according to remaining term to maturity		
- Up to 3 months	11,558,796	13,292,474
- Over 3 months and up to one year	91,853	228,924
- Over one year and up to 5 years	-	-
- Over 5 years	-	-
- Undated		_

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II. Amounts receivable from customers (Heading IV of balance sheet assets) As at 31 December

(€'000)	2015	2014
1. Amounts receivable from affiliated enterprises	364	338
2. Amounts receivable from other enterprises linked by participating interests 3. Subordinated amounts receivable	-	-
4. Bills eligible for refinancing at the central bank of the country or countries of establishment of the credit institution		-
5. Breakdown of amounts receivable according to remaining term to maturity		
a. Up to 3 months	1,546,517	2,581,612
b. Over 3 months and up to one year	2,422,295	1,698,504
c. Over one year and up to 5 years	-	-
d. Over 5 years	-	-
e. Undated	-	-
6 Preskdown seconding to the nature of the debters		
6. Breakdown according to the nature of the debtors a. On public authorities	23	130
b. On individuals	23	130
	2 069 790	4 270 096
c. On corporates	3,968,789	4,279,986
7. Breakdown by type		
a. Commercial paper	-	-
b. Leasing loans	-	-
c. Consumer loans	-	-
d. Real estate loans	-	-
e. Other loans superior to 1 year	-	-
f. Other	3,968,812	4,280,116
8. Geographical breakdown (a)		
	10 526	8,023
		4,272,093
b. Foreign countries	0,000,200	4,272,000
	3,968,812	4,280,116
 8. Geographical breakdown (a) a. Belgium b. Foreign countries 9. Analytical data related to real estate loans with reconstitution of capital at the bank b. Foreign countries 		10,526 3,958,286 3,968,812
itial capital granted	-	
b. Reconstitution fund and mathematical reserve linked to the loans	-	
c. Net position (a-b)	-	-

(a) The geographical breakdown is made in function of the beneficiaries of the credit.

III. Bonds and other fixed-income securities (Heading V of balance sheet assets) As at 31 December

(€'000)	2015	2014
A. General	809,729	1,027,948
1. Bonds and other securities issued by affiliated enterprises	-	-
2. Bonds and other securities issued by other enterprises linked by participating interests	-	-
3. Bonds and securities representing subordinated loans	-	-
4. Geographical breakdown of the following headings		
a. Belgian public issuers	-	203,046
b. Foreign public issuers	566,610	474,814
c. Belgian other issuers	91,101	-
d. Foreign other issuers	152,018	350,088
5. Quotations		
a. Book value listed securities	809,729	1,027,948
b. Market value listed securities	809,061	1,027,289
c. Book value unlisted securities	-	-
6. Quotations and durations		
a. Residual term up to one year	304,052	1,027,948
b. Residual term over one year	505,677	-
7. Bonds and securities belonging to		
a. Trading portfolio	-	-
b. Investment portfolio	809,729	1,027,948
8. For the trading portfolio		
a. Positive difference betw een the market value and the acquisition value for bonds and	-	-
securities to be valued at their market value		
b. Positive difference betw een the market value and the book value for bonds and	-	-
securities valued in accordance with Article 35 ter §2 (2)		
9. For the investment portfolio		
a. Positive difference in respect of all securities with a redemption value higher than their	-	-
book value		
b. Negative difference in respect of all securities with a redemption value low er than their book value	14,329	9,198

III. Bonds and other fixed-income securities (continued) (Heading V of balance sheet assets) As at 31 December

(€'000)	2015	2014
B. Details of the book value of the investment portfolio		
1. Acquisition value at the end of the previous financial year	1,027,948	655,426
2. Changes during the financial year		
a. Acquisitions	1,475,617	1,039,916
b. Redemptions and disposals	(1,679,623)	(650,000)
c. Adjustments made in accordance with Article 35 ter §4 and 5 (+/-)	(14,213)	(17,394)
3. Acquisition value at the end of the financial year	809,729	1,027,948
4. Transfers between portfolios		
a. From the investment portfolio to the trading portfolio (-)	-	-
b. From the trading portfolio to the investment portfolio (+)	-	-
c. Impacts of these transfers on the result	-	-
5. Write-offs at the end of the previous financial year	-	-
6. Changes during the financial year		
a. Charged	-	-
b. Reserved because of surplus (-)	-	-
c. Cancelled (-)	-	-
d. Transferred from one heading to another (-)	-	-
7. Write-offs at the end of the financial year	-	-
8. Book value at the end of the financial year	809,729	1,027,948

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IV. Corporate shares and other variable-income securities (Heading VI of balance sheet assets) As at 31 December

(€'000)	2015	2014
A. General information		
1. Geographical breakdown of the issuers of the securities		
a. Belgian issuers	-	-
b. Foreign issuers	-	-
2. Quotations		
a. Book value listed securities	-	-
b. Market value listed securities	-	-
c. Unlisted securities	-	-
3. Shares and securities belonging to the		
a. Trading portfolio	-	-
b. Investment portfolio	-	-
4. For the trading portfolio		
a. Positive difference between the acquisition value and the market value for securities	-	-
valued at their market value		
b. Positive difference betw een the market value, w hen higher, and the book value for	-	-
securities valued in accordance with Article 35 ter § 2 (2)		

IV. Corporate shares and other variable-income securities (continued) (Heading VI of balance sheet assets) As at 31 December

(€'000)	2015	2014
B. Details of the book value of the investment portfolio	2015	2014
1. Acquisition value at the end of the previous financial year	-	-
 2. Changes during the financial year a. Acquisitions b. Cancelled (-) c. Other changes 		-
3. Acquisition value at the end of the financial year	-	-
 4. Transfers between portfolios a. From the investment portfolio to the trading portfolio (-) b. From the trading portfolio to the investment portfolio (+) c. Impact of these transfers on the result 	- - -	-
5. Write-offs at the end of the previous financial year	-	-
 6. Changes during the financial year a. Charged b. Reversed because of surplus (-) c. Cancelled (-) d. Transferred from one heading to another (+/-) 	- - - -	
7. Write-offs at the end of the financial year	-	-
8. Book value at the end of the financial year	-	-

EUROCLEAR BANK SA/NV

V. Financial fixed assets (Heading VII of balance sheet assets) As at 31 December

	2015		2014	
	Credit		Credit	
(€'000)	institutions	Other	institutions	Other
A. Breakdown of the headings VII A, B, C, D of the assets				
1. Economic sector of				
a. Participation in affiliated enterprises	-	23,200	-	27,699
b. Participation in other enterprises linked by participating interests	-	-	-	-
c. Other financial assets	-	8,042	-	7,428
d. Subordinated loans with affiliated enterprises and with other	-	-	-	-
associated enterprises				

	2015		2014	
(€'000)	Quoted	Not quoted	Quoted	Not quoted
2. Quotation				
a. Participation in affiliated enterprises	-	23,200	-	27,699
 Participation in other enterprises linked by participating interests 	-	-	-	-
c. Other financial fixed assets	124	7,918	124	7,304
d. Subordinated loans with affiliated enterprises and with other	-	-	-	-
associated enterprises				

V. Financial fixed assets (continued) (Heading VII of balance sheet assets) As at 31 December 2015

		Enterprises	
((2000)	Affiliated	Associated	Other
(€'000) B. Details on the book value at the end of the financial year (VII A, B and C of the assets)	(VII.A.)	(VII.B.)	(VII.C.
1. Acquisition value at the end of the previous financial year	27,699	-	7,428
2. Changes during the financial year	-	-	-
a. Acquisitions	-	-	614
b. Sales	(4,499)	-	-
c. Transfers from one heading to another (+/-)	-	-	-
3. Acquisition value at the end of the financial year	23,200	-	8,042
4. Revaluation at the end of the previous financial year	-	-	-
5. Changes during the financial year	-	-	-
a. Charged	-	-	-
b. Acquired from third parties c. Cancelled (-)	-	-	-
d. Transferred from one heading to another(+/-)	-	-	-
6. Revaluation at the end of the financial year	-	-	-
7. Write-offs at the end of the previous financial year	-	-	-
8. Changes during the financial year	-	-	-
a. Charged	-	-	-
b. Revered because of surplus (-)	-	-	-
c. Acquired from third parties	-	-	-
d. Cancelled (-)	-	-	-
e. Transfers from one heading to another (+/-)	-	-	-
9. Write-offs at the end of the financial year	-	-	-
10. Net book value at the end of the financial year	23,200	-	8,042

V. Financial fixed assets (continued) (Heading VII of balance sheet assets) As at 31 December 2015

(€'000) C. Details of the subordinated loans 1. Net book value at the end of the previous financial year	Affiliated enterprises -	Associated enterprises -
2. Changes during the financial year	_	-
a. Additions	_	-
b. Repayments (-)	-	-
c. Write-off (-)	-	-
d. Write-off taken back	-	-
e. Exchange differences (+/-)	-	-
f. Other change(+/-)	-	-
3. Net book value at the end of the financial year	-	-
4. Cumulated provisions at the end of the financial year	-	

EUROCLEAR BANK SA/NV

VI. A. List of affiliated enterprises As at 31 December 2015

Mentioned hereafter are the enterprises in which the credit institution holds a participation as mentioned in the Royal Decree of 23 September 1992, as well as the other enterprises in which the credit institution holds social rights representing at least 10% of the subscribed equity.

Name,	S	hareholder's	stake	Through		e last available	e financial s	tatements
address,	Dir	ectly		subsidiaries	statements			
VAT or Nat. ld nr	Type of shares	Number	%	%	of	Currency	Equity	Netresult
Calar Belgium SA/NV 1 Boulevard du Roi Albert II 1210 Brussels, Belgium	Ordinary shares	157,354	100		31/12/2015	€'000	21,329	918
Registre des sociétés civiles : 1489								
Euroclear Finance 2 SA (liquidated in December 2015) 5, Rue Guillaume Kroll 1882 Luxembourg, Luxembourg	Ordinary shares	0	0		31/12/2015	€'000	-	8
RCS Lux: B - 108194								

EUROCLEAR BANK SA/NV

VI. B. List of enterprises for which the credit institution as a shareholder is bearing unlimited liability As at 31 December 2015

per Possible	Name and complete address of the headquarter and for the Belgian enterprises, mention of the VAT number
code (a)	or the national number
10	Code 05
	Code 05

(a) The financial statements of the enterprise:

- are published by deposit at the National Bank of Belgium by this enterprise; Α.
- В. С.
- are effectively published by this enterprise in another EU Member State as per Article 3 of the Directive: 68/151/CEE; and are integrated in the global consolidation or by proportional consolidation of the consolidated financial statements of the credit institution controlled and published in agreement with the Royal Decree of 23 September 1992 related to the consolidated accounts of credit institutions

VII. Formation expenses and intangible fixed assets (Heading VIII of balance sheet assets) As at 31 December 2015

(€'000)	2015
A. Detail of the formation expenses	
1. Net book value at the end of the previous financial year	-
2. Changes during the financial year	-
a. New expenses incurred	-
b. Depreciation	-
c. Other changes	-
3. Net book value at the end of the financial year	-
4. Including	
a. Formation and capital - increased expenses or issuing expenses for loans and other	-
start-up expenses	
b. Reorganisation expenses	-

(€'000) B. Intangible fixed assets	Goodwill	Other intangible fixed assets	Commissions for the operations of art 27 Bis
1. Acquisition value at the end of the previous financial year	-	37,886	-
2. Changes during the financial year a. Acquisitions including production of fixed assets	-	54 54	-
 b. Transfers and disposals (-) c. Transfers from one heading to another(-) 	-		-
3. Acquisition value at the end of the financial year	-	37,940	-
4. Depreciation and amounts written off at the end of the previous financial year	-	37,874	-
5. Changes during the financial year	-	53	-
a. Charged	-	3	-
b. Reversed because of surplus (-)	-	-	-
c. Acquired from third parties	-	-	-
d. Cancelled (-) e. Transferred from one heading to another (+/-)	-	- 50	-
6. Depreciation and amounts written off at the end of the financial year	-	37,927	-
7. Net book value at the end of the financial year	-	13	-

VIII. Tangible fixed assets (Heading IX of balance sheet assets) As at 31 December 2015

(€000)	Land and buildings	Installations, machines and tools	Furniture, fixtures and vehicles	Leasing and similar rights	Other tangible fixed assets	Fixed assets under constructionand advance payments
1. Acquisition value at the end of the previous	-	2,448	1,384	-	4,021	-
financial year						
 Changes during the financial year Acquisitions including ow n production of fixed assets 	-	310 317	15 97	-	347 351	-
b. Transfers and disposals (-)	-	(7)	(82)	-	(4)	-
c. Transfers from one heading to another (+/-)	-	-	-	-	-	-
3. Acquisition value at the end of the financial year	-	2,758	1,399	-	4,368	-
4. Revaluations at the end of the previous financial year	-	-	-	-	-	-
5. Changes during the financial year	-	-	-	-	-	-
a. Recorded	-	-	-	-	-	-
b. Acquired from third parties	-	-	-	-	-	-
c. Cancelled (-)	-	-	-	-	-	-
d. Transferred from one heading to another (+/-)	-	-	-	-	-	-
6. Revaluations at the end of the financial year	-	-	-	-	-	-
7. Depreciation and amounts written-off at the end of the previous financial year	-	1,535	634	-	1,846	-
8. Changes during the financial year	-	496	125	-	891	-
a. Charged	-	440	161	-	805	-
b. Reversed because of surplus (-)	-	-	-	-	-	-
c. Acquired from third parties	-	-	-	-	-	-
d. Cancelled (-)	-	(6)	(52)	-	(4)	-
e. Transferred from one heading to another (+/-)	-	62	16	-	90	-
9. Depreciation and amounts written-off at the end of the financial year	-	2,031	759	-	2,737	-
10. Net book value at the end of the financial year	-	727	640	-	1,631	-

IX. Other assets (Heading XI of balance sheet assets) As at 31 December

€'000)	2015	201
Breakdow n of this caption if it represents an important amount		
a. VAT & WHT to recover	11,352	14,504
b. Guarantee deposits	4,017	3,561
c. Tax assets	-	-
d. Miscellaneous	396	714
	15,765	18,779

X. Deferred charges and accrued income (Heading XII of balance sheet assets) As at 31 December

	99,697	107,783
2. Accrued income	97,183	105,367
1. Deferred charges	2,514	2,416
(€'000)	2015	2014

X.bis Re-use of funds of segregated customers (Heading XII of balance sheet) As at 31 December

(€'000)	2015	2014
1. Total amount	-	-

XI. Amounts payable to credit institutions (Heading I of balance sheet liabilities) As at 31 December

(€'000)	2015	2014
1. For the heading as a whole, amounts payable to affiliated enterprises	-	14,210
2. For the heading as a whole, amounts payable to other enterprises linked by participating interests	-	-
Breakdown of the amounts payable other than at sight according to their residual term (heading I.B and C of the liabilities)		
a. Up to three months	405,518	1,668,882
b. Over three months and up to one year	-	-
c. Over one year and up to five years	-	-
d. Over five years	-	-
e. Undated	-	-
	405,518	1,668,882

XII. Amounts payable to customers (Heading II of balance sheet liabilities) As at 31 December

(€'000)	2015	2014
1. Amounts payable to affiliated enterprises	2,420	3,009
2. Amounts payable to other enterprises linked by participating interests	-	-
3. Breakdown by residual term		
a. At sight	5,001,733	3,799,253
b. Up to 3 months	87,745	89,081
c. Over 3 months and up to one year	15,500	360
d. Over one year and up to 5 years	-	-
e. Over 5 years	-	-
f. Undated	-	-
4. Breakdown of the debts according to the nature of the debtors		
a. Debts on public authorities	45,226	3,353
b. Debts on individuals	-	-
c. Debts on corporates	5,059,752	3,885,341
5. Geographical breakdown of the amounts payable to		
a. Belgium	95,592	72,120
b. Foreign countries	5,009,386	3,816,574
	5,104,978	3,888,694

Amounts payable to credit institutions and customers (headings I and II of balance sheet liabilities) include an amount of 3,726,977,000 €-equivalent of deposits blocked pursuant to applicable international sanctions measures.

XIII. Debt securities in issue (Heading III of balance sheet liabilities) As at 31 December

(€'000)	2015	2014
1. Amounts payable which, to the knowledge of the credit institution, constitute amounts payable to affiliated enterprises	-	-
 Amounts payable which, to the knowledge of the credit institution, constitute amounts payable to other enterprises linked by participating interests Breakdown according to the residual term 	-	-
a. Up to 3 months	-	-
b. Over 3 months and up to one year	-	-
c. Over one year and up to 5 years	-	-
d. Over 5 years	-	-
e. Undated	-	-
	-	-

EUROCLEAR BANK SA/NV

XIV. Other amounts payable (Heading IV of balance sheet liabilities) As at 31 December

(€'000)	2015	2014
1. Fiscal and social debts towards the fiscal administration	59,728	59,383
a. Overdue	-	-
b. Not overdue	59,728	59,383
2. Fiscal and social debts towards the social security authorities	3,817	3,363
a. Overdue	-	-
b. Not overdue	3,817	3,363
3. Taxes		
a. Payable	119	27,193
b. Estimated	59,609	32,190
4. Other debts		
Breakdow n of this caption if it represents an important amount		
Dividend	44,982	45,336
Payroll (other than social security)	36,906	42,478
Other payable	14,140	9,710

XV. Accrued charged and deferred income (Heading V of balance sheet liabilities) As at 31 December

		81,538	79,784
	2. Deferred income	633	879
(€000) 2015 2014	1. Accrued charges	80,905	78,906
	(€'000)	2015	2014

XVI. Provisions for risks and charges (Heading VI.A.3 of balance sheet liabilities) As at 31 December

	4,649	5,220
		-
Taxes	4,518	4,700
Dilapidation costs	131	117
Dnerous contracts	_	403
Breakdow n of this heading if it represents an important amount		
€'000)	2015	2014

XVII. Statement of subordinated liabilities (Heading VIII of balance sheet liabilities) As at 31 December

(€'000)	2015	2014
1. Debts to affiliated enterprises	-	102,505
2. Debts to other enterprises linked by participating interest	-	-
3. Charges in respect of subordinated debts	2,043	4,384

4. Details of subordinated debt are as follows:

N° Ref.	Currency	Amount	Maturity date	 A) Circumstances for early redemption B) Conditions for subordination C) Conditions for convertibility
1	EUR	102,600	Undated issue	 A) On demand of the issuer with a notice period of 30 to 60 days, at each interest payment date as from 15 June 2015. B) Payment after all preferred creditors, equally with other subordinated obligations, before shareholders, if the guarantor is solvent. C) Not convertible

The Fixed/Floating Rate Subordinated Guaranteed Non-Cumulative Perpetual Securities listed above were denominated in euro and were issued at par by Euroclear Finance 2 in June 2005 (principal amount of €300,000,000). The proceeds of the issue and the €4,500,000 capital of Euroclear Finance 2 were lent to Euroclear Bank through the full subscription of Fixed/Floating Rate Subordinated Perpetual Notes (principal amount of €304,500,000, net of €2,600,000 of issue costs) issued by Euroclear Bank. These notes provide Upper Tier II regulatory capital to Euroclear Bank on a stand-alone basis, whereas the securities provide Hybrid Tier I regulatory capital to Euroclear Bank on a consolidated basis.

Euroclear Bank has exercised on 15 June 2015 the optional redemption rights of the Bank on all of its Upper Tier 2 note with Euroclear Finance 2 at the base redemption price.

XVIII. Shareholders' capital As at 31 December 2015

	Amounts (€'000)	Number of shares
1. Capital	(000)	
a. Subscribed capital		
(heading IX. A. of the liabilities)		
- At the end of the last financial year	285,497	70,838
- Subscribed capital changes throughout the exercise	-	-
- At the end of the financial year	285,497	70,838
b. Structure of capital		
- Categories of shares		
* Ordinary shares	285,497	70,838
- Registered or bearer shares		
* Registered	*****	70,838
* Bearer	*****	-
	Uncalled capital	Called up capital, unpaid
2. Called up but unpaid capital		
a. Shareholders still ow ing capital payment	-	-
	Capital amount held	Corresponding number of shares
3. Own shares held		
a. By the credit institution	_	-
b. By its subsidiaries	-	
4. Share issuance commitment		_
a. Follow ing the exercise of conversion rights		
- Amount of convertible loans outstanding	-	-
- Amount of capital to be subscribed	-	-
- Corresponding maximum number of shares to issue	-	-
b. Follow ing the exercise of subscription rights		
- Number of subscription rights outstanding	-	-
- Capital amount to be subscribed	-	-
- Corresponding maximum number of shares to issue	-	-
	-	-
5. Non-subscribed authorised capital		
5. Non-subscribed authorised capital		

	Number of stakes	
6. Shares not representing capital		
Which are		
a. Held by the credit institution	-	-
b. Held by its subsidiaries	-	

XIX. Breakdown of total assets and total liabilities in euros and foreign currencies $_{\rm As\ at\ 31\ December\ 2015}$

	CL	In foreign Irrencies (euro
(€'000)	In euros	equivalent)
Total assets	8,087,394	11,668,970
Total liabilities	7,259,697	12,496,667

XX. Trustee operations referred to in Article 27ter, § 1 paragraph 3 $_{\rm As\ at\ 31\ December}$

(€'000)	2015
Concerned headings of the assets and liabilities	

XXI. Guaranteed liabilities and commitments As at 31 December 2015

Secured guarantees provided or irrevocably promised by the credit institution on its own assets

(€'000)	Mortgages (a)	Pledging of goodwill (b)	Pledges on other assets (c)	Guarantees established on future assets (d)
1. As security for liabilities and commitments of				
the credit institution				
a. Headings of the liabilities				
b. Off-balance sheet headings				
- Guarantee with the National Bank of Belgium	-	-	2,112,278	-
- Guarantee with credit institutions	-	-	35,927	-
2. As security for liabilities and commitments of				
third parties				
a. Headings of the liabilities				
b. Off-balance sheet headings				

(a): Amount registered or book value of the real estate encumbered if the latter is lower

(b): Amount registered
(c): Book value of the assets pledged

(d): Amount of the assets in question

Investment securities with a book value of \in 2,112,278,000 (2014: \in 3,535,439,000) have been deposited with the National Bank of Belgium as potential collateral for TARGET2-related exposures. There was an exposure amounting to \in 7,889,000 at 31 December 2015 (2014: \in 840,651,000)

XXII. Statement of the contingent liabilities and of commitments which can give rise to a credit risk (Heading I and II of the off-balance sheet)

(Heading I and II of the off-balance sheet) As at 31 December

(€'000)	2015	2014
Total of contingent liabilities on account of affiliated enterprises	-	98,100
Total of contingent liabilities on account of other enterprises linked by participating interests	-	-
Total of the commitments to affiliated enterprises	-	-
Total of the commitments to other enterprises linked by participating interests	-	-

XXIII. Details concerning the results of the current and previous financial year (Headings I through XV of the profit and loss accounts) As at 31 December

	20		20	
(€'000)	Belgian entities	Entities abroad	Belgian entities	Entities abroad
1. Breakdown of operating income according to origin				
a. Interests and similar income	148,961	39	124,070	36
b. Income from variable-income securities				
- Corporate shares and other variable-income securities	-	-	-	-
- Participation in affiliated enterprises	-	-	1,007	-
- Participation in other enterprises linked by participating	-	-	-	-
interests				
 Participating interests and shares representing financial 	39	-	218	-
fixed assets				
c. Commissions received	977,219	-	916,023	-
d. Profit from financial operations				
 From exchange transactions and transactions in securities and other financial instruments 	3,695	76	634	213
- From sale of investment securities	-		606	
	4.550	400	5.000	110
e. Other operating income	4,558	138	5,908	142

XXIII. Details concerning the results of the current and previous financial year (continued) (Headings I through XV of the profit and loss accounts) As at 31 December

(€'000)	2015	201
2. Workers registered		
a. Total number of workers at the end of the financial year	1,672	1,542
b. Average number registered as full-time equivalent	1,574	1,467
- Management	243	224
- Employees	1,331	1,243
- Manual w orkers	-	
- Other c. Number of hours worked	-	2 404 253
	2,394,988	2,191,257
3. Social charges		
a. Wages and direct social advantages	92,490	87,787
b. Social insurance paid by the employer	20,403	19,74 <i>°</i>
c. Employer premiums for extra legal insurance	1,911	1,467
d. Other	4,578	3,883
e. Pensions	354	7,520
	119,736	120,398
4. Provisions for pensions		
a. Additions (+)	400	137
b. Write-backs (-)	(224)	(140
	176	(3
	176	(3
5. Other operating income	176	(3
 Other operating income a. Breakdow n of the heading XIV if they represent an important amount 	176	(3
	176	(3
a. Breakdown of the heading XIV if they represent an important amount	176	(3
a. Breakdow n of the heading XIV if they represent an important amount	176	(3
a. Breakdown of the heading XIV if they represent an important amount	176	(3
 a. Breakdow n of the heading XIV if they represent an important amount 6. Other operating charges 	176	(3
a. Breakdow n of the heading XIV if they represent an important amount	5,859	
 a. Breakdow n of the heading XIV if they represent an important amount 6. Other operating charges (heading XV of the profit and loss account) a. Taxes 	5,859	5,881
 a. Breakdow n of the heading XIV if they represent an important amount 6. Other operating charges (heading XV of the profit and loss account) 		5,881
 a. Breakdow n of the heading XIV if they represent an important amount 6. Other operating charges (heading XV of the profit and loss account) a. Taxes b. Other operating charges c. Breakdow n of the other operating charges if they represent an important amount 	5,859 31,380	5,88 ⁷ 31,520
 a. Breakdow n of the heading XIV if they represent an important amount 6. Other operating charges (heading XV of the profit and loss account) a. Taxes b. Other operating charges c. Breakdow n of the other operating charges if they represent an important amount - Other operating charges 	5,859 31,380 5,702	5,881 31,520 7,918
 a. Breakdow n of the heading XIV if they represent an important amount 6. Other operating charges (heading XV of the profit and loss account) a. Taxes b. Other operating charges c. Breakdow n of the other operating charges if they represent an important amount 	5,859 31,380	5,881 31,520
 a. Breakdow n of the heading XIV if they represent an important amount 6. Other operating charges (heading XV of the profit and loss account) a. Taxes b. Other operating charges c. Breakdow n of the other operating charges if they represent an important amount - Other operating charges 	5,859 31,380 5,702	5,881 31,520 7,918
 a. Breakdow n of the heading XIV if they represent an important amount 	5,859 31,380 5,702 25,678	5,88 31,520 7,918 23,602
 a. Breakdow n of the heading XIV if they represent an important amount 	5,859 31,380 5,702 25,678 37,239	5,88 31,520 7,918 23,602 37,40
 a. Breakdow n of the heading XIV if they represent an important amount 6. Other operating charges (heading XV of the profit and loss account) a. Taxes b. Other operating charges c. Breakdow n of the other operating charges if they represent an important amount - Other operating charges 	5,859 31,380 5,702 25,678	5,881 31,520 7,918 23,602

EUROCLEAR BANK SA/NV

XXIV. Forward off-balance sheet operations in securities, foreign currencies and other financial instruments which do not constitute commitments which can give rise to a credit risk within the meaning of heading II of the off-balance sheet As at 31 December 2015

(€'000)	Amount at 31 December 2015	Of which transactions do not constitute hedging transactions
A. Types of operations		
 On transferable securities a. Forw ard purchases and sales of transferable securities and negotiable instruments 	-	-
 2. On currencies (a) a. Forw ard exchange operations b. Interest-rate and currency sw aps c. Currency futures d. Currency options e. Forw ard exchange rate contracts 	1,398,117 - - - -	- - - -
 3. On other financial instruments a. On interests (b) Interest-rate sw aps Interest-rate futures Forw ard interest-rate contracts Interest-rate options 	-	- - -
 b. Other forw ard purchases and sales (c) Other option contracts Other futures operations Other forw ard purchases and sales 	-	- - -
	1,398,117	-

(a) Amounts to be delivered

(b) Nominal/notional reference amount

(c) Agreed buying/selling price

Estimation of the impact on the results of the derogation to the valuation rule defined under Article 36 Bis, § 2, granted by the Belgian Banking and Finance Commission, concerning interest-rate derivatives.

	Amount at 31 December 2015	Difference between market value and book
(6000)		
(€'000)	(a)	value (b)
B. Type of interest-rate derivative		
1. For the purposes of treasury management	-	-
2. For the purposes of asset and liability management	-	-
3. Without effect on risk reduction	-	-

(a) Notional amount

(b) Positive fair value (Negative fair value)

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XXV. Exceptional results (Heading XVII.E and XVIII.E of the profit and loss accounts) As at 31 December

(€'000)	2015	2014
1. Realised gain on disposal of fixed assets to affiliated enterprises	-	-
2. Realised loss on disposals of fixed assets to affiliated enterprises	-	-
3. Breakdown of the heading if it represents an important amount		
(heading XVII. E. of the income statement)		
4. Other exceptional charges - Breakdown of the heading if it represents an		
important amount		
(heading XVIII. E. of the income statement)		

XXVI. Income taxes

(Heading XX of the profit and loss accounts) As at 31 December

(€'000)	2015	2014
1. Income tax for the year	68,598	55,986
a. Taxes or withholding taxes paid or due	8,989	23,796
b. Taxes or withholding taxes receivable booked as an asset	-	- 20,700
c. Additional estimated tax (brought to heading IV. B. of the liabilities) as fiscal debts	59,609	32,190
		,
2. Income taxes on previous financial years	(846)	(151)
a. Additional taxes or withholding taxes	(846)	(151)
b. Additional estimated taxes (brought to the heading IV of the liabilities) or provisioned	-	-
(brought to heading VIA.2. of the liabilities)		
	67,752	55,835
		,
3. Sources of the differences between accounting profit and tax profit		
With particular mention of those related to timing differences (if the impact on the corporate		
profit is significant)		
- Non-deductible expenses	4,091	3,768
- Taxable provisions	971	10,423
- Notional interest	(22,500)	(36,180)
- RDT	(502)	(1,164)
4. Impact on the extraordinary results of the taxes on the result of the year		
5. Sources of deferred taxes (where those indications are important for the		
valuation of the credit institution)		
a. Deferred tax assets		
- Cumulated tax losses, future deductible taxed benefits	-	-
b. Deferred tax liabilities	-	-

XXVII. Other taxes and taxes at the charges of third parties $\ensuremath{\mathsf{As}}\xspace$ at 31 $\ensuremath{\mathsf{December}}\xspace$

(€'000)	2015	2014
1. VAT charged and special taxes		
a. To the credit institution (deductible)	136,976	129,670
b. By the credit institution	13,564	11,721
2. Taxes withheld		
a. Personal income tax withheld	18,838	18,352
b. Withholding tax on financial revenue	1	14

XXVIII. Off-balance sheet rights and commitments and transactions with related parties

As at 31 December

(€'000)	2015	2014
1. Major commitments for the acquisition of fixed assets		
2. Major commitments for the sale of fixed assets		
3. Important legal proceedings and other important commitments	-	-
4. If necessary, brief description of the commitments relating to the supplementary retirement benefit plan for the benefit of employees and directors		
 5. Retirement benefits which are the responsibility of the credit institution - Estimated amount of engagement for the credit institution for services already carried out - Method of this estimation 	-	-
6. Nature and business purpose of off-balance sheet operations To the extent that the risks and advantages related to those operations are significant and that the disclosure of those risks and rew ards is necessary for the correct assessment of the financial situation of the institution The commitment of Euroclear Bank tow ards Euroclear SA/NV as of 31 December 2015 amounts to €78,514,000 and corresponds to the development costs related to infrastructure and innovation projects currently under development or already launched that Euroclear SA/NV, as ow ner, will charge out in future years.	78,514	53,955
7. Transactions with related parties not carried out at arm's length Disclosure of such transactions to the extent that they are significant, including their amount, the nature of the links with the related party, as well as any other information on the transactions which would be necessary for a better understanding of the financial situation of the institution	-	-
NIHIL		

E.

XXIX. Financial relations with

As at 31 December

	2014
-	-
-	-
-	-
1,728	2,266
	- - - 1,728 -

(€'000)	2015	2014
B. The auditor(s) and person(s) to whom he (they) is (are) linked		
1. Audit fees	357	336
2. Non-statutory audit services		
a. Other assurance services	180	180
b. Tax services	-	-
c. Other services	-	-
3. Non-statutory audit services performed by individuals related to the statutory		
auditor		
a. Other assurance services	-	-
b. Tax services	-	-
c. Other services	-	-
4. Notices in application of alinea 133, paragraph 6 of the Belgian Company Code		
	537	516

Euroclear Bank ensures that the independence of the external auditor is preserved through a specific policy adopted by the Board and agreed to by PwC. This policy adheres to the highest standards of independence. The engagement of the external auditor for non-core services is subject to specific controls, supervised by the Audit Committee.

XXX. Positions in financial instruments As at 31 December

(€'000)	2015	2014
1. Financial instruments to be received on behalf of customers	-	-
2. Financial instruments to be delivered to customers	-	-
3. Financial instruments deposited by customers	9,475,167,856	8,914,087,269
4. Financial instruments from customers deposited	12,550,388,614	12,080,967,520
5. Financial instruments from customers received in guarantee	3,075,588,064	3,166,880,251
6. Financial instruments from customers given in guarantee	367,306	

XXXI. Derivative financial instruments not estimated at fair value ${\mbox{\sc As}}$ at 31 ${\mbox{\sc December}}$

3 (425)
-
38

XXXII. Statement relative to the consolidated accounts As at 31 December 2015

Declaration related to consolidated accounts

A. Information to be completed by all the credit institutions

The credit institution establishes and publishes consolidated accounts and a consolidated management report in accordance with the Royal Decree of 23 September 1992 relating to the consolidated accounts of credit institutions: YES / NO¹

The credit institution does not establish consolidated accounts or a management report for one of the following reasons¹:

- the credit institution does not control, solely or jointly, one or more subsidiaries under Belgian or foreign law the credit institution, however, submitted to the Royal Decree of 23 September 1992, is exempted to establish consolidated accounts and a consolidated management report because the credit institution is a subsidiary of a mother company that establishes and publishes consolidated accounts (Article 4 of the Royal Decree of 23 September 1992).
 - justification of the respect of the provisions set out Article 4
 - name, complete address of the headquarter company and, if it concerns a Belgian legal entity, the VAT number or the national number of the mother company that establishes and publishes the consolidated accounts in the name of which the exemption is authorised
- the credit institution only controls subsidiaries which are, both individually and on a combined basis, insignificant for providing a true and fair view on the consolidated financial statements.

B. Information to be completed by the credit institution if a subsidiary or a joint subsidiary

Name, complete address of the headquarter and, if it concerns a Belgian legal entity, the VAT number or the national number of the mother company and mention if this mother company establishes and publishes consolidated accounts in which the credit institution accounts are integrated by the consolidation²:

Ultimate parent	Immediate parent
Euroclear plc	Euroclear SA/NV
33 Cannon Street	1 Boulevard du Roi Albert II
London EC4M 5SB	1210 Brussels
United Kingdom	Belgium
-	BE 423.747.369

If the mother company is under foreign law, place where the above-mentioned consolidated accounts can be obtained²:

Furoclear plc Baarematte 6340 Baar Switzerland

Euroclear SA/NV 1 Boulevard du Roi Albert II 1210 Brussels Belgium BE 423.747.369

¹ Delete as appropriate

² If the accounts of the institution are consolidated at several levels, the indications are given on the one hand for the biggest consolidation scope and on the other hand, for the smallest consolidation scope to which the institution belongs as a subsidiary, and for which consolidated accounts are prepared and published

Staff survey As at 31 December 2015

Social security number : 30/01186583-53 Number of the social consulting committees governing the Company: 310

I. Details of staff employed

A. Staff under contract

	Total	1. Men	2. Womer
1. During the financial year			
a. Average number of staff			
- Full-time	883	379	504
- Part-time	179	17	162
- Total full-time equivalents (FTE)	1,022	392	630
b. Effective hours w orked			
- Full-time	1,220,579	548,624	671,955
- Part-time	188,389	17,526	170,863
- Total	1,408,968	566,150	842,818
c. Personnel expenses (€'000)			
- Full-time	68,793	32,821	35,972
- Part-time	11,849	1,104	10,745
- Total	80,642	33,925	46,717
d. Benefits in addition to w ages (€'000)	1,130	442	688

	P. Total	1P. Men	2P. Women
2. During the previous financial year			
a. Average number of staff	1,062	406	656
b. Effective hours w orked	1,435,134	576,692	858,442
c. Personnel expenses (€'000)	81,053	34,036	47,017
d. Benefits in addition to w ages (€'000)	1,182	465	717

Staff survey (continued) As at 31 December 2015

			Total (T) or total full-time equivalents
	Full-time	Part-time	(FTE)
3. At the end of the financial year	075	407	4 000
a. Number of staff in the personnel register	875	187	1,020
b. Breakdow n by type of employment contract			
- Contract of unlimited duration	814	187	959
- Contract of limited duration	61	-	61
- One-job contract	-	-	-
- Interim substitution contract	-	-	-
c. Breakdow n by sex and school degree			
- Men	377	17	390
Primary school	-	-	-
Secondary school	33	5	37
Higher non-academic degree	124	6	129
Academic degree	220	6	224
- Women	498	170	630
Primary school	-	-	-
Secondary school	59	19	74
Higher non-academic degree	142	56	185
Academic degree	297	95	371
d. Breakdow n by professional occupation			
- Management	151	36	181
- Employees	724	151	839
- Manual w orkers	-	-	-
- Other	-	-	-

B. Hired staff and staff put at disposal of the Company

	Hired personnel	Personnel put at disposal
1. Average number of people	1	-
2. Effective hours worked	387	-
3. Expenses incurred by the Company (€'000)	37	-

E.

Staff survey (continued) As at 31 December 2015

II. Evolution of staff numbers during the financial year

			3. Total full- time
A. New employment contracts	1. Full-time	2. Part-time	equivalents
1. Number of staff engaged during the financial year	78	1	79
2. Breakdown by type of employment contract			
a. Contract of undefined duration	25	1	26
b. Contract of defined duration	53	-	53
c. One-job contract	-	-	-
d. Interim substitution contract	-	-	-
B. Employment contracts terminated			
1. Number of employment contracts terminated during the financial year	90	10	98
2. Breakdown by type of employment contract			
a. Contract of undefined duration	75	10	83
b. Contract of defined duration	15	-	15
c. One-job contract	-	-	-
d. Interim substitution contracts	-	-	-
3. Breakdown by motive for the termination of			
the contract	4		4
a. Retirement	4	-	4
b. Early retirement	6	2	7
c. Dismissal	4	2	6
d. Other reason	76	6	81
- Of which the number of staff that continues to	-	-	-
provide services to the Company as an			
independent on at least a half-time basis			

Staff survey (continued) As at 31 December 2015

III. Staff participating in training programmes

(€'000)	Men	Women
1. Continued training initiatives with a formal character at the expense of		
the Company		
a. Number of staff involved	285	478
b. Number of training hours	6,249	10,196
c. Expenses incurred by the Company (€'000)	1,286	2,097
- of which gross charges directly linked to training	1,275	2,081
- of which contributions paid to collective funds	11	16
- of which subsidies and other financial advantages received	-	-
2. Continued training initiatives with less formal or informal character at		
the expense of the Company		
a. Number of staff involved	36	43
b. Number of training hours	108	129
c. Expenses incurred by the Company (€'000)	4	5
3. Initial training initiatives at the expense of the Company		
a. Number of staff involved	-	-
b. Number of training hours	-	-
c. Expenses incurred by the Company	-	-

Complementary Information As at 31 December 2015

I. Pension Plan

The group, which adopted IAS 19 in 2006, has a wide range of defined-benefit pension plans and medical plans covering employees in Belgium.

The assets of the plans are held separately from those of the group.

The most recent full actuarial valuations of the plans, under IFRS (IAS 19), were made by independent qualified professional actuaries as of 31 December 2015.

Funding levels are monitored on an annual basis and contributions are made to comply with minimum requirements as determined by local regulations and, if applicable, internal funding policy. The group considers that the contribution rates set at the last valuation date are sufficient to eliminate the deficit over the agreed period and that regular contributions, which are based on service costs, will not increase significantly.

The pension cost in 2015, computed in accordance with IAS 19 (taking into account, for example, projected salary increases and inflation up to the time of retirement) amounted to \in 5,307,000 (2014: \in 4,431,000) and was fully expensed in the current year. The contribution, reflecting employers' contributions for funded plans and benefit disbursements for unfunded plans, amounted to \in 2,854,000 (2014: \in 545,000). The actuarial valuation at 31 December 2015, also computed in accordance with IAS 19, showed a deficit of \in 14,217,000 (2014: \in 16,705,000).

The deficit is detailed as follows:

(€'000)	2015	2014
1. Balance at 1 January	(16,705)	(9,809)
2. Movements		
a. Contributions	2,854	545
b. Service cost	(4,991)	(4,121)
c. Interest cost	(316)	(310)
d. Foreign currency difference	(112)	4
e. Actuarial gains / (losses)	5,053	(3,014)
3. Balance at 31 December	(14,217)	(16,705)

The major assumptions used by the actuaries in their valuation were:

(€'000)	201	5 2014
Discount rate	2.18	% 2.09%
Expected inflation rate	1.70	% 1.70%
Future salary increases	3.00	% 3.00%
Expected medical cost trend rate	3.20	% 3.70%

The above percentages are weighted averages of the assumptions used for individual plans.

The value of assets in the plans and the expected rates of return were:

Equities	31,793	30,519
Bonds	21,195	20,347
Total market value of assets	52,988	50,866

II. Additional clarification on staff survey

In accordance with the applicable regulations, please note that the population reflected in the staff survey does not agree with the figures presented in Note XXIII of the financial statements. The reason is that the latter present figures related to the legal entity, i.e. including its foreign branches, whereas the former exclusively shows figures associated with the headquarters in Belgium.

III. Country by country reporting

As per relevant regulations, the country by country reporting includes all the entities in the scope of consolidation of Euroclear Bank. Figures in the below table do hence differ from these statutory financial statements due to the contribution of Euroclear Bank's subsidiaries.

The reportable country segments are as follows:

- Belgium includes Euroclear Bank and Calar Belgium SA/NV (property investment);
- Hong Kong includes Euroclear Bank's Hong Kong branch (operational support to ICSD);
- Luxembourg includes Euroclear Finance 2 SA (financing vehicle);
- Poland includes Euroclear Bank's Polish branch (operational support to ICSD);

	2015					
(€'000)	Belgium	Hong Kong	Luxemburg	Poland	Eliminations	Group
Turnover	1,127,487	593	2,011	(245)	(2,011)	1,127,835
Other income	12,197	17,828	-	35,883	(55,051)	10,857
Charges	(928,406)	(16,357)	(2,002)	(21,243)	57,062	(910,946)
Profit before tax	211,278	2,064	9	14,395	-	227,746
Tax on profit and loss	(64,270)	(261)	(1)	(2,815)	-	(67,347)
Profit after tax	147,008	1,803	8	11,580	-	160,399
Average number of employees (FTE)	1,091	123	-	360	-	1,574
Subsidies	1,071	_	_	_	-	1,071

2014					
Belgium	Hong Kong	Luxemburg	Poland	⊟iminations	Group
1,038,137	344	4,357	(123)	(4,357)	1,038,358
14,073	12,661	-	22,891	(36,191)	13,434
(870,132)	(11,423)	(4,237)	(15,498)	40,548	(860,742)
182,078	1,582	120	7,270	-	191,050
(49,886)	(204)	(35)	(1,442)	-	(51,567)
132,192	1,378	85	5,828	-	139,483
1,125	106	-	236	-	1,467
2,390	_	-	142	-	2,532
	1,038,137 14,073 (870,132) 182,078 (49,886) 132,192 1,125	1,038,137 344 14,073 12,661 (870,132) (11,423) 182,078 1,582 (49,886) (204) 132,192 1,378 1,125 106	Belgium Hong Kong Luxemburg 1,038,137 344 4,357 14,073 12,661 - (870,132) (11,423) (4,237) 182,078 1,582 120 (49,886) (204) (35) 132,192 1,378 85 1,125 106 -	Belgium Hong Kong Luxemburg Poland 1,038,137 344 4,357 (123) 14,073 12,661 - 22,891 (870,132) (11,423) (4,237) (15,498) 182,078 1,582 120 7,270 (49,886) (204) (35) (1,442) 132,192 1,378 85 5,828 1,125 106 - 236	Belgium Hong Kong Luxemburg Poland Eliminations 1,038,137 344 4,357 (123) (4,357) 14,073 12,661 - 22,891 (36,191) (870,132) (11,423) (4,237) (15,498) 40,548 182,078 1,582 120 7,270 - (49,886) (204) (35) (1,442) - 132,192 1,378 85 5,828 - 1,125 106 - 236 -

EUROCLEAR BANK SA/NV

Valuation rules As at 31 December 2015

The financial statements of Euroclear Bank SA/NV and its subsidiary undertakings are made up as at, and for the period ending, 31 December. The valuation rules used to draw up the group's accounts and the stand-alone accounts of Euroclear Bank have been prepared in accordance with the Royal Decree of 23 September 1992 ('the Royal Decree'), relating to the annual accounts of credit institutions.

This document contains the specification of the valuation rules in a number of areas, where the Royal Decree allows alternative treatments, where significant management estimates are required, or which are very significant areas in the financial statements.

Those areas are:

- a] Income and expenditure recognition
- b] Provisions for bad and doubtful debts
- c] Provisions for liabilities and charges
- d] Leasing
- e] Intangible fixed assets
- f] Tangible fixed assets
- g] Subsidiary undertakings
- h] Debt securities and equity shares
- i] Sale and repurchase transactions
- j] Pensions and other post-retirement benefits
- k] Derivatives and other financial instruments
- I] Foreign currencies
- m] Fund for general banking risks

al Income and expenditure recognition

Interest income is recognised in the profit and loss account as it accrues.

Dividend income is recognised in the profit and loss account when received.

Fees receivable, which represent a return for services provided, are credited to income when the related service is performed.

Fees receivable, which represent a return for credit risk borne or which are in the nature of interest, are taken to the profit and loss account over the period of the loan, or on a systematic basis over the expected life of the transaction to which they relate.

Expenditure is accounted for on an accrual basis.

b] Provisions for bad and doubtful debts

Specific provisions are made against advances when, in the opinion of the directors, credit risks or economic or political factors make recovery doubtful. The need to adjust provisions is reviewed regularly in the light of actual experience. The provisions which are made during the year (less amounts released and recoveries of bad debts previously written off) are charged against operating profit. Bad debts are written off in part or in whole when a loss has been confirmed.

c] Provisions for liabilities and charges

Specific provisions are recognised where there is a present obligation arising from a past event, there is a probable outflow of resources, and the outflow can be estimated reliably.

d] Leasing

Contracts to lease assets are classified as finance leases where they transfer substantially all the risks and rewards of ownership of the asset to the customer. Contracts not deemed to be finance leases are treated as operating leases.

Rentals payable and receivable under operating leases are accounted for on the straight-line basis over the period of the lease.

e] Intangible fixed assets

Intangible fixed assets are amortised in equal instalments over their estimated useful lives.

f] Tangible fixed assets

Depreciation of tangible fixed assets is provided on a straight-line basis over their estimated useful lives as follows:

- · Leasehold improvements: shorter of economic life and period of lease
- Data processing and communications equipment: 2 to 5 years
- Furniture and fixtures: 7 years

g] Subsidiary undertakings

Investments in Euroclear Bank's subsidiary undertakings are stated in the parent company's stand-alone accounts at cost less dividends received from pre-acquisition reserves and any impairment in value.

h] Debt securities and equity shares

Securities and shares intended for use on a continuing basis in the group's activities are classified as investment securities and are stated at cost less provision for any impairment in value. The carrying value of investment securities is adjusted over the period to maturity to allow for the amortisation of premiums or discounts on an actuarial basis. Such amortisation is included in interest receivable.

Valuation rules (continued) As at 31 December 2015

i] Sale and repurchase transactions

Securities that have been sold with an agreement to repurchase continue to be shown on the balance sheet and the sale proceeds recorded as a deposit. Securities acquired in reverse repurchase transactions are not recognised in the balance sheet and the purchase price is treated as a loan. The difference between the sale price and repurchase price is accrued evenly over the life of the transaction and charged or credited to the profit and loss account as interest payable or receivable.

j] Pensions and other post-retirement benefits

The Company operates a number of post-retirement benefit schemes for its employees, including both defined contribution and defined benefit pension plans.

A defined contribution plan is a pension plan under which the Company pays fixed contributions into a separate entity and has no legal or constructive obligation to pay further contributions if the fund does not hold sufficient funds to pay all employees the benefits relating to employee service in the current and prior periods.

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan.

The liability recognised in the balance sheet in respect of defined benefit plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension liability.

All actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised in the income statement in the period in which they occur.

Past service cost is recognised immediately in the profit and loss account.

The costs of defined contribution plans are charged to the income statement in the period in which they fall due.

The Company provides post-retirement healthcare benefits to their retirees. The expected costs of these benefits are accrued over the period of employment using an accounting methodology similar to that for defined benefit pension plans. Actuarial gains and losses arising from experience adjustments, and changes in actuarial assumptions, are charged or credited to the income statement. These obligations are valued annually by independent qualified actuaries.

k] Derivatives and other financial instruments

Transactions are undertaken in derivative financial instruments (derivatives) for hedging purposes, which include interest rate swaps, futures, options and similar instruments. A derivative is designated as non-trading as there is an offset between the effects of potential movements in market rates on the derivative and the designated non-trading asset, liability or position being hedged. Non-trading derivatives are reviewed regularly for their effectiveness as hedges.

Under a derogation granted by the Belgian Banking and Finance Commission to Article 36 bis, § 2 of the Royal Decree of 23 September 1992, derivatives entered into for the purposes of asset and liability management can be accounted for as hedges.

Non-trading derivatives are accounted for on an accruals basis, consistent with the assets, liabilities or positions being hedged. Income and expense on non-trading derivatives are recognised as they accrue over the life of the instruments as an adjustment to the income or expense of the hedged item.

Where a non-trading derivative no longer represents a hedge because either the underlying non-trading asset, liability or position has been derecognised, or the effectiveness of the hedge has been undermined, it is restated at fair value and any change in value is taken directly to the profit and loss account and reported within 'Profit from (loss on) financial operations'. Thereafter, the derivative is classified as a trading instrument and accounted for accordingly.

In other circumstances, where non-trading derivatives are terminated, any resulting gains and losses are amortised over the remaining life of the hedged asset, liability or position. Unamortised gains and losses are reported within 'Other assets' and 'Other liabilities' on the balance sheet.

Derivatives hedging anticipatory transactions are accounted for on a basis consistent with the relevant type of transaction. i.e. gains and losses are not recognised until the period the anticipated transactions occur. When anticipatory transactions do not actually occur, related derivatives are restated at fair value and changes in value are taken directly to the profit and loss account and reported within 'Profit from (loss on) financial operations'.

I] Foreign currencies

Monetary assets and liabilities denominated in foreign currencies are translated into euros at rates prevailing at the balance sheet date. Profit and loss amounts in foreign currencies are translated into euros at the rates prevailing on the date of the transaction.

Non-monetary assets and liabilities denominated in foreign currencies are translated into euros at historical exchange rates.

Spot foreign exchange contracts are translated into euros at market rates and the resulting gains or losses are taken into the profit and loss account.

The results of branches in foreign currencies are translated at average exchange rates for the year. Exchange differences arising on consolidation of the Company's branches are taken to the profit and loss account.

m] Fund for general banking risks

Additions to, and the uses of, a fund for general banking risks are determined by the Board of directors of Euroclear Bank SA/NV.

Statutory auditor's report

STATUTORY AUDITOR'S REPORT TO THE GENERAL SHAREHOLDERS' MEETING OF EUROCLEAR BANK SA ON THE ANNUAL ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2015

As required by law and the company's articles of association, we report to you in the context of our statutory auditor's mandate. This report includes our opinion on the annual accounts, as well as the required additional statements. The annual accounts include the balance sheet as at 31 December 2015, the income statement for the year then ended, and the disclosures.

Report on the annual accounts - Unqualified opinion

We have audited the annual accounts of Euroclear Bank SA ("the Company") for the year ended 31 December 2015, prepared in accordance with the financial reporting framework applicable to Credit Institutions in Belgium, which show a balance sheet total of '000' EUR 19.756.364 and a profit for the year of '000' EUR 164.451.

The board of directors' responsibility for the preparation of the annual accounts

The board of directors is responsible for the preparation and fair presentation of these annual accounts in accordance with the financialreporting framework applicable in Belgium, and for such internal control as the board of directors determines is necessary to enable the preparation of annual accounts that are free from material misstatement, whether due to fraud or error.

Statutory auditor's responsibility

Our responsibility is to express an opinion on these annual accounts based on our audit. We conducted our audit in accordance with International Standards on Auditing (ISAs). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the annual accounts are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the annual accounts. The procedures selected depend on the statutory auditor's judgment, including the assessment of the risks of material misstatement of the annual accounts, whether due to fraud or error. In making those risk assessments, the statutory auditor considers internal control relevant to the Company's preparation and fair presentation of the annual accounts in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the board of directors, as well as evaluating the overall presentation of the annual accounts.

We have obtained from the board of directors and company's officials the explanations and information necessary for performing our audit.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Unqualified Opinion

In our opinion, the annual accounts give a true and fair view of the Company's net equity and financial position as at 31 December 2015 and of its results for the year then ended in accordance with the financial-reporting framework applicable in Belgium.

Report on other legal and regulatory requirements

The board of directors is responsible for the preparation and the content of the directors' report, for the compliance with the applicable legal and regulatory requirements regarding bookkeeping, the Companies' Code and the Company's articles of association.

In the context of our mandate and in accordance with the Belgian standard which is complementary to the International Standards on Auditing (ISAs) as applicable in Belgium, our responsibility is to verify, in all material respects, compliance with certain legal and regulatory requirements. On this basis, we provide the following additional statements which do not impact our opinion on the annual accounts:

- The directors' report includes the information required by the Companies' Code, is consistent with the financial statements, and does not present any material inconsistencies with the information that we became aware of during the performance of our mandate.
- Without prejudice to formal aspects of minor importance, the accounting records were maintained in accordance with the legal and regulatory requirements applicable in Belgium.
- The appropriation of results proposed to the general meeting complies with the legal provisions and the provisions of the articles of association.
- There are no transactions undertaken or decisions taken in breach of the Company's articles of association or the Companies' Code that we have to report to you.
- In accordance with Article 523 of the Companies' Code, the financial consequences of the decision of the Board of Directors on 12 January 2015 relating to the compensation scheme for the members of the management committee have been adequately disclosed in the 'conflict of interest' section of the annual report on the statutory accounts.

EUROCLEAR BANK SA/NV

• An interim dividend has been distributed during the year in relation to which we have issued the attached report in accordance with legal requirements.

Sint-Stevens-Woluwe, 03 March 2016

The statutory auditor PwC B Repres

Damie Revise

Attached : Statutory Auditor's Report of 4 September 2015 to the Board of Directors of Euroclear Bank SA on the proposed distribution of an interim dividend, issued in accordance with article 618 of the Companies' Code

STATUTORY AUDITOR'S REPORT TO THE BOARD OF DIRECTORS OF EUROCLEAR BANK SA ON THE STATEMENT OF ASSETS AND LIABILITIES IN CONNECTION WITH THE PROPOSED DISTRIBUTION OF AN INTERIM DIVIDEND

Introduction

We have reviewed the accompanying statement of assets and liabilities (hereafter the "Statement") as of 31 July 2015, included in appendix of this report, based on which the Board of Directors of Euroclear Bank SA (hereafter "Company") proposes to distribute an interim dividend of '000 EUR 100.023. The board of directors is responsible for the preparation of this Statement, which should *fairly present, in all material respects, the* Company's capital and financial position in accordance with the financial reporting framework applicable in Belgium. Our responsibility is to express a conclusion on this Statement based on our review, performed in accordance with the related professional standards and by virtue of Article 618 of the Companies' Code.

Scope of Review

We conducted our review of the Statement in accordance with the International Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" (ISRE 2410). A review consists in making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and, consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the *S*tatement does not fairly present, in all material respects, the Company's capital and financial position as of 31 July 2015, in accordance with the financial reporting framework applicable to Banks in Belgium.

Finally, according to the Statement, and the draft Board resolution submitted to us, the proposed distribution would not lead to a decrease in the Company's net assets to an amount lower than the sum of the Company's paid-up capital and those reserves that the Companies' Code or the Company's Articles of Association do not allow to be distributed, as required by Article 617 of the Companies' Code.

This report is prepared solely to address the requirements as set by virtue of Article 618 of the Companies' Code, and may not be used for any other purpose.

Sint-Stevens-Woluwe, 4 September 2015

The statutory auditor PwC Bedrijfsrevisoren BCVBA Represented by

bamien Walgrave Reviseur d'Entreprises

Appendix: Statement of assets and liabilities as of 31 July 2015

(E000) Assets	Notes	2014	2013
. Cash In hand, balances with central banks and post offices		0	539
I. Government securities eligible for refinancing at the central bank		4.361.111	2.542.486
A mounts receivable from credit institutions I A. On demand B. Other amounts receivable (at fixed term or period of notice)		20.330.013 2.855.047 17.474.966	15.937.366 2.415.968 13.521.398
V. Amounts receivable from customers	81	5.435.726	4.280.116
Bonds and other fixed-income securities A. Of public issuers B. Of other issuers		375.428 167.058 208.370	1.027.948 677.860 350.088
/I. Corporate shares and other variable-income securities	IV		
III. Financial fixed assets A. Participating interests in affiliated enterprises B. Participating interests in other associated enterprises C. Other shares or stakes constituting financial fixed assets D. Subordinated loans with affiliated enterprises and with other associated enterprises	V, VI	35.741 27.699 8.042	35.127 27.699 7.428
/III. Formation expenses and intangible fixed assets	VII	11	12
X. Tangible fixed assets	VIII	3.476	3.838
C. Own shares		-	
G. Other assets	IX	26.706	18.779
III. Deferred charges and accrued income	x	95.682	107.783
fotal assets		30,663,894	23,953,994

(€'000)	Notes	2014	201
Liabilities			
I. Amounts payable to credit institutions	XI	21.337.808	18.289.035
A. On demand		20.553.357	16.620.153
B. Resulting from refinancing by rediscounting of trade bills		-	
C. Other amounts payable at fixed term or period of notice		784.451	1.668.882
II. Amounts payable to customers	XII	7.599.678	3.888.694
A. Savings deposits			
B. Other amounts payable		7.599.678	3.888.694
1. On demand		7.488.658	3.799.183
 At fixed term or period of notice Resulting from refinancing by rediscounting of trade bills 		111.020	89.511
III. Debt securities in issue	XIII	-	
A. Bills and bonds in circulation B. Other			
B. Other		-	
V. Other amounts payable	XIV	123.590	160.272
V. Accrued charges and deferred income	XV	59.094	79.784
VI. A. Provisions for risks and charges		6.427	6.109
 Pensions and similar obligations 		758	881
2. Fiscal charges		· ·	
Other risks and charges	XVI	5.669	5.220
B. Deferred taxes		· ·	
VII. Fund for general banking risks		-	
VIII. Subordinated liabilities	XVII	-	102.505
Shareholders' equity		1.537.297	1.427.596
X. Capital	XVIII	285,497	285.497
A. Called up share capital	200	285.497	285.497
B. Uncalled capital		-	200.407
X. Share premium account		558.008	558.008
I. Revaluation reserve			
(II. Reserves		94.048	94.047
A. Legal reserve		28,550	28.549
B. Non available reserve		20.000	20.041
1. For own shares			
2. Others			
C. Untaxed reserve		· · ·	
D. Available reserve		65.498	65.498
(III. Profit (loss (-)) carried forward		599.744	490.043

EUROCLEAR BANK SA/NV

FORM CA-1

Attach as **Exhibit I** the addresses of all offices in which clearing agency activities are performed by registrant, or for registrant by any person listed in response to item 4, and identify the nature of the clearing activities performed in each office listed.

* * *

Euroclear Bank engages in Clearing Agency Activities primarily in its main and secondary offices, which are located at the following addresses:

Euroclear Bank SA/NV 1 Boulevard du Roi Albert II 1210 Brussels, Belgium

Euroclear Bank SA/NV 3 Place du Luxembourg 1420 Braine l'Alleud, Belgium

Euroclear Bank also engages in Clearing Agency Activities through its branches in the following locations:

Euroclear Bank SA/NV (Hong Kong Branch)

Suite 2001-2003 & 2005 20F Central Plaza 18 Harbour Road Wanchai, Hong Kong

Euroclear Bank SA/NV (Spółka Akcyjna)

ul. Puszkarska 7H 30-644 Kraków, Poland

Euroclear Bank's Hong Kong branch provides operational services, technical support and client sales and relationship management services to the Company's clients during the Asia-Pacific region's business hours. Specifically with respect to operational services, the Hong Kong branch handles the following functions: income services; settlement support; new issue services; cash correspondent investigation; FundSettle services; collateral management and money transfer reconciliations; tax and corporate actions services. The Hong Kong branch also handles certain Treasury Division functions (*e.g.*, managing day-to-day cash flows and liquidity) and compliance matters (*e.g.*, undertaking compliance testing and other reviews).

The Kraków branch also provides operational services, including the following: income services; collateral management; new issue services; corporate actions services; transaction

processing; EquityReach services; FundSettle services; settlement support; tax operations; fixed income services and investigations and reconciliations.

Euroclear Bank also maintains a representative office in New York City that provides only commercial support and other limited activities as permitted by its authorization as a representative office. No Clearing Agency Activities are performed in this office.

Euroclear Group maintains two data centers in the Paris metropolitan area. Production activity for Euroclear Group activities (including the Clearing Agency Activities) is transferred between these sites at least six times a year. A third data center is located hundreds of kilometers from the primary and secondary sites and provides regional disaster recovery capability.

The names and locations for depositories and cash correspondents used by Euroclear Bank to hold securities as of the date of this application (including Eligible U.S. Government Securities and U.S. Equity Securities) or currency in the U.S. are attached as <u>Exhibit I-1</u>.

In addition as described in greater detail in <u>Exhibit S-1</u>, DTC will act as depository for U.S. Equity Securities and other DTC-eligible securities in connection with the U.S. Equities Proposal, when the IMS service of DEGCL is launched. DTC is located at the following address:

The Depository Trust Company 55 Water Street New York, New York 10041

Depositories and Cash Correspondents Located in the United States

Below is a list of depositories and cash correspondents used by Euroclear $Bank^1$ to hold securities as of the date of the Form CA-1 application (including Eligible U.S. Government Securities and U.S. Equity Securities) or currency in the United States:

Depositories

JPMorgan Chase Bank 270 Park Avenue New York, New York 10017

Cash Correspondents

Citibank N.A. 388 Greenwich Street New York, New York 10013

JPMorgan Chase Bank 270 Park Avenue New York, New York 10017

The Bank of New York 225 Liberty Street New York, New York 10286

¹ Each capitalized term used in this <u>Exhibit I-1</u> has the meaning set forth in the attached narrative responses to Exhibits A-S of Form CA-1.

EUROCLEAR BANK SA/NV

FORM CA-1

Attach as **Exhibit J** narrative descriptions of each service or function performed by the registrant.

* * *

To utilize the Euroclear System services, Euroclear Bank participants are required to open and maintain securities accounts (referred to as "Securities Clearance Accounts") and current cash accounts on the books of Euroclear Bank (collectively, "EB Accounts"). The general Terms and Conditions, Supplementary Terms and Conditions and Operating Procedures governing the use of the Euroclear System are attached in Exhibit E.

Participants are able to utilize various services through the Euroclear System, including clearance and settlement services that are not part of the Clearing Agency Activities. This <u>Exhibit J</u> contains a description of each of the Euroclear System's primary services. One of these services, Euroclear Bank's collateral management services ("**EB-CMS**"), will be directly affected by the U.S. Equities Proposal. As such, the following description provides a general overview of the Euroclear System's primary services (some of which are not part of the Clearing Agency Activities), together with greater detail related to the EB-CMS. The agreements and other documentation governing the use of the EB-CMS and related services are attached in <u>Exhibit P</u>. An explanation of the interaction between the EB-CMS and the U.S. Equities Proposal is provided in <u>Exhibit S-1</u>.

Securities Settlement

The Euroclear System offers settlement services for OTC and exchange-listed securities, including bonds, equities, money market instruments, government securities and funds. In the Euroclear System, settlement can take place either against payment or free of payment. The Euroclear System operates a Delivery Versus Payment (DVP) model 1 system (*i.e.*, providing for simultaneous settlement of securities and associated cash transfers with immediate settlement finality for internal and Bridge instructions). For cross-border instructions, local rules apply.

Securities Lending and Borrowing

Euroclear Bank's securities lending and borrowing program is designed to increase settlement efficiency. The service provides a mechanism to allow borrowers to obtain securities immediately when required for delivery, as necessary. The borrowing and lending services therefore reduce the risk of settlement failure.

As an additional securities lending program, Euroclear Bank provides a function that enables participants to lend or borrow securities in exchange for collateral. Borrowers negotiate the terms of any loan with Euroclear Bank and must provide collateral for every loan.

Custody and Asset Servicing

The Euroclear System's custody services encompass a range of services, including securities safekeeping, corporate actions and proxy voting, payment of coupon interest, dividends and redemptions, market claims and administration of related tax services. The Euroclear System also offers services related to new issues, including the acceptance of eligible securities and the distribution of new issues through Euroclear Bank either against or free of payment.

Issuer CSD

Euroclear Bank acts as primary place of deposit for Eurobonds and other international securities. These type of securities are always issued on a physical basis either under the form of a global physical certificate (global note) representing the whole issue or under the form of individual notes (marginal share of the issues) and immobilized by the respective depository. Different custody structures can be chosen by the issuer (or its agent) for these securities either in bearer or registered form. Depending on the structure chosen (*i.e.*, New or Classical Global Notes), issued securities are eligible as collateral for Eurosystem monetary policy and intraday credit operations. About 200,000 national and international securities are accepted in Euroclear Bank, including debt securities, depository receipts, equities, warrants and investment funds.

Treasury and Credit

Euroclear Bank grants credit facilities to support its participants' operations in the Euroclear System, including securities settlement, borrowing and money transfer operations. Euroclear Bank's money transfer services are available both as a service as such and to support the cash management activities required for settlement and corporate actions. Euroclear Bank maintains cash accounts in more than 50 currencies.

Investment Funds Services

Euroclear Bank offers an automated investment fund platform that provides to its participants order routing and processing, corporate action services and related reporting.

Collateral Management Services

Euroclear Bank offers the EB-CMS, which provides collateral management services to parties to bilateral arrangements that require the posting of collateral by one party (collateral giver) in favor of the other party (collateral taker) in order to secure a credit exposure arising under such arrangements (and particular transactions thereunder). The terms of such bilateral arrangements and the related collateral needs (including the credit exposure, collateral requirements and

collateral terms) are negotiated between the parties independently of Euroclear Bank and have been agreed to prior to using the EB-CMS. After such arrangements are agreed, the relevant Euroclear Bank participants enter into an agreement with Euroclear Bank to provide the collateral management services (an "EB-CMS Services Agreement"). Euroclear Bank participants may use the EB-CMS to manage their outstanding collateral obligations under the arrangements and EB-CMS Services Agreement. EB-CMS include the following services:

- collection, validation and storage of information regarding the terms of the collateral obligation;
- independent verification that the collateral proposed and provided by the collateral giver meets the terms reported by the counterparties and stored on the EB-CMS for the duration of the collateral obligation;
- monitoring and reporting on the status of the collateral obligations, based on information provided by the counterparties;
- generating instructions which are communicated to Euroclear Bank's settlement processing infrastructure to transfer collateral between the EB Accounts of collateral giver (which is generally the giver's primary settlement account) and the EB Accounts of collateral taker (which will be a segregated account only for holding collateral, referred to below as the "Collateral Account");
- interacting with Euroclear Bank's other primary services to facilitate asset servicing of collateral (*e.g.*, processing and correctly allocating proceeds of corporate actions in accordance with parameters set by the counterparties and the EB-CMS procedures);
- optionally, using the "AutoSelect" feature to automatically identify, propose and select asset lines to be used as collateral (including initial allocations, top-ups, withdrawals or substitutions), within parameters set by the relevant EB-CMS users; and
- optionally, automatically facilitating re-use of collateral by a collateral taker through the EB-CMS, if permitted by the bilateral agreement between the counterparties.

Instructions to move collateral that are generated by the EB-CMS are exclusively processed by Euroclear Bank's settlement processing infrastructure, and are subject to the same protocols and validation rules that apply to normal settlement activities in EB Accounts. As further described in Exhibit S-1, these protocols and validation rules currently include procedures that prevent receipt and use of U.S. Equity Securities by U.S. Participants for any purpose in EB Accounts.

Euroclear Bank also provides certain other services to complement its EB-CMS, including the open inventory sourcing ("**OIS**") services, the RepoAccess service and the collateral allocation

interface service. The OIS services enable its participants to use assets they hold with their domestic agents as collateral for multiple types of transactions in Euroclear Bank. Through its RepoAccess service, Euroclear Bank enables a participant to outsource the set-up of required bilateral master agreement to Euroclear Bank, within the collateral terms (or tolerances) set by the participant with its counterparties. The collateral allocation interface service supports the automatic allocation, settlement and monitoring of collateral between a collateral giver and a collateral taker.

EUROCLEAR BANK SA/NV

FORM CA-1

Attach as **Exhibit K** a description of the measures or procedures employed by registrant to provide for the security of any system which performs the functions of a clearing agency. Include a general description of any operational safeguards designed to prevent unauthorized access to the system (including unauthorized input or retrieval of information for which the primary record source is not hard copy). Identify any instances within the past year in which the described security measures or safeguards failed to prevent unauthorized access to the system and describe any measures taken to prevent a recurrence of any such incident. Describe also any measures used to verify the accuracy of information received or disseminated by the system.

* * *

Euroclear Bank does not segregate an IT infrastructure for its Clearing Agency Activities that is separate from the IT infrastructure that is used for its other clearance and settlement activities. As such, this <u>Exhibit K</u> contains a description of the measures and procedures employed by Euroclear Bank to provide for the security of its clearance and settlement systems, including systems that may not directly relate to the Clearing Agency Activities.

In certain instances, the systems, resources, facilities and personnel that comprise Euroclear Bank's IT infrastructure are provided pursuant to intercompany services agreements between Euroclear Bank and ESA or other Euroclear Group affiliates, and references in <u>Exhibit K</u> and <u>Exhibit M</u> to systems, resources, facilities and personnel are, where applicable, to activities that are supplied to Euroclear Bank pursuant to the intercompany services agreements. The intercompany services agreements are attached hereto as <u>Exhibit C-2</u> and <u>Exhibit C-3</u>.

Physical Security

General Policies and Procedures

The Euroclear Group Operational Risk Board Policy (attached as <u>Exhibit K-1</u>) comprises policy goals for corporate and information security. In addition, more detailed procedures have been adopted at various geographic locations to take local conditions into account. The objective of these policies is to prevent unauthorized physical access, damage and interference to business premises and information and to prevent loss, damage, theft or harm to assets (including personnel) and interruption to Euroclear Bank's activities. These policies require critical or sensitive business information processing facilities to be housed in secure areas, protected by a defined security perimeter, with appropriate security barriers and entry controls.

When compliance with any security standard outlined in the relevant policies and procedures is not achieved, a formal risk assessment is to be made and an exception is reported either for mitigation or for acceptance by senior management. Change management and project management policies and processes require that risks related to physical security be identified, assessed and mitigated in compliance with the Operational Risk Board Policy.

Physical Security for Data Centers

With respect to the data centers hosting Euroclear Bank systems, physical access is restricted to specified employees routinely employed in the data centers, and controlled by an electronic badge and a secondary authentication control mechanism (PIN code or biometric). Prior notification is required for all visitors to data centers, who are escorted throughout their visit. Access key cards are issued to authorized employees using formal procedures and on a need-to-have basis. Security cameras monitor access to the building as well as other critical areas. Any significant security incidents are formally reported to Euroclear Bank management. Areas housing critical technology assets are protected by the following environmental controls:

- fire and water detection mechanisms;
- fire suppression mechanisms;
- uninterruptible power supply (UPS) and generator systems;
- temperature and humidity monitoring; and
- increased housing and cabling robustness.

The environmental conditions are monitored via a centralized alarm system in the security room. Maintenance and testing of the computer and environmental management equipment are done on a regular basis.

Information Security

General Policies and Procedures

As noted above, the Euroclear Group Operational Risk Board Policy sets forth policy goals for information security, which includes identifying, monitoring, assessing and managing information security vulnerabilities and threats on an ongoing basis. Information security is defined within this policy as the protection of critical assets by preserving the following:

- confidentiality, by ensuring that access to critical assets is not made available to unauthorized individuals, entities or processes;
- integrity, by ensuring that critical assets are not removed, corrupted, damaged or harmed; and
- availability, by ensuring that critical assets are available when required.

Euroclear Group also has implemented the Information Security Management System Management Resolution (attached as <u>Exhibit K-2</u>), which describes how information security is organized, managed, implemented and monitored. This Management Resolution outlines the roles and responsibilities for various information security managers and other personnel. In addition, this Management Resolution prescribes more detailed information security control principles and measures to protect critical assets of Euroclear Bank and its participants. Information security is addressed through the implementation of controls in four domains:

- physical and environmental security;
- personnel security;
- logical security; and
- business continuity management.

Euroclear Bank periodically assesses whether its information security protocols properly conform to various internationally recognized standards and reference frameworks.

Project Management

Euroclear Bank's project management framework mandates risk assessments to be done before implementation starts and before delivery to production. At these check points, information security requirements and residual risks are assessed and appropriate mitigation actions are initiated, if needed.

All changes to the production environment (including hardware, software and network devices) must be formally approved before implementation. Changes to the production environment are only made subject to the following standardized processes and controls:

- Changes (including to hardware, network devices and software) are recorded electronically through a change request form that must be approved by authorized staff.
- A test strategy is defined well in advance and approved, determining the level of testing appropriate to the change or project.
- The production launch process is controlled by the Change Advisory Board, which is a committee specifically designated to review changes and, as appropriate, verify that an impact analysis was conducted and that all required approvals are present. Documentation and approvals are recorded in the change management system.
- A verification is done to help ensure that earlier identified needs relating to required user training, changes in operational procedures and other support considerations have been adequately addressed.

- A group independent from the development team performs the transfer of executables into the production environment using automated tools that are only available to authorized individuals.
- The tools provide a complete audit trail of all transfers into production.

In case of system blockage or non-availability, emergency changes may be implemented following strict procedures and authorization. Changes performed during an emergency are reviewed by the domain experts to make sure they are properly documented and are in line with coding and infrastructure standards.

Internet-facing applications are reviewed before launch by external experts to help ensure security and robustness. Vulnerability assessment and penetration tests are conducted on a regular basis with the support of specialized providers.

More information related to physical security and information security is available in Section IV, Principle 17 of the Disclosure Framework – Observance by Euroclear Bank of the CPMI-IOSCO Principles for Financial Market Infrastructures, which is attached hereto as <u>Exhibit K-5</u>. More information also is available in Section 5 of the 2014 Euroclear Bank ISAE 3402 Report, which is attached hereto as <u>Exhibit K-6</u>.

Please also see Eplc's most recent Pillar 3 Disclosure document, which is attached hereto as Exhibit K-7.

Exhibit K-5



Post-trade made easy

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Disclosure Framework

Observance by **Euroclear Bank** of the CPMI-IOSCO Principles for Financial Market Infrastructures

30 October 2015

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Euroclear Bank DISCLOSURE FRAMEWORK 2015

Responding institution: Euroclear Bank SA

Jurisdiction(s) in which the FMI operates: Belgium

Authority(ies) regulating, supervising or overseeing the FMI: National Bank of Belgium and Financial Services & Market Authorities

The date of this disclosure is **30/10/2015**.

This disclosure can also be found at www.euroclear.com

For further information, please contact **Benedicte Waerseggers – tel: 00 32 2 326 1496.**

I. EXECUTIVE SUMMARY

General organisation

Euroclear Bank has

- a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities.
- clear and transparent **governance arrangements** that promote its safety and efficiency and support the stability of the broader financial system.
- policies, procedures and systems to identify, monitor and manage the range of **risks** it faces thanks to adequate policies (including back-tests) and solid internal controls systems fed by the three lines of defense.

Credit and liquidity risk management

Euroclear Bank

- has no history of **credit** losses due to client defaults. Its credit exposures are managed through credit limits and full collateralisation.

- covers its clients' credit exposures with adequate **collateral**. The collateral valuation model of Euroclear Bank is regularly back- and stress tested.

- monitors its clients' collateral portfolio composition, including concentration, on a regular basis.

Settlement

- Both the points of **settlement finality** and irrevocability are clearly defined in Euroclear Bank's *Operating Procedures*. Settlement can be done internally, externally or via the Bridge with Clearstream Banking Luxembourg.

- Money settlement in all eligible settlement currencies is carried out in commercial bank money in the books of Euroclear Bank; which is, as reconfirmed by Fitch in October 2015, an AA+ rated limited-purpose bank.

- The *Operating Procedures of the Euroclear System* clearly state the specific rules in relation to the receipt and delivery of **physical instruments**. Euroclear Bank manages the risk related to physical settlement through adequate due diligence and insurance.

Central securities depositories and exchange-of value settlement systems

- Euroclear Bank has adequate rules, procedures and controls to safeguard the rights of the securities issuers and holders.

- It prevents unauthorised creation or deletion of securities.

- The majority of securities movements and balances are reconciled on a daily basis. Debit balances or overdrafts are prohibited.

- All securities that are settled in the system are immobilised or dematerialised.

- Euroclear Bank segregates its own securities from those of its clients in its own books and/or at the level of Euroclear Bank's Depositories.

- New services go through an approval process and risk assessment before they can be offered to clients.

- The Euroclear system is a Model 1 DVP system: internal and Bridge instructions are settled between clients on a trade-by-trade (gross) basis, with finality of the transfer of securities from the seller to the buyer occurring at the same time as the finality of transfer of funds from the buyer to the seller. For cross-border instructions, the local rules apply.

Default management

- Euroclear Bank has adequate rules and procedures to cope with a client default.
- These rules have been tested life in several bankruptcy/insolvency cases of Euroclear Bank clients.
- Relevant aspects of the default rules and procedures are publicly disclosed.

General business and operational risk management

- Euroclear Bank has robust management and control systems to identify, monitor and manage **general business risks**.

- Euroclear Bank has more than sufficient high quality liquid net assets to cover
 - six months of current operating expenses and
 - the time needed to implement the recovery plan, which was approved by the Board in October 2015. This recovery plan includes options on raising additional capital in case of need.

- Euroclear Bank holds its own and clients' assets in **custody** at supervised and regulated entities and ensures via a legal opinion that the ownership rights for its clients' and own assets are adequately protected.

- The total stock of securities that Euroclear Bank holds is diversified over several 'Common Depositories' (for Eurobonds) and more than 40 local Depositories.

- Euroclear Bank's capital is **invested** in debt securities with a rating of at least AA+.

- Euroclear Bank has a thorough business continuity management and plans in place, based on three data centers, which allow resuming operations within two hours following local disasters and within four hours following regional disasters.

Access

- Euroclear Bank's **admission** criteria are risk based and allow for fair and open access. They have recently been updated to take into account the implementation of the Settlement Finality Directive and CSDR.

- These criteria aim to minimise financial and other risks to Euroclear Bank, the system and its users.

- Euroclear Bank ensures that clients continue to fulfil these requirements on a yearly basis via the 'sponsorship review' process.

- Euroclear Bank does not allow for **tiered participation** arrangements in its system as contractual relationships exist only with direct clients.

Links

- Euroclear Bank has processes in place to identify potential sources of risk arising from market **links**. Such as a risk assessment on the local market and the candidate agents, when opening a link, continuous monitoring thereafter and an in-depth market link review every three years.

- Euroclear Bank has an interoperable link with Clearstream Banking Luxembourg that generates specific credit exposures and adapted monitoring procedures between both international CSDs.

Efficiency & communication

Being user-owned and user-governed, the Euroclear group is committed to meet the needs of its clients and the markets it serves **efficiently and effectively**.

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Euroclear Bank also monitors

- the evolutions in the market and conducts an annual client survey
- its efficiency and effectiveness via a Balanced Scorecard (including financial, business operational, risk and other objectives) and various Key Performance Indicators and Key Risk Indicators on an ongoing basis

Euroclear Bank uses internationally accepted **communications** standards.

Transparency

- Euroclear discloses a lot of information on the company itself, the services it provides, etc. on its website.
- This allows its clients to accurately identify the risks associated with the use of the system.

- Euroclear Bank has recently conducted a complete review of its *Operating Procedures* to increase the ease of understanding of the rules and risks that clients face.

- Euroclear Bank publishes, on a yearly basis, a Disclosure Framework and an ISAE 3402.

Since the beginning of 2015, Euroclear Bank is adapting all its governance, controls, policy and procedures to become compliant with CSDR. The IT developments to become compliant with Settlement Discipline, Record Keeping and Banking parts start as from Q4 2015.

II. SUMMARY OF MAJOR CHANGES SINCE THE LAST UPDATE OF THE DISCLOSURE

Euroclear Bank has continued to invest in regulation-driven initiatives that not only ensure compliance with the market infrastructure regulatory framework but also support cost mutualisation and open access. Clients and other market clients seek enhanced visibility, greater collateral mobility and access to liquidity, as well as operating safety, speed and resilience through higher levels of process automation.

Operating in an evolving post-trade environment

The post-trade environment is evolving, driven by factors including new regulation.

Wave 1 of the European Central Bank's Target2-Securities (**T2S**) platform for euro-denominated CSDs was successfully launched on 22nd June: Euroclear Bank adapted its links, as from the launch, to Greece and Switzerland (new settlement deadlines and format adaptation). The Italian CSD Monte Titoli launched on 30th August 2015; Euroclear Bank was ready with the adaptation as from the initially planned launch date. EB is now working on the following T2S waves.

Euroclear Bank is also working on the compliance with provisions of the Central Securities Depositories Regulation (**CSDR**), which came into force in September 2014. It has delivered a first draft filing to NBB on 30/10/2015. The final filing to obtain the license is expected end of July 2016.

Euroclear Bank delivered end September 2015– together with Clearstream Banking Luxemburg- Phase 1 of the **Bridge** settlement enhancements, which provides greater flexibility and increased efficiency for clients. Phase 1 brought significant improvement to input deadlines, in particular for core currencies, more efficient settlement turnaround time in the afternoon and the extension of interoperability between the two ICSDs at the end of the day.

Euroclear Bank is continuously improving its servicing offering in response to client needs. Enhancements in 2015 include additional features to the new web based client interface **Easy Way**. It includes enhanced reporting of elective corporate actions and reporting of proceeds, features to instruct and monitor collateral management operations, launch of EasyWay Settlement and some T2S- linked enhancements.

Collateral management

In 2012, Euroclear Bank launched the Collateral Highway - the world's first open architecture global infrastructure for collateral management. The Collateral Highway has continued to grow in 2014, driven by demand by market clients for a neutral, inter-operable, venue-agnostic utility to source and mobilise collateral across geographical borders and time zones. In 2014, average daily collateralised outstandings reached €883 billion, representing 12% year-on-year growth. Over the past year, the range and involvement of market clients on the Collateral Highway have continued to expand, with new clients including Standard Chartered and BNP Paribas Securities.

Following our 2013 agreement with the Depository Trust & Clearing Corporation (DTCC), the joint venture company DTCC-Euroclear GlobalCollateral Ltd was launched in September 2014. Building on our leadership

position in collateral management, the joint venture seeks to deliver unprecedented operating efficiencies to market clients and improve the stability and soundness of financial markets.

GlobalCollateral Ltd. will enable the automatic transfer and segregation of collateral based on agreed margin calls relating to over-the-counter derivatives and other collateralised contracts. This joint venture will contribute to the Collateral Highway interoperability objective by connecting two of the largest pools of collateral. It will also contribute significantly to reducing settlement risk, increasing transparency around collateral processing on a global basis and providing maximum asset protection for all clients.

Euroclear continued to deliver key components of the Collateral Highway in 2014 and 2015, including:

• Open Inventory Sourcing (OIS) technology was expanded to include equities, broadening the domestic market asset classes that clients can use for international financing via Euroclear Bank.

• Our triparty service for Eurosystem cross-border financing was launched, which followed the ECB's further relaxation of its repatriation principle. This enables clients to use our full range of triparty services to mobilise assets held in Euroclear Bank or the ESES CSDs to post collateral to the National Bank of Belgium or Banque de France, when accessing liquidity at the central bank of their home country.

• €GCPlus was launched, in collaboration with LCH. Clearnet and Banque de France, providing risk managers with a secure and streamlined inter-bank liquidity management tool that blends the efficiency of triparty repo with the safety of central bank money and a substantial reduction in use of balance sheet with a Central Counterparties (CCP)-cleared product. Using baskets of ECB-eligible securities, €GCPlus was launched to meet the demand for access to more high quality liquid assets largely driven by new capital requirement regulation.

• The Collateral Highway extended its operating hours in order to cover the full working day in Asia, enabling This enables them to offer a more global collateral management service. In 2015, we continue to on-board agents, CSDs, CCPs and central banks around the world and to upgrade infrastructure and services to better serve the needs of clients, in line with the implementation of regulatory reforms that affect our clients' business models.

Serving the funds industry

Euroclear is one of the largest providers of fund processing services in Europe with over 11.3 million orders routed through our platforms in 2014. We offer a single entry point for the effective distribution of cross-border, offshore and domestic funds, providing significant opportunities for cost and risk reduction.

Euroclear Bank also entered into a cooperation agreement with SIX Securities Services in September 2014, the Swiss international post-trade services provider, to provide more cost- and risk-efficient fund services to Swiss investors through FundSettle. Mutual clients benefitted from market proximity, with SIX covering 17 primarily Swiss market securities and clients, combined with our extensive global network of over 500 transfer agents.

Euroclearability - creating access to developing markets

Open access to the international capital markets is an important enabler for macroeconomic growth. Domestic issuers in growth markets around the world seek wider funding opportunities than may currently exist, in order to support local development. Likewise, global investors are looking for ways to get closer and more substantively participate in growth markets to benefit from higher and more diversified returns. To this end, Euroclear Bank made further progress in strengthening its franchise around the world, with continued success in bringing 'euroclearability' to domestic capital markets that might otherwise have limited access to global clients.

In June 2015 Euroclear Bank and China Construction Bank (CCB) signed a Memorandum of Understanding in the presence of the prime ministers of China and Belgium, to further develop the offshore Renminbi (RMB) products across the world via the EB platform. Euroclear Bank has also penned an account with Hong Kong's Central Securities Depositary, which will give our clients the possibility to access China domiciled funds through Euroclear's automated fund processing platform – (FundSettle) under the Mainland Hong Kong Mutual Recognition of Funds (MRF) initiative. Furthermore, in February 2015, Euroclear Bank and Peru's Ministry of Economy and Finance have signed a Memorandum of Cooperation committing to cooperate in the development of a new international link for Peru.

Euroclear is also supporting the ETF industry to overcome inefficiencies linked to market fragmentation, by promoting an international ETF structure. Under this structure, both new issues and settlement of transactions can take place in an international CSD. In 2014 and 2015 Euroclear made further progress, with two major players converting domestically issued ETF into the international structure. During the first half of 2015, Euroclear's international ETF structure was selected by the China Construction Bank (CCB) for the first ever RMB-denominated money market international ETF, with listings completed in London and Paris.

III. GENERAL BACKGROUND ON THE FMI

A. General description of the FMI and the markets it serves

Euroclear Bank provides multi-currency settlement and custody services for domestic and international securities to a wide range of international clients, which are mostly banks, custodians, broker-dealers and central banks. In addition to its core settlement and custody services, Euroclear Bank offers related services such as new issues distribution, securities lending and money transfer. Acting as a limited purpose bank, Euroclear Bank provides its clients with a limited range of banking services directly bound to the settlement activity.

Description of the FMI's basic business processes and activities

<u>New issues</u>

Euroclear Bank acts as primary place of deposit for Eurobonds and other international securities. These type of securities are always issued on a physical basis either under the form of a global physical certificate (global note) representing the whole issue or under the form of individual notes (marginal share of the issues) and immobilised by their Depository.

Different custody structures can be chosen by the issuer (or its agent) for these securities either in bearer of registered form. Depending on the structure chosen (i.e. New or Classical Global Notes), issued securities are eligible as collateral for Eurosystem monetary policy and intraday credit operations.

All newly issued global bearer form securities with the ICSDs as primary place of deposit - in order to be ESCB eligible - should be issued in New Global Note (NGN) form, as of 1 January 2007, and deposited with either Euroclear Bank or Clearstream Banking Luxembourg as ICSD Common Safekeeper.

In accordance with Eurosystem rules, the NGN is serviced by a Common Service Provider (in charge of providing asset services to the ICSDs) and a Common Safekeeper (in charge of safekeeping the NGN throughout its life). Similarly, new global form registered securities issued after 1 October 2010 have to be safekept by and registered in the name of a nominee of the ICSD as Common Safekeeper and serviced by a Common Service Provider in order to be ESCB eligible. Newly issued securities with a Classical Global Note (CGN) structure, represented by a bearer or registered form Global Note that is deposited with a Common Depository on behalf of the two ICSDs that provides safekeeping and asset servicing for such securities, are no longer ESCB-eligible (whereas older CGN issues remain ESCB eligible until their maturity).

Securities clearing & settlement

About 200,000 national and international securities are accepted in Euroclear Bank, including debt securities, depository receipts, equities, warrants and investment funds.

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Securities Clearing

Euroclear Bank offers clearing services through the Euroclear Trade Capture and Matching System (ETCMS). The service includes automated matching and routing of trade confirmations to the central counterparty (currently LCH.Clearnet group).

ETCMS has been developed to facilitate the collection of trades in the frame of cash and repo netting.

The ETCMS service includes:

- o real-time validation of the confirmation messages;
- o real-time matching of trade details of the counterparties' messages; and
- o real-time sending of the matched instructions to the Central Counterparty
- access to:
 - RepoClear for Over-The-Counter (OTC) cash and repurchase transactions (LCH.Clearnet Ltd.)
 - Clearnet for OTC cash and repurchase transactions (LCH.Clearnet SA).

Securities Settlement

Settlement services are Euroclear Bank's main activity.

The full range of internationally traded securities are eligible for transfer and settlement. This includes debt securities, equities, convertibles, warrants, fund shares and Depository Receipts.

Settlement can take place:

- **against payment** A simultaneous exchange of cash, in any of the more than 50 currencies accepted, and securities; or
- free of payment The delivery is free of payment or the exchange of cash is arranged in a different way.

Securities settlement transaction instructions are:

- o submitted to Euroclear Bank directly by clients or certain trading systems; or
- o generated automatically based on the options the client has selected.

Euroclear Bank applies the Delivery Versus Payment (DVP) model 1, i.e. simultaneous settlement of securities and associated cash transfers with immediate settlement finality for internal and Bridge instructions. For cross-border instructions, local rules apply.

As it does not have access to central bank accounts/facilities in all settlement currencies, Euroclear Bank makes use of a large network of cash correspondents to offer multi-currency services to their international clients. Euroclear Bank has only direct clients (no tiering) and many clients do not have access to central bank money themselves. For the four main currencies (EUR, USD, GBP and JPY), Euroclear Bank has several cash correspondents. The cash correspondents act as liquidity providers and are the link between Euroclear Bank and the national payment system in the country of the currency.

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Money Transfer

Money transfer services are available in Euroclear Bank both as a service as such and to support the cash management activities required for settlement and corporate actions. These services enable clients to manage Cash Accounts maintained in any of the more than 50 different currencies.

Cash Accounts with Euroclear Bank represent:

- o actual cash deposits and claims against Euroclear Bank; or
- o actual cash advances and claims against clients.

Euroclear Bank in turn maintains a network of correspondent banks that provide access to the national cash clearing systems. These correspondent banks are major local banks chosen for their high quality service and creditworthiness. Euroclear Bank is also a direct member of the Belgian Real Time Gross Settlement (RTGS) system, which provides direct access to the Trans-European Automated Real-time Gross settlement Express Transfer (TARGET2) system.

Clients' money transfer instructions are executed through:

- o the real-time process, and
- o for incoming or outgoing payment, one of Euroclear Bank's Cash Correspondents.

The money transfer system also provides validation and communication services.

Securities Lending & Borrowing

The Securities Lending and Borrowing Programme is designed to increase settlement efficiency. For:

- borrowers, the service provides a mechanism to obtain securities immediately when required for delivery, if they otherwise lack such securities in Euroclear Bank. Borrowers therefore reduce the risk of settlement failure for themselves and their counterparties.
- lenders, the programme provides a mechanism to increase security yields through lending fees. Lent securities remain included as collateral to secure lenders' credit arrangements, if such securities are normally pledged, but are excluded when calculating lenders' safekeeping fees.

The Securities Lending and Borrowing Programme is governed by:

- the Supplementary Terms and Conditions governing the Lending and Borrowing of Securities through Euroclear.
- o section 22 of the *Operating Procedures*.

The service is an integrated component of the batch and real-time process. clients must explicitly subscribe to the service by completing various subscription forms, indicating options selected and securities subject to lending and borrowing. Borrowers of securities must also complete credit documentation with Euroclear Bank and define a borrowing cap.

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The classes of securities eligible for lending and borrowing are identified in Euroclear Bank documentation. Securities are usually eligible for the programme, except if regulations in the jurisdiction of issue do not permit the lending and borrowing of securities.

Under the programme, securities available for lending are made available to Borrowers in an aggregated pool. The securities available within the pool are allocated according to defined rules. There are no direct links between a particular Borrower and a particular Lender. A Borrower's identity is never revealed to a Lender and vice versa. Euroclear Bank arranges for the borrowing and lending of securities on behalf of Borrowers and Lenders, and serves as an agent ('commissionaire' in Belgian Law) between the parties to ensure the confidentiality of clients' positions.

Triparty Collateral Management services

Euroclear Bank offers collateral management services to clients to collateralise exposures across products, instruments and counterparties using a single collateral pool. Euroclear Bank collateral management products include the following:

- o Triparty Repo
- Triparty Securities Lending
- Triparty Secured Loans
- Triparty Derivatives Support
- Triparty Collateral Services
- Collateral Allocation Interface

Collateral management services include:

- o deal matching
- collateral eligibility verification and selection
- o delivery against or free of payment of collateral
- o daily mark-to-market functions
- o collateral substitution
- o margin maintenance
- o custody event management
- o reporting

Collateral management services are available during the batch and the real-time processes.

A service agreement documenting these services must be executed between Euroclear Bank, as collateral management service agent and clients using the service. The service agreement includes the:

- Terms and Conditions
- Annexes to the *Terms and Conditions* (Collateral Schedules agreed between the counterparties)
- Operating Procedures

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The Annexes to the *Terms and Conditions* allow the client to specify the eligible securities for Triparty transactions and define different types of risk management tools:

- **Eligibility criteria** clients can define various risk profiles by mixing different eligibility criteria such as rating, instrument type, currency, issuer, sector, etc.
- Concentration limits clients can limit the risk on certain categories of securities. They can establish concentration limits (in absolute terms or in percentage of the transaction size) on securities, categories of securities, and issuers.
- **Margins** clients can define a variety of margins. They can do so based on several criteria, such as rating, issuer type, instrument type, price volatility and time to maturity.
- **General options** There are also a number of general options which counterparties need to agree as part of their contractual agreement.

Asset servicing

Euroclear Bank offers a large number of custody services facilitating the exercise of securities holders' rights and corporate actions, including:

- safekeeping of securities
 - o corporate actions and proxy voting
 - o payment of coupon interest, dividends and redemptions
 - o market claims
 - administration of related tax services

Considering the processes, custody services can be grouped into several main categories:

- Information collection and distribution Custody services are supported by various continuous and automated communication mechanisms which notify clients of upcoming corporate actions, including redemption and income payments.
- Processing of instructions This category relates to the actual execution of custody instructions. Not all custody operations require the same processing steps, and parties external to Euroclear Bank may handle part of the execution (e.g. Securities Agents).
- Proceeds payments Upon receipt of cash or securities, and after internal reconciliation, the proceeds are paid out to the entitled clients.
- Reporting on the results of custody operations Reporting is available to allow clients to monitor their activity.
- o Investigations Inconsistencies are investigated and are timely and adequately solved.
- Client services The client services teams ensure that client inquiries, either by phone or in writing, are timely and adequately responded to.

Investment Funds services

FundSettle International is an internet-based system that permits centralised fund distribution on a crossborder basis. It has been designed for high-volume, cross-border fund transactions and provides a single access point between fund distributors and transfer agents worldwide.

Key objectives of FundSettle International are:

- tailor-made fund order processing, i.e. identification of distributors/dealers at order input, multi-currency facility, processing of subscription, redemption, switch and transfer orders;
- o extensive real-time and customised reporting facilities;
- o a dedicated FundSettle client support service;
- o an extensive funds information database;
- the provision of corporate action information; and
- the processing of dividend payments and related instructions.

Through the FundSettle platform, Euroclear Bank provides the following services to its clients (in their capacity as fund investors, intermediaries or distributors):

- o order routing and processing (either subscription, redemption, switch or transfer orders);
- o corporate action services; and
- o reporting.

Before the actual processing of orders, a dedicated team needs to:

- o accept and check the eligibility of the funds, based on pre-defined criteria; and
- maintain the FundSettle database. The database includes information on transfer agents, cut-offs, settlement cycles, etc.

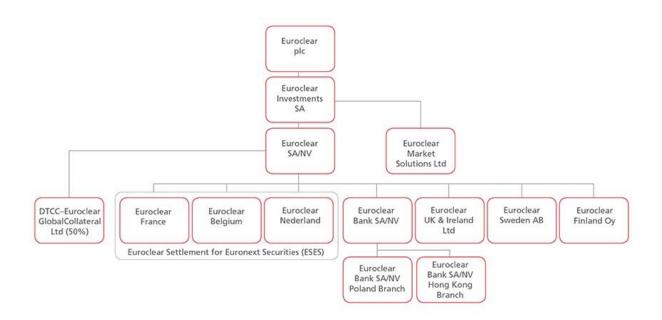
Euroclear Bank also provides a number of **income and corporate action services** for funds. In principle, the execution of these is similar to related operations for other asset classes. However, the market players that intervene in the process differ. FundSettle custody distribution includes:

- o any distribution of fund shares or other securities
- o cash payments made by a fund or its agents resulting from FundSettle instructions.

B. General organisation of the FMI

Euroclear Bank, a bank incorporated under Belgian law, is the ICSD of the Euroclear group. The Euroclear group also comprises a CSD for UK and the Republic of Ireland (Euroclear UK & Ireland), France (Euroclear France), the Netherlands (Euroclear Nederland), Sweden (Euroclear Sweden), Finland (Euroclear Finland) and for Belgium (Euroclear Belgium).

Euroclear plc, incorporated in the UK, is the ultimate holding company of the Euroclear group. It owns Euroclear SA/NV a Belgian financial holding company, which is the parent company of the group (I)CSDs. Euroclear SA acts as the group service company and provides a broad range of common services to the group (I)CSDs such as IT production and development, audit, financial, risk management, legal, compliance, human resources, sales and relationship management, strategy and public affairs and product management. The Euroclear group's shares are largely owned by the users of its services.



C. Legal and regulatory framework

Euroclear Bank has the status of a credit and settlement institution under Royal Decree n°62 recognised as a 'central securities depository for financial instruments' (Royal Decree of 22 August 2002).

Euroclear Bank is submitted to the banking law dated 22 March 1993 and the new banking law dated 7 May 2014. It is **not** submitted to the Royal Decree dated 26 September 2005 because Article 1 states that it applies to all settlement institutions except those having the status of credit institution.

Euroclear Bank is submitted to the Regulation 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms (CRR) IV and Regulation 909/2014 of 23 July 2014 on improving securities settlement in the European Unions and on central securities depositaries (CSDR).

Euroclear Bank is supervised by NBB and FSMA in accordance with the following competences:

1. NBB

1.1 Legal competences

Under Article 8 of the NBB Organic Law, the NBB shall ensure that the clearing settlement and payment systems operate properly and shall make certain that they are efficient and sound (oversight).

Without prejudice to the above-mentioned powers of oversight, the NBB is also responsible, under Articles 36/2, 36/3 and 36/26 of the NBB Organic Law and under the RD 26/09/2005, for prudential supervision (including the issuance of authorisations) of credit institutions and settlement institutions like Euroclear Bank and Euroclear Belgium.

1.2 Oversight and prudential supervision

1.2.1 NBB oversight

The NBB assesses the Euroclear Bank and ESES systems against the CPMI-IOSCO Recommendations. Best practices are also taken into account where appropriate e.g. in the field of operational reliability/business continuity, liquidity and links. The NBB oversight applies a risk-based approach in defining its priorities. The NBB oversight is responsible for both oversight implementation and policy issues.

1.2.2. NBB Prudential supervision

In its capacity as prudential supervisor, the NBB verifies that credit institutions or settlement institutions like Euroclear Bank and Euroclear Belgium meet the authorisation requirements and operating criteria laid down in the laws and regulations. This implies inter alia that the NBB ascertains that the institution's organisation and functioning are appropriate, and carries out supervision over its activities and financial situation. Where the institution is a subsidiary of a financial holding company such as Euroclear SA for Euroclear Bank and Euroclear Belgium), the supervision on a standalone basis is complemented with a supervision on a consolidated basis.

2. FSMA

Under Article 23 of the Law of 2 August 2002, the FSMA must ensure that settlement institutions take the measures necessary to (i) prevent any conflict of interest from affecting the interests of customers, (ii) ensure that the services provided are duly registered, (iii) protect the rights of clients in case of insolvency of the settlement institution and prevent the use by the settlement institution of financial instruments belonging to clients (code of conduct rules).

In accordance with Article 45, § 1, 1°, of the Law of 2 August 2002, the FSMA must ensure compliance with the rules on (i) protecting investors' interests in transactions on financial instruments, and (ii) proper

operation, integrity and transparency of markets in financial instruments.

3. Other

There are bilateral cooperation arrangements among the two Belgian authorities and with different national regulators having a particular interest in the well-functioning of the Euroclear system operated by Euroclear Bank. In the prudential area, bilateral cooperation arrangements may also exist to cover e.g. the Hong Kong and Krakow branches of Euroclear Bank.

D. System design and operations

Settlement model

On the settlement date, securities are transferred by book-entry from the securities account of the seller to the securities account of the buyer, provided that settlement conditions are met. Simultaneously, cash is transferred from the account of the buyer to the account of the seller. Securities and cash transfers between buyer and seller accounts are final and irrevocable upon generation of the settlement records in the books of Euroclear Bank (DVP Model 1 for internal and Bridge instructions and according to local rules for cross-border instructions).

• Settlement windows

The securities settlement process includes batch and real-time processes. The overnight batch process runs in the night between S-1 and S and settles transactions for settlement date S (or any recycled transactions of the previous settlement days). This process settles the main volume and value of transactions.

The real-time process is not only used to recycle the pending/unsettled transactions from the overnight batch process, but also for settlement instructions received for same day settlement which are introduced, validated and matched during the working day. All instructions for real-time settlement, which are not settled at the end of the process, are automatically recycled for settlement in the next batch process.

The system's processing window starts at 22:00 on S-1 with the batch process and ends at around 19:00 on S with the close of the optional real-time process. After 14:30, real-time settlement is not mandatory, meaning that the buyer or the seller must both explicitly authorise settlement in that part of the real-time process otherwise the settlement is postponed until the next night processing. The rationale behind this optional settlement window is related to potential liquidity management issues that might arise among the system clients as cash deadlines approach.

The approximate timing of the different processes is as follows:

- Overnight batch processing: from 22:00 (S-1) until 23:30 (S-1)
- o Real-time process: from about 01:30 (S) until 19:00 (S)

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Whenever possible, external instructions for value S, including settlement feedback from local markets are also processed within the Euroclear Bank processing window for value S. Securities transactions are settled via domestic market links in accordance with local market rules.

23:00 23:00 0	1:30	14:00	16:00	19:0
Batch process	Real-tin Free of payment	ne process		
	Automatic Against payment ARS, CAD, EUR, GBP, M	XN, PEN, USD		
SET 1	Automatic		Option	nal
	Against payment All other settlement cu	rrencies		
	Automatic	Ĭ	Optional	

Settlement windows in Euroclear Bank

Settlement efficiency is further optimised through dynamic recycling of securities and cash positions throughout the securities settlement processing. In order to enable clients to settle as many matched transactions as possible, clients may specify the priority that controls the order in which their instructions are processed. Optimisation mechanisms such as back-to-back settlements are used to increase settlement efficiency of the system. After each securities settlement processing, Euroclear Bank provides clients with a report of settled and unsettled securities transactions and, at the beginning of each business day, with a report of positions resulting from the overnight processing.

IV. PRINCIPLE-BY-PRINCIPLE SUMMARY NARRATIVE DISCLOSURE

Ratings summary

Assessment	Principle
category	
Observed	1, 2, 3, 4, 5, 7, 8, 9, 12, 13, 15, 16, 17, 18, 20, 21, 22, 23
Broadly observed	11, 19
Partly observed	-
Not observed	-
Not applicable	6, 10, 14

Principle 1: Legal basis

An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

Key consideration 1: The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.

Material aspects and relevant jurisdictions

In our opinion, the following **material aspects** for Euroclear Bank activities require a high degree of legal certainty:

- Regulatory framework the existence of an adequate authorisation and supervision, from a regulatory point of view
- Asset protection the protection of the holdings in financial instruments of the clients in the books of Euroclear Bank as well as in the books of the Euroclear Bank Depositories
- Dematerialisation and immobilisation legal basis for dematerialisation or immobilisation of securities
- Finality the settlement finality of securities and cash transfers
- Collateral the framework covering the guarantees received from the clients to secure the credit lines granted by Euroclear Bank for the purpose of settlement efficiency
- Contractual framework the material aspects of the services and activities of Euroclear Bank
- Default procedures the rules concerning default situations. Please refer to Principle 13 for this aspect

Relevant jurisdictions

The most relevant legal jurisdiction for all the above material aspects of Euroclear Bank activities is Belgium.

From an asset protection point of view, all jurisdictions where financial instruments are held through links are also relevant.

The actual location or place of incorporation of clients is also relevant in case of insolvency or resolution proceedings affecting those clients.

Eventually, jurisdictions the laws of which are elected as governing law of certain agreements from the contractual framework are also relevant.

Regulatory framework

• Euroclear Bank SA/NV (Euroclear Bank) is an authorised credit institution in accordance with the Belgian Banking Act and a settlement institution under Royal Decree 62. It is legally recognised as a central securities depository (CSD) by Royal Decree of 22 August 2002. Euroclear Bank operates

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the Euroclear System which is designated as a Securities Settlement System pursuant to the Belgian Settlement Finality Act which implements the EU Directive 98/26 (SFD).

- In these capacities, Euroclear Bank may hold deposits in cash and financial instruments on behalf of its clients and extend credit to its clients. Euroclear Bank is authorised to hold on behalf of third parties Belgian dematerialised securities:
 - Belgian public debt (Law of 02 January 1991 and Ministerial Decree of 24 January 1991)
 - Belgian corporate securities (Belgian Companies code and RD of 12 January 2006);
 - Belgian commercial paper (Belgian Law of 22 July 1991)
- Euroclear Bank has a specific tax status under Belgian law for the purpose of holding securities in the securities settlement system operated by the National Bank of Belgium (the so-called X/N rules) and for the purpose of the securities lending and borrowing activity (art. 261 of the Belgian Income Tax Code).
- Euroclear Bank has also specific regulatory or tax statuses in some foreign jurisdictions where it has links.

Asset protection

Belgian Law

- The Belgian legislation provides for a clear and sound basis for admission and book-entry transfers of immobilised, dematerialised or registered securities, regardless of whether or not those are governed by Belgian law.
- Securities are held and transferred in the Euroclear System via book-entry, under various (but similar) regimes of fungibility, depending on the nature of the securities (Royal Decree 62, Law of 02 January 1991, Law of 22 July 1991 and the Belgian Companies code).
- The Royal Decree 62 and the other relevant pieces of legislation referred to above provide for a two-tier structure of asset protection, benefiting to the client of the Euroclear System and their underlying clients. The financial instruments held with Euroclear Bank are protected against both the insolvency of Euroclear Bank and of its clients.
- By virtue of the above legislation, the securities deposited with Euroclear Bank never become part of the estate of Euroclear Bank and cannot be claimed by its creditors: the clients of Euroclear Bank are given by law a co-ownership right of an intangible nature on a pool of book-entry securities of the same category held by Euroclear Bank on behalf of all its clients holding securities of that category. The clients holding securities in the Euroclear System retain ownership on such securities, which implies they retain (i) 'in rem' rights on the securities, i.e. a right of 'revindication' of the relevant quantity of securities deposited in case of an insolvency event or bankruptcy affecting Euroclear Bank, and (ii) voting rights.
- Such asset protection regime does not apply to cash deposits where Euroclear Bank becomes the legal owner of the cash deposited and the depositor retains only a contractual claim against Euroclear Bank.
- Besides, securities and cash held with Euroclear Bank are by virtue of law immune from attachment by creditors of account holders and any third party.

• More details are available in *Rights of Participants to securities deposited in the Euroclear System* which is published on <u>www.euroclear.com</u>

Other jurisdictions

- Before opening links with local SSS, Euroclear Bank performs an initial verification of the local legislation to ensure that securities deposited on the local market benefit from a level of asset protection that has comparable effects to the Belgian regime. A review of the local legislation is performed periodically.
- The legal opinions notably address the following legal issues:
 - i. the entitlement to the securities (law applicable to proprietary aspects, nature of the rights on the securities, permissibility of an attachment or freeze of the securities)
 - ii. the impact of insolvency proceedings (segregation aspects, settlement finality, procedures and deadlines to claim the securities)

Dematerialisation and immobilisation

The Belgian legislation has proven to be a very clear and effective legal basis for:

- immobilisation of securities governed by foreign or Belgian legislation; Royal Decree 62 provides for the holding of securities on a fungible basis and for a circulation of those securities via book-entry; and
- ii. dematerialisation of securities governed by Belgian law (Laws of 02 January 1991, 22 July 1991 and 14 December 2005, as amended from time to time).

Due to a specific provision of the Belgian legislation, physical deliveries on the Belgian territory are now prohibited, except when made between professionals and for immobilisation purposes.

Finality

The Euroclear System operated by Euroclear Bank is designated as a 'System' under the Belgian law of 28 April 1999 (Belgian Settlement Finality law) implementing the EU Settlement Finality Directive 98/26/EC.

This legislation effectively ensures irrevocability and finality of transfer orders executed in a securities settlement system ('System').

In case of insolvency proceedings affecting a client, the system operator or the operator of a linked or interoperable system, zero hour rule or claw-back rules of general bankruptcy laws do not apply.

Instead, the Belgian Settlement Finality Law refers to the rules of the System to determine the moment of (i) entry of transfer orders in such System, (ii) irrevocability of transfer orders (if any such moment is determined) and (iii) finality of transfer orders executed by the System.

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The Euroclear System is governed by Belgian law. The finality rules of transfer orders in the Euroclear System (also referred to as 'instructions') are set out in the *Terms and Conditions governing use of Euroclear* (T&C) and in the *Operating Procedures of the Euroclear System*.

The typology of clients and the access criteria to the Euroclear System are set out in the *Operating Procedures of the Euroclear System*, in compliance with the Belgian Settlement Finality Law and the CPMI-IOSCO Principles for FMIs, in particular Principle 18.

For links with a foreign CSD/SSS (directly or through a custodian), operations are governed by the law that is applicable to the foreign CSD/SSS. The contractual framework of the Euroclear System explains how local law impacts cross-border settlement, amongst others on finality.

Collateral

Robust collateral arrangements securing the credit exposure of Euroclear Bank towards its clients are in place.

- The Belgian Law of 15 December 2004 implementing the Financial Collateral Directive (The Belgian Collateral law) and the Belgian Settlement Finality Law effectively ensures the creation and perfection of financial security interests by Euroclear Bank.
- In cross-border contexts, Euroclear Bank obtains legal opinions on jurisdictions where it has most
 of its exposures. The opinions aim at confirming that (i) under the Private International Law rules
 of those jurisdictions Belgian law governs the validity and enforceability of security interests
 granted to Euroclear Bank and (ii) the underlying securities in those jurisdictions would not be
 subject to any successful attachment or other encumbrance by or in favor of any adverse claimant.
 A periodic review of these opinions is performed.

Contractual framework

Please refer to KC 2 below.

Default procedures

Please refer to Principle 13.

Key consideration 2: An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.

The main contractual documentation of Euroclear Bank consists of:

- the Terms and Conditions governing use of Euroclear (T&C), supplemented by
- the Operating Procedures of the Euroclear System (OPs)

and are governed by Belgian law.

The credit facilities granted by Euroclear Bank are documented via specific agreements, governed by New York law (or Belgian law in certain cases).

The securities lending arrangements of the Euroclear System are documented via supplementary contractual documentation, part of which is governed by Belgian law, the other part being governed by New York law.

The collateral agreements and the general pledge provision documented in the OPs (section 3.5) are governed by Belgian law.

The collateral management services are documented via specific contractual agreements which are governed by English law.

The consistency of the contractual framework with applicable law is ensured by scrutiny exercised by inhouse lawyers and by legal opinions obtained on specific aspects (asset protection opinions, collateral surveys, legal opinions on some provisions of the T&C/OPs, on securities lending and borrowing services, collateral management services, etc.)

Key consideration 3: An FMI should be able to articulate the legal basis for its activities to relevant authorities, clients, and, where relevant, client's customers, in a clear and understandable way.

The legal basis for the activity of Euroclear Bank is essentially articulated in the following documents:

- The *Terms and Conditions* and *Operating Procedures of the Euroclear System* and other related contractual agreements (please refer to KC2)
- the online market guides
- the Asset Protection Pack
- the present Disclosure Framework

All these documents (as well as other relevant documents) are publicly available on euroclear.com

Key consideration 4: An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.

Most aspects have already been covered in Key consideration 1 and 2.

In the collateral surveys, further to the implementation of resolution regimes in certain jurisdictions, Euroclear Bank now assesses the risks resulting from resolution measures affecting a client on the security interests securing the credit facilities granted by Euroclear Bank. In particular, Euroclear Bank assesses whether stays on enforcement of security interests may be applied.

Key consideration 5: An FMI conducting business in multiple jurisdictions should identity and mitigate the risks arising from any potential conflict of laws across jurisdictions.

Conflict of laws issues arise in cross-border situations:

- when Euroclear Bank holds securities via links in other jurisdictions: it then obtains legal opinions on specific aspects (please refer to KC1 under Asset Protection).
- Euroclear Bank also created a branch in Poland and subsequently transferred operational activities to it. In this context, Euroclear Bank obtained legal opinions from Belgian and Polish external counsels who both confirmed that the holding and transfer of securities in the Euroclear System remain governed by Belgian law. Similar legal opinions were received for the Euroclear Bank Branch in Hong Kong.
- Euroclear Bank also opened representative offices in several other jurisdictions (China (Beijing), Dubai, Germany (Frankfurt), Japan (Tokyo), Singapore and the U.S. (New York)) which only perform general representative activities for Euroclear Bank. Euroclear Bank monitors that such limited activities remain compliant with the local regulations on representative offices.

Principle 2: Governance

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

Key consideration 1: An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.

The objectives of the Euroclear Group are published on our website. The main strategic objective of the Euroclear Group and Euroclear Bank is to be one of the leading providers of post-trade services through reliability, innovation and leadership by:

- o building long-term partnerships with clients and
- o supporting the stability and developments of the markets, locally or globally.

Within this framework, the Euroclear Bank Board has the requisite autonomy and authority to effectively manage its interests when implementing the group strategy.

Euroclear Bank benefits from the pooling of investment within a larger group, the ability to develop new services and cover new products leveraging the expertise of the group with the objective of meeting the needs of the market where they operate.

The Boards of Euroclear Bank and Euroclear plc/Euroclear SA (on a consolidated basis) are responsible for assessing their respective performance in meeting their objectives. In addition, the Management Committee of Euroclear SA assesses also the performance of Euroclear Bank as a group's entity.

The Group has established high standards of professional conduct that direct the ongoing activities of the Group. These standards are formalised in various policies and procedures applicable to employees, senior management and directors across the group.

The group's shares are largely owned by users of its services and its main boards (Euroclear plc and Euroclear SA boards) are essentially composed of members drawn from a cross-section of firms that use the Euroclear services allowing users' interests and sensitivities to influence the decision-making process of Euroclear. In addition independent directors, not affiliated with firms using the Group's services have been appointed to each of the boards of Euroclear plc, Euroclear SA and Euroclear Bank in order to allow for the interests of stakeholders other than users to be represented. Users can also influence the Group decision-making bodies through the market advisory committees, which are committees established by the group for each market where an entity of the group acts as CSD.

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Key consideration 2: An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, clients, and, at a more general level, the public.

The current structure of the Euroclear group is presented on www.euroclear.com/en/about/ourstructure.html

Euroclear Bank is the ICSD of the Euroclear group and is incorporated under Belgian Law. Euroclear Bank is a wholly-owned subsidiary of Euroclear SA/NV, a Belgian financial holding company regulated by the BNB.

Euroclear SA/NV acts as the group service company providing shared services to other group companies in services arrangements with each group company, the 'Shared Services Agreements'. Services centralised in Euroclear SA are: IT production & development, HR, audit, legal, financial, risk management, compliance, sales & relationship management, product management, strategy & public affairs.

Euroclear plc is the owner of the Euroclear System, the clearance and settlement system for internationally traded securities. Euroclear Bank operates the Euroclear System under a license agreement.

Euroclear Bank's governance requirements are set out in a CBFA circular on internal governance and other Belgian legal and regulatory recommendations. Euroclear Bank has a regulatory obligation to describe how it complies with those governance requirements in a Governance Memorandum, provided annually to the Belgian regulator for their review.

Disclosure of governance arrangements

Euroclear makes public relevant governance information via different channels to provide accountability to owners, clients and other relevant stakeholders, namely:

- Publications with relevant authorities (e.g. Belgian State Gazette, Banque Carrefour des Entreprises, NBB, FSMA etc.);
- Publications in financial/national newspapers;
- Publications on the Euroclear website (e.g. Board and Board Committees composition and Terms of Reference, ISAE 3402, CPMI-IOSCO Disclosure Framework, etc.); and
- o publications to shareholders (annual reports, notice of meetings, etc.).

Key consideration 3: The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.

The Board has the powers to carry out all acts that are useful to achieve the objectives of Euroclear Bank as defined in the Articles of Association, except those that are explicitly reserved by law or the Articles to

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the shareholders. In carrying out this role, each Board member acts in good faith in the way s/he considers would be most likely to promote the success of Euroclear Bank for the benefit of its shareholders as a whole while having due regard to the interests of other stakeholders (such as customers, employees and suppliers). The Board also has regard to the interests of the Group, provided the proper balance is struck between the financial charges imposed on Euroclear Bank and the eventual benefit to Euroclear Bank.

The overarching responsibilities of the Board are to define and oversee the implementation of the strategy and objectives of Euroclear Bank as well as the risk policies (including the risk tolerance levels of Euroclear Bank) and to supervise the Euroclear Bank management. The main responsibilities and operating procedures of the Board have been defined in the Board terms of reference available on the Euroclear website.

In order to perform its responsibilities more efficiently, the Board has established the following committees exclusively composed of non-executive directors: the Audit Committee, the Risk Committee, the Nominations and Governance Committee and the Remuneration Committee.

The **Audit Committee** assists the Board in fulfilling its responsibilities for oversight of the quality and integrity of the accounting, auditing and reporting practices of Euroclear Bank, the effectiveness of internal control systems and risk management systems, the adequacy and performance of Euroclear Bank's Internal Audit function and Compliance function, the independence, accountability and effectiveness of the External Auditor such other duties as directed by the Board.

The **Risk Committee** assists the Board in fulfilling its oversight of Euroclear Bank's risk management governance structure, risk tolerance, appetite and strategy, management of key risks as well as the process for monitoring and mitigating such risks (including contingency planning, cyber security, recovery plans, board policies, etc.); and such other duties as directed by the Board.

The **Nominations and Governance Committee** reviews and makes recommendations to the Board in respect of nominations of the executive and non-executive Directors of the Company, the composition of the Board and Board committees and corporate governance matters. It also sets a target for representation of the underrepresented gender on the Board and defines guidelines describing appropriate actions to reach this target.

The **Remuneration Committee** makes recommendations to the Board with respect to the total amount of remuneration and other benefits (other than those applicable to employees of the Company generally) paid by the Company to its executive Directors. It further reviews recommendations and approves the amount of annual individual remuneration of each executive director (including incentive compensation, and changes to base salary, retirement and other benefits), subject to approval by the Board of the overall amount of executive director remuneration referred to above.

The **Board** of Euroclear Bank also established a Management Committee, in accordance with Belgian legal and regulatory requirements, and delegated to it the responsibility for managing the business of Euroclear within the strategy and general policy decided by the Board, and to implement such strategy and general policy. The Management Committee has set up several internal committees to assist it in the performance of its duties.

The composition and Terms of Reference of the Board and board committees have been posted on euroclear.com

Euroclear established group policies identifying requirements that Euroclear employees, senior management and board members must follow in order to identify and prevent any conflicts of interest and, in the event it is not reasonably possible to avoid a conflict of interest, to properly manage such a conflict. The principles of the procedures set out in the group policies that are communicated to Euroclear employees are available on www.euroclear.com

Review of performance

On an annual basis, the Board of Euroclear Bank carries out a self-assessment and effectiveness review of the Board as a whole, the Board Chairman and the individual members. This review endeavours to ensure that the Board has the necessary framework in place within which to make decisions, focusing on the optimum mix of skills and knowledge amongst the directors, clarity of goals and processes, a culture of frankness that encourages constructive evaluation, full disclosure of procedures and an effective relationship with management. This annual review is carried out by completion of a questionnaire by each Board member.

The composition, the operation (including the training of the Directors and the relationships of the Board with the Board Committees and with the management) and the role of the Board (including the way the strategic matters are treated by the Board and the control exercised by the Board over management) as well as the directors involvement and attendance at meetings are part of the self-assessment process. The consolidated responses of the self-assessment are reviewed by the Nominations and Governance Committee and the results are reported to the Board for discussion. Where concerns are raised in the responses, they are the object of any follow-up actions.

Key consideration 4: The board should contain suitable members with the appropriate skills and incentives to fulfill its multiple roles. This typically requires the inclusion of non-executive board member(s).

In accordance with Belgian law, Board members are appointed by the shareholders. The Board submits to the shareholders its proposals regarding appointment and renewal or non-renewal of Board members, supported by a recommendation of the Nominations and Governance Committee which assesses the Director against selection criteria and his/her availability to perform the role. All nominations are made against merit and on the basis of a Director's potential contribution in terms of knowledge, experience and skills, with a view to ensuring a balanced Board which, as a whole, has the optimum mix of skills and experience to ensure the proper fulfillment of the tasks of the Board that are appropriate for the requirements of Euroclear Bank's business. In addition, to adequately fulfill its role and responsibilities, the Board as a whole should possess the necessary balance of skills and experience to set the Euroclear Bank general policy and strategy and to properly supervise management in the implementation of such policy and strategy. The skills that should necessarily be represented on the Board are both generic (finance, accounting, management and organisation) and specific to the Euroclear Bank business (banking, operations, securities settlement, capital markets, IT).

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The Board of Directors is composed of the members of the Management Committee and a majority of nonexecutive directors. Euroclear Bank ensures to have a sufficient number of independent directors sitting on the board in line with legal and regulatory requirements.

The overall membership of the Board and board Committees is reviewed by the Nominations & Governance Committee regularly with a view to ensuring the Board remains appropriately composed. The Board and board committee composition is posted on www.euroclear.com

Non-executive directors who are not member of the group management receive remuneration for their mandate, taking into account their level of responsibility and time required of them in fulfillment of their Board role. It comprises an annual gross fee, pro-rated to the number of Board meetings attended and reflects any additional formal responsibilities held.

Non-executive directors do not receive incentive compensation (short or long-term) or stock options or employments benefits (other than reimbursement of expenses). Their remuneration is not linked to the performance of Euroclear.

Key consideration 5: The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.

The Euroclear Bank Management Committee has been established by the Board in accordance with the Belgian legal requirements and has been entrusted with the general management of Euroclear Bank with the exception of (i) the determination of the strategy and general policy of Euroclear Bank and (ii) the powers reserved to the Board by law or the Articles. The Management Committee acts in accordance with applicable law and the rules set out in the Articles and its Terms of Reference and under the supervision of the Board.

The Management Committee reports directly to the Board and, where it concerns an area within the remit of the Board committees, to the Board's specific committees which in turn report their analysis on the same to the Board.

A Chief Executive Officer has been appointed by the Board and is the Chairman of the Management Committee. Subsequently the Management Committee has delegated to the CEO the day-to-day management and the representation of the Company with regard to such day-to-day management, consistently with the allocation of responsibilities between Management Committee members decided by the Management Committee from time to time.

The objectives of the CEO are approved by the Board and the objectives of the Management Committee are approved by the CEO and communicated to the Board. The Nominations and Governance Committee assesses the performance of the Management Committee as part of the Board self-assessment.

Experience, skills and integrity

All nominations to the Management Committee are made against merit and on the basis of the knowledge, experience and skills of the candidate, regardless of his/her gender or ethnic background.

With respect to future potential members of the Management Committee, the Chairman of the Management Committee and the Chairman of the Board jointly propose to the Board the names of the candidates to be appointed as members of the Management Committee.

The recruitment process includes as series of interviews of the candidate, an assessment of the candidate's profile carried by reputable external consultants where appropriate as well as a check of the candidate's professional references.

In addition, the Management Committee as a whole should possess the necessary balance of skills and experience to fulfill its role and responsibilities.

Key consideration 6: The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.

Risk management framework

The Management Committee of Euroclear group actively supports the development and maintenance of a strong internal control system (ICS) within the group. In line with best market practice, Euroclear operates a three lines of defense model.

The allocation of responsibilities within Euroclear's three lines of defense model is:

first line of defense:

Businesses identify the risks that may prevent reaching their objectives, define and operate controls to mitigate the risks and document and demonstrate the control environment.

second line of defense:

- Risk Management defines the control environment framework in line with regulations and internal policies, it monitors the Risk and Internal Control environment in the changing internal and external environment and reports, challenges or escalates to management risks or control defects. Risk Management supports the business to implement remedial actions.
- Compliance monitors, tests and reports to management on controls relating to laws and regulations and advises on remedial actions. Other support functions like Finance or HR monitor specific controls and escalate to management in case of control defects.

third line of defense:

Internal Audit independently reviews and tests the controls and reports to management about the adequacy and effectiveness of the control environment.

An extensive policy framework exists for Risk Management and Compliance. Internal Audit has an Audit Charter approved by the Board and is reviewed yearly. The Risk Management, Compliance and Internal Audit divisions are independent from the business lines they monitor through a direct reporting line to the CEO and through direct access to the chairman of the relevant Board committees (Euroclear SA and Euroclear Bank boards, audit committees and risk committees).

The risk management framework is documented through a comprehensive set of policies, management resolutions and implementing procedures. All high level policies including the risk management policies are decided by the Board.

The risk management framework is described in more detail under principle 3.

The Risk Management framework addresses the risk-tolerance policy and assigns responsibilities and accountability for risk decisions. The strength of this framework can be summarised as follows:

- The Euroclear group has a risk management strategy aligned with its corporate objectives and commensurate with its role as financial infrastructure. Risk tolerance levels are defined and adapted yearly by the Board consistent with available capital while risk appetite levels are set by the management on an annual basis with the objective to keep the risk profile low and stable.
- Euroclear has a risk adverse culture, emphasised by management through its actions. Examples of this
 are the extensive use of the Risk Management framework, the importance of risk management in the
 group's Balanced Scorecard, the risk and control assertions signed by senior managers. Euroclear has
 well developed frameworks and comprehensive policies based on good market practices that set out
 how the internal control system operates and guidelines that support repeatability. The policies that
 govern these frameworks are documented and part of a well-defined policy control framework.
- Euroclear has established a risk register, High-Level Control Objectives (HLCOs) and more detailed control objectives to mitigate the risks identified, describing how and by whom the risks are to be managed.
- The risk management policy and management resolutions clearly assign the risk management responsibilities and business ownership to the relevant levels of management.

The accountability for risk decisions is distributed at all levels of the group. Strong crisis procedures are also in place allowing quick escalation at entity or group level depending on the nature and the severity of the crisis. Those procedures are regularly tested.

The *Risk management framework* is approved by the Board.

Authority and independence of risk management and audit functions

1. Risk Management

Mission

Risk Management provides high quality and independent assurance that the relevant risks taken to achieve Euroclear's vision are identified and controlled. Risk Management implements an approach which enables the identification and understanding of all material current and prospective risks and the management of appropriate responses.

This is done by providing a coherent effective framework, suitable training, useful tools, expert impartial advice, timely risk assessments, escalation of material risk issues, informed relevant reporting, all of which enable risks to be managed well.

More specifically, Risk Management develops and oversees appropriate risk management policies and procedures and advises on related risk activities. Risk Management is responsible for the following generic types of activity for each of the risks it covers:

- risk policy setting
- risk assessment & measurement; i.e. tools and methods for risk definition and measurement; identification and assessment of the various residual risk exposures, their likelihood of occurrence and their impact
- risk advice; i.e. expert impartial risk advice
- risk monitoring; i.e. follow-up of exceptions, action plans, new products and changes in risk exposure, oversight over the various risk areas and reporting to the appropriate levels (local and group). If needed, escalation of material risk issues to management and the Risk Committee.

Organisation

Risk Management acts independently of other functions and reports directly to the group CEO.

It is headed by the Chief Risk Officer who is also a member of the Management Committee of Euroclear Bank and a permanent invitee to the Management Committee of Euroclear SA/NV.

Corporate risk managers have been assigned to address the risks of each Euroclear entity and are supported by the Risk Management division of the group, who develops for instance the risk management framework, capital modeling and data support. A team is also dedicated to banking risks.

Enterprise Risk Management (ERM) Framework

The risk register is supported by High-Level Control Objectives (HLCOs) established by the group to mitigate the risks identified in the risk register. The HLCOs are supported by more detailed control objectives, agreed with senior business management and providing a clear link to the mission of each business unit. Finally, these control objectives are supported by detailed controls and control processes describing how the risks impacting business activities are to be mitigated. These control objectives are the foundation of the group's internal control system and are documented in the Positive Assurance Reports (PAR). The PAR have been

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deployed at entity/divisional level and, where relevant, at departmental level. They link business objectives through to control objectives, control activities, and forms of evidences. By keeping track of the main expected internal and external change factors, they allow first line management to timely maintain the adequacy of the control environment when expected changes materialise.

Internal Control System (ICS)

As described above under principle 3, Euroclear has adopted the 'three lines of defense' model.

Risk Monitoring through self-assessments

The control objectives are the basis of the annual Risk & Control Self-Assessments (RCSAs). The qualitative self-assessments are key components of the ERM framework. The RCSAs aim to achieve the following objectives:

- build an accurate and consistent assessment of the ICS, i.e. to achieve a good understanding of the risk profile of the business
- increase risk awareness and promote an ongoing assessment of risks and controls by business managers
- identify new risks by bringing together experts and less experienced people in brainstorming sessions
- obtain quantification of the risks faced by Euroclear at 'risk event level', service level and entity level
- ensure that individual risks in the ICS are identified proactively and that they are addressed adequately
- help management make a well-founded statement on the effectiveness of the ICS.

Risk Management consolidates and summarises the results of these self-assessments, discusses them with management and reports them to the Audit and Risk board committee and to the Board.

ICAAP – Methodology

The Euroclear Group ICAAP is built around 2 key internal processes, the Enterprise Risk Management Framework (ERM) and the Internal Capital Measurement Approach (ICMA) which is part of ERM.

• The ERM framework details how risks are identified, who owns them, and how they are to be mitigated. The ERM framework helps to establish ERM objectives and describes relevant risk processes, the role of people within them, and what information is to be provided to take proper management decisions.

Euroclear implements every pillar of the framework consistently across the Group.

• The Internal Capital Measurement Approach (ICMA) provides high level principles to ensure that sufficient capital is maintained for the identified risks of the relevant entities within the Euroclear Group to meet the group objectives. A relevant entity is, in this context, an entity which provides its clients with services relating to post-trading businesses. Euroclear Bank is one of these entities in the group.

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Those principles are applied consistently across the group and force each relevant entity to have a view on its level of capitalisation. The results of the ICAAP as expressed in capital requirements over a 1 year horizon are reported in the core equity recommendation. These figures are approved by the highest levels of management on a yearly basis: the report for a given year will show capital needs for next year.

It is complemented by an analysis of the potential capital requirement over a 5 year- time horizon capital requirement, which is reported in the capital plan. The Board approves the models and the capital plan.

2. Internal Audit

Mission

The mission of the group Internal Audit division ('IA') is set out in the *Internal Audit Charter* approved by the group's Management Committee (MC) and Board Audit Committee (AC), as providing reasonable assurance, in an independent and objective way, on the adequacy and effectiveness of the Group's system of internal controls to support the Board and senior management in reaching their objectives.

Organisation

The Euroclear SA Internal Audit Charter describes IA's purpose, authority and responsibility. The Charter stipulates that the Group Chief Auditor should report to a level within the organisation that allows IA to fulfill its responsibilities, with proper independence in determining the Audit Universe, Audit Plan and scope of audit reviews, performing work (through an unlimited access right to all records and data of the company), and communicating results.

IA is organisationally independent from any operational or business activity. The Chief Auditor reports to the CEO of the group. The independence of IA is further ensured by an additional reporting line to the Chairman of the AC. The Chief Auditor has direct access to the Chairman and members of the AC, the Chairman of the Board of directors, and the accredited statutory auditors.

Functioning

In order to carry out its mission, Internal Audit has set up a comprehensive audit universe including all processes carried out by the group, whether directly or outsourced. The Audit Plan covers the full audit universe and is presented quarterly for approval by the Management Committee and Audit Committee. The audit plan is the result of:

- a risk and control based approach: each line of the universe is assessed quarterly, which drives the depth and scope of audits
- a cyclical approach: even though the results of the risk and control assessments would not lead to an audit, an audit is anyway performed every three years

The audit plan focuses on the next quarter but has a six-quarter time horizon. This has just been adapted for CSDR to become a three years plan.

Such a frequent and comprehensive plan process ensures that the audit plan remains commensurate to the risk profile of the company and focuses on the areas presenting the highest risks or being heavily control dependent.

Issues identified by Internal Audit are entered into the risk database used at group level. In line with the Institute of Internal Auditors standards, Internal Audit performs the follow-up and verification of the issues it raises.

Reporting

Euroclear Bank management and the Audit Committee are informed periodically of the adequacy and effectiveness of the internal control system through the quarterly *internal audit activity report*, which covers the progress on the internal audit plan, the results of audit work (including concerns regarding the effectiveness or timeliness of management's actions to address audit issues), and resourcing. In addition to this, Internal Audit sends any communication, audit memos and reports it deems necessary, directly to Management Committee members; the High Priority Control Issues (HPCI) report is made quarterly to highlight significant control issues as well as progress in mitigating them.

Internal Audit also has regular meetings with external auditors. Audit reports are communicated to these stakeholders upon request.

Key consideration 7: The board should ensure that the FMI's design, rules, overall strategy and major decisions reflect appropriately the legitimate interests of its direct and indirect clients and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.

Identification and consideration of stakeholder interests

The user governance framework of Euroclear ensures that the interests of clients and other stakeholders are taken into account in the CSDs' design, rules, overall strategy and major decisions. Users can also influence the Group decision-making bodies through the Market Advisory Committees which are committees established by the Group for each market where an entity of the Group acts as CSD (Belgium, the Netherlands, France, Ireland, Sweden, Finland and United Kingdom) as well as the ESES Market Advisory Committee and the Cross-Border Market Advisory Committees. These committees act as a primary source of feedback and interaction between the user community and Euroclear management on significant matters affecting their respective markets. These committees are not part of the formal direction of the Group companies and their members are not Euroclear directors, nor do they owe any fiduciary duty to Euroclear.

Users and other stakeholders can also influence the group's decision bodies by participating in ad hoc working groups and committees, international groups (European Repo Council, ISMA, IPMA) or through ad hoc consultations.

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Disclosure

Major decisions are communicated to owners (Euroclear SA and Euroclear plc user shareholders) through the 'Notice to Shareholders' for the annual general meeting and for each extraordinary general meeting. They are communicated to the users (clients) via the commercial account officers and through various publications (i.e. newsletters) and through user representatives in regular meetings of the MACs.

Principle 3: Framework for the comprehensive management of risks

Key consideration 1: An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.

Risks that arise in or are borne by the FMI

The Euroclear group has established a Risk Register, which contains six risk categories the group is faced with.

Three categories relate to the provision of services:

- Credit risk: The risk of loss (direct or contingent) arising from the failure of a counterparty to meet its obligations to Euroclear.
- Liquidity risk: The risk of loss (financial or non-financial) arising from Euroclear being unable to settle an obligation for full value when due. Liquidity risk does not imply that Euroclear is insolvent since it may be able to settle the required debit obligations at some unspecified time thereafter.
- Operational risk: the risk of financial and reputational loss from inadequate or failed internal processes, people and systems. It encompasses processing risk, accounting risk, ethical conduct, legal and compliance risk, people risk, project risk and information and system risk.)

Three other categories are related to the environment in which Euroclear operates:

- Market risk: the uncertainty on future earnings and on the value of assets and liabilities (on or off balance sheet) due to changes in interest rates, foreign exchange rates, equity prices or commodity prices
- Business risk: The risk of revenues being different from forecast as a result of the inherent uncertainty associated with business planning over a two-years time horizon or of unanticipated changes in the nature or level of market activity serviced by Euroclear
- Strategic risk: The risk of the business model not being appropriate to deliver the corporate vision as a result of restrictions in the ability to implement internal change, external changes in the environment in which Euroclear operates or the inherent uncertainty associated with business planning over a medium to long term horizon

Risk management policies, procedures and systems

Euroclear uses an Enterprise Risk Management (ERM) framework to ensure a coherent approach to risk management. It covers both the day-to-day operational risk/control processes as well as content-related key risk framework concepts.

The ERM has the following key content-related components:

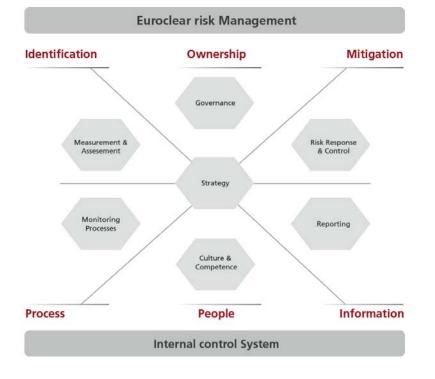
• Euroclear has well-developed frameworks and comprehensive policies based on good market practices that set out how risks are managed consistently. The policies that govern these frameworks are documented and part of a well-defined policy control framework.

• Euroclear has established a Risk Register, which is an inventory of all types or risks that the Euroclear group is facing. Under each of the six main categories of risk, a next level of more specific risks that Euroclear may be facing is listed (a Level 2 Risk Register). This register is used as input to build or verify the control objectives which the business has to fulfill.

• The Internal Controls System is an integral part of the ERM and has defined High-Level Control Objectives (HLCOs) and more detailed Control Objectives to mitigate the risks of the Risk Register.

The ERM framework is composed of seven key, inter-related building blocks, or 'pillars' that cater for a consistent approach to the management of risks:

- *Strategy* Euroclear's approach to risk management
- Culture & Competence An active and interventionist approach to risk management by appropriately skilled people
- *Governance* Assigning responsibility and authority
- Identification, Measurement & Assessment Understanding risks
- Risk Response and Control Addressing risks in an appropriate way
- Reporting Getting the right information to the right people at the right time
- Monitoring Processes Assessing the effectiveness of the risk management strategies.



Picture 3 – Overview of the ERM

Risk Identification

In line with best market practice, Euroclear operates a three lines of defense model. The allocation of responsibilities within Euroclear's three lines of defense model is:

• first line of defense: Businesses identify the risks that may prevent reaching their objectives, define and operate controls to mitigate the risks and document and demonstrate the control environment.

• second line of defense:

- Risk Management defines the control environment framework in line with regulations and internal policies; it monitors the Risk and Internal Control environment in the changing internal and external environment and reports, challenges or escalates to management risks or control defects. Risk Management supports the business to implement remedial actions.
- Compliance monitors, tests and reports to management on controls relating to laws and regulations and advises on remedial actions. Other support functions like Finance or HR monitor specific controls and escalate to management in case of control defects.

• third line of defense: Internal Audit independently reviews and tests the controls and reports to management about the adequacy and effectiveness of the control environment.

Euroclear encourages the proactive identification of risks and control weaknesses, as opposed to the reactive logging of risks. Key techniques and processes that facilitate this are:

- the periodic (daily to quarterly) monitoring of key risk and key performance indicators by team leaders, department heads, division heads, committees and management committees.
- the systematic risk assessments associated with the new product or service approval process
- annual risk and control self-assessment
- Risk Management's recurring risk assessments

Also, Euroclear records all incidents and performs a post-mortem exercise to identify root causes and put in place measures to avoid recurrence.

Risk Measurement

Euroclear has developed a granular assessment and rating methodology for risks which enables risks to be classified according to their impact on the relevant business areas or Euroclear entities. Risks are assessed e.g. in risk workshops and are recorded in the common system of otherwise when assessed.

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Monitoring

Monitoring is mainly done through the periodic monitoring of key performance indicators (KPIs) by the different first line teams, specific control teams (e.g. in Finance) or second line controls. The results of the monitoring are cascaded upwards to process owners, department heads, committees and management.

Annual qualitative Risk & Control Self-Assessments (RCSAs) are used to build an accurate and consistent assessment of the Internal Control System (ICS), i.e. to achieve a good understanding of the risk profile and of control gaps and help management make a well-founded statement on the effectiveness of the ICS.

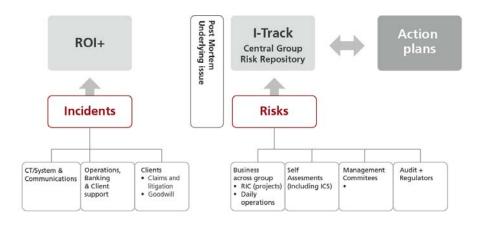
Manage/control

Risks are primarily managed by all the operational controls implemented by the first line of defense, such as STP processing, reconciliation checks, four-eyes principles for critical manual functions, standardised operating procedures (SOPs), incident analysis, etc.

Supporting systems

Euroclear uses the ERM framework to manage its risks. The group also has a common central risk repository called 'I-Track' where risks are recorded and followed up. It allows Euroclear Bank track its range of risks that have been identified proactively by the business but also through incidents, by risk management, by the internal audit. The database contains risk owners, all action plans and their owners, the assessment and history of risk mitigation or acceptance. Each identified risks is rated considering the severity and the likelihood in order to facilitate the prioritisation of mitigating actions.

Incidents are recorded in a central database called 'ROI+' which is linked to the 'I-Track' database.



Euroclear Bank also has specific systems to monitor and manage specific risks such as:

- credit exposures on its clients
- collateral valuation
- liquidity management

etc.

through KPIs or control measures.

It uses a number of datawarehouses for this purpose: liquidity datawarehouse, market risk datawarehouse, credit datawarehouse and the operational risk datawarehouse.

Apart from the above, Risk Management also uses a value-at-risk tool to monitor exposures to the Bank and a number of models to calculate economic capital.

Aggregation of exposures

Euroclear Bank has a view on its exposures on its counterparties across the FMI for all the roles they may have in the system, such as treasury counterparty (for re-deposits of cash balances), client (credit line for settlement activity, securities borrowing), issuer of securities (used as collateral by other clients, or securities that are being redeemed/pay interest) and lead manager in the new issues process.

Although Euroclear Bank has an aggregate view on its exposures on an entity for all its roles, in setting the upper limit for a client's credit line, it does not take into account the credit exposure it has on the entity as a cash correspondent. The maximum credit limit ('Global Family Limit') caps the exposures from the treasury and client roles only, as the exposure resulting from the cash correspondent role is not controllable ex ante (as clients may wire money to this cash correspondent without pre-advice for example). Euroclear Bank manages the cash correspondent intra-day risk through intra-day cash realignment between cash correspondents or to the central bank.

Effectiveness of the risk management policies, procedures and systems

The effectiveness of the actual measures in place is assessed in first place by first line (business owner) and second line monitoring activity (essentially Risk Management and Compliance). This is done using key performance indicators (KPIs) by the different first line teams, specific control teams or second line controls (like Banking Middle Office). The results of the monitoring are cascaded upwards to process owners, department heads, division heads, committees and management aommittees. Any deviations are highlighted, investigated and policies and processes are adjusted if necessary.

Euroclear also conducts annual risk control self-assessment, where all departments and functions are assessing themselves against the given control objectives, and reports on any gaps, risks or shortcomings. This process is done also for risk management and compliance functions.

The effectiveness of Euroclear Bank's risk-management policies, procedures and systems is also proven by back-tests that are regularly conducted. The Liquidity Stress Test for example tests whether there were sufficient liquidity sources to cover its liquidity needs based on real-life data (i.e. based on statistics of actual cash balances in the period under review). In addition, real-life events (such as a real default of a

client) can prove whether the policies and systems are effective in real-life stress situations (e.g. by actually selling collateral of a defaulted client on the market, it can be verified if the collateral valuation system and haircuts have been adequate).

The effectiveness of crisis management and business continuity plans is also regularly tested. Crisis management rehearsal exercises via desktop or simulation exercises are organised to train the crisis managers and test the crisis management procedures. Several of these exercises are organised each year, as standalone activities or combined with the other activities. Every update, findings and actions for improvement are captured in the standard flow of problem management & issue tracking, which guarantees the follow-up (root cause analysis, tracking of solutions and/or agreed actions).

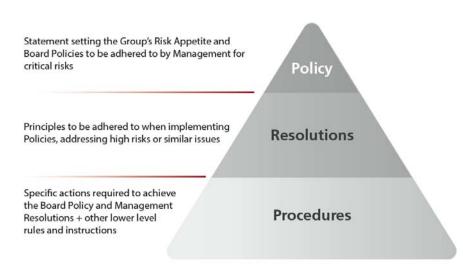
Reports on Risk Management effectiveness are presented to the governing bodies including the Board.

Finally, Risk Management functions are audited by Internal Audit which provides as well a reporting to the governing bodies including the Board.

Review of risk management policies, procedures and systems

Euroclear's Risk Management division is located in Euroclear SA/NV, the parent company of the group, in order to ensure a consistent risk-management approach across all entities. Many policies will apply to the whole group, while others are specific to a Euroclear entity (e.g. local regulation or technical implementations, some policies related to banking activities are only applicable to Euroclear Bank). However, the covered processes and principles are quite similar:

- the Board is responsible for approving (risk-management) 'policies'
- local management is responsible for approving management resolutions that implement the Board Policies
- department heads are responsible for developing 'implementing procedures' that implement the board policies and management resolutions.



When developing these policies, the boards and management committees are assisted by specific committees. The Euroclear SA Board is advised by the Risk Committee, which also makes recommendations with regard to the approval or revision of risk policies. The Euroclear SA Management Committee is advised by the Group Risk Committee. In addition to the support from Euroclear SA's risk management, the Euroclear Bank Board is advised by its Audit and Risk Committee. The Euroclear Bank Management Committee is supported by the Risk, Local Security and Operating Committee (for operational risks, as well as the assessment of the risks of new and changed products and services) and the CALCO (Credit and Assets and Liabilities Committee for banking related risks). These committees may propose policy changes.

Both Euroclear SA governance bodies and Euroclear Bank governance bodies rely on the advice from the Risk Management division.

Review frequency

When policies are written, they are designed so that the principles set out in them can remain valid even if the risk intensity or environment has changed. Euroclear continuously monitors fluctuations in risk intensity and changes in its environment. Every quarter, Risk Management prepares management risk reports at group and entity levels, which lists the main risks, and captures trends in risk intensity and the validity of action plans. Such monitoring allows changing the policies, management resolutions or implementing procedures if needed.

Key consideration 2: An FMI should provide incentives to clients and, where relevant, their customers to manage and contain the risks they pose to the FMI.

Credit that is granted by Euroclear Bank to clients are short term to facilitate the settlement of transactions and are collaterialised (for more detail, please see Principle 4).

Euroclear Bank encourages its clients to use the Euroclear Bank's system in the best way. Euroclear Bank provides extensive information regarding the use of the system and the services available.

Beside the information available on euroclear.com (Terms and Conditions, rules, newsletters), Euroclear organises training for clients.

Euroclear services and system have been specifically designed to enable clients to monitor, manage and reduce the risk they face, including through 'delivery versus payment' and extensive real-time information (the information contains among others data on client's transactions, cash and securities positions, the amount of credit facilities as provided by Euroclear Bank, which are uncommitted, intra-day, secured and documented, the credit usage and additional real time information allowing clients to anticipate their collateral and credit needs for the day and for the next overnight processing cycle).

Additional services such as Triparty repo and collateral management have been designed to mitigate the risks further.

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Finally, Euroclear has implemented a sponsorship process to reduce the risks both for Euroclear and its clients. A sponsorship consists of an initial know your client (KYC) exercise upon admission which is follow up by regular KYC process to make sure the admission criteria are still met.

The level of due diligence required depends on the creditworthiness of the client or its shareholders as expressed by a Euroclear Bank internal credit rating or external credit rating and the type of risk (financial and/or only operational risk).

Sponsorships are performed before admission and on an annual basis, except under defined criteria where the frequency is decreased to every two years provided all criteria are scored 'sufficient'. clients with a credit facility are rated at least annually and many of the elements in the Sponsorship File are assessed in this process. Sponsorships have to be updated and reapproved if Euroclear Bank has knowledge of events that have material adverse effects on clients.

Euroclear Bank has no contractual relationship with clients' customer. The contractual relationship remains exclusively between Euroclear Bank and its clients.

Key consideration 3: An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.

Material risks

The risk that Euroclear Bank bears from or poses to other entities are identified and assessed as part of the ERM framework with specific approaches for the different risk types. The three main risks types to consider for Euroclear Bank are: credit risks, liquidity risks and operational risks.

The main risk borne by Euroclear Bank from other entities (such as other FMIs, settlement banks, liquidity providers and service providers) are with Clearstream Banking Luxembourg - Euroclear Bank and Clearstream Banking Luxembourg have a lot of interaction during the Bridge process -, cash correspondent and liquidity providers, TARGET2, network providers and data providers.

The risk caused by other FMIs such as CCPs and MTFs are smaller (because of relatively small volumes, compared to the overall Euroclear Bank settlement volumes and because of peculiarity of post-trade model i.e. de facto CCP acting as standard settlement client and Stock Exchanges / MTFs sending settlement instructions on behalf of Euroclear Bank clients on those accounts settlement occurs) and could be compared to the risk borne by Euroclear Bank from a standard client.

Beside the credit and liquidity risks, the operational risks posed to Euroclear Bank from other entity are e.g.:

• risk of lower settlement ratio if one or several significant clients make operational errors (e.g. sends wrong instructions) or cannot deliver their instructions in time.

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- risk to settlement ratio and completeness if major infrastructure players in the financial sector is down, like the central bank.
- risk to the general market stability and risk of delays or losses to other clients and investors if a client defaults (but not per say any particular risk to the CSD).

The main risks posed by Euroclear Bank to other entities are more difficult to evaluate as their contingency procedures in case of Euroclear Bank default or unavailability are not known. It can be assumed that the main risks are credit risks and liquidity risks (Clearstream Banking Luxembourg BANKING LUXEMBOURG, Liquidity providers, Central Banks to access collateral for monetary policy, CCPs, clients) and operational risks. Other entities that Euroclear Bank uses as service providers from time to time perform due diligence reviews of Euroclear Bank. Euroclear Bank also shares relevant information that allows other entities to adequately assess the risks posed to them by Euroclear Bank.

To mitigate this, Euroclear Bank has implemented many layers of precaution and protection of its processes and services (business continuity plans regularly tested), and operates a comprehensive risk management framework built on established standards and best practices. Specific risks in the context of CSD links are described under principle 20.

Risk measurement and monitoring

The same risk management procedures and processes as described above under Key consideration 1 will apply to our assessment of risks from other entities.

These include:

- Business risk assessments (including the new product approval risk assessments)
- Stress tests such a business continuity tests and default procedure tests
- first line and second line monitoring activities
- Other specific initiatives on specific risks such as the 'Long-term IT outage' analysis
- Incident analysis and availability follow-up

Risk management tools

The same procedures and processes as described under Key consideration 1 above apply to risks arising from interdependencies with other entities.

The effectiveness of the actual measures in place is assessed in first place by first line and second line monitoring activity.

In addition, real-life incidents events, such as operational incidents or a real default of a client, can prove whether the policies and systems are effective in real-life stress situations. Key consideration 4: An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.

Recovery plans

At the request of the NBB and of other group regulators, Euroclear has prepared recovery plans for each of the group's entities, as well as a plan for the group. These plans are based on a generic group framework and developed in a consistent way. They identify

- scenarios that may bring any group entity in severe financial difficulties threatening its mediumterm viability
- recovery options that may be taken either locally, at the level of the relevant entity or at group level, to restore the stricken entity's financial health
- an appropriate governance allowing timely detection of situations that may require taking recovery options and escalation to Management and Board

The preparation of the recovery plans is coordinated by Risk Management, based on input from other divisions. Key stakeholders in the projects include the Financial, Legal, Banking, Human Resources and IT divisions, as well as Corporate Secretariat, Strategy and Public affairs, Product Management and Regulatory Relationship Management. A Steering Committee, made up of senior executives within the group and of all entities' CEOs, ensures top management's involvement at all stages of the process.

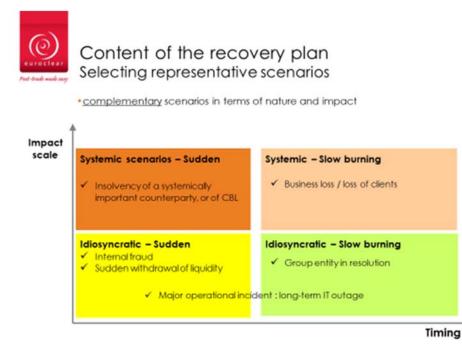
It is our intention to review recovery plans annually or when a significant change occurs that would impact the feasibility or materiality of a recovery option.

The Euroclear Bank recovery plan has been approved by the Board of Directors of the Bank in October 2015, upon recommendation from the Audit and Risk Committee. The Euroclear SA recovery plan has been approved by the Board of Directors of Euroclear SA/NV in October 2015, upon recommendation from the Euroclear SA Risk Committee.

Recovery scenarios

The recovery plans describe scenarios sufficiently severe to put at risk the continuity of any Euroclear entity or of Euroclear as a group. These scenarios are extreme but plausible, and built around the specificities of the entities of the group. The set of scenarios includes scenarios threatening each (type of) entity: Euroclear SA standalone, Euroclear Bank and the CSDs.

The set of scenarios retained in the plan are complementary in terms of scale (idiosyncratic vs. systemic) and rapidity of unfolding (slow vs. fast), as can be seen in the figure below.



We analyse the consequences of similar scenarios for all entities, where appropriate. This ensures a consistent approach across group entities, and allows capturing the aggregate impact at group level of all selected scenarios. The figure below shows how relevant each (type of) scenario is for the various group entities.



Content of the recovery plan Selecting representative scenarios for any group entity

Scenarios	Description	EB	CSD	ESA
S01: Insolvency of a major Participant or counterparty	Default of major cash correspondent or deposit-taker (<u>a SIFI</u>)			
S02: Insolvency of CBL	CBL default + major operational error			
S03: Internal fraud	Sizeable fraud + insurer defaults. Impact on individual entities.			
S04: Sudden withdrawal of liquidity	Unexpected immediate liquidity squeeze (intraday)			
S05: Major operational incident (long-term IT outage)	All systems down for <u>5 days</u>			
S06: Business loss (different drivers per entity)	EB: inability to adapt to market change. CSDs: participant / issuer defection.			
S07: Group entity in resolution	EB in resolution or insolvency ESA in resolution or insolvency			

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In addition to the recovery planning exercise, Euroclear Bank Resilience team within the Risk Management organisation has analysed the impact of and developed responses to (business continuity plans) scenarios impacting its office, IT infrastructure and its staff, as well as financial crisis scenarios, with the objective to manage the impact and return to business as usual.

Recovery options

Euroclear has developed recovery strategies that address the respective impacts caused by the various scenarios developed in the plan.

The recovery tools analysed in the plans cover:

- options to increase available capital, either through intra-group support, mainly from the mother company (Euroclear SA/NV), or through raising additional capital externally
- options to raise liquidity in case of need, included through committed liquidity sources. Liquidity options are mainly relevant for Euroclear Bank
- Business options, that may be used independently in case of a prolonged P&L problem threatening the viability of any group entity. Such options are also likely to be used to accompany and support the implementation of any other recovery options. They aim at improving the cost base or the revenue base of group entities
- Divestments, the purpose of which is to generate a one-off inflow of cash, or to ensure that a stricken entity is taken over smoothly to ensure continued provision of services to the market

Content of the recovery plan Selecting recovery options

Capital	Liquidity	
 Capital/liquidity: sought from Group Capital sought from external sharehol 	 Re-use collateral (EB) Activate contingency liquidity sources (EB) 	
Business Immediate cost reductions Stop projects Downsize Increase fees Downscale facilities & IT infra	Divestments Sell business lines Sell entities Sell other assets	
Loss absorption Available capital Sell collateral (EB) Liability limitations (CSDs)	 ► Insurance ► Specific CBL options (EB) 	

Not all options are as relevant for all entities. The figure below shows how different options may effectively be applied either locally or at group level.

Content of the recovery plan Selecting recovery options for all group entities

EB	CSD	ESA
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_		

Resolution plans

The preparation of Euroclear's resolution plan(s) is expected to be initiated by the respective competent authorities soon. We do not yet have any view on the timeline involved.

Principle 4: Credit risk

An FMI should effectively measure, monitor, and manage its credit exposure to clients and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each client fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two largest clients and their affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions. All other CCPs should maintain, at a minimum, total financial resources sufficient to cover the default of the one client and its affiliates that would potentially cause the largest aggregate credit exposures to the larg

Key consideration 1: An FMI should establish a robust framework to manage its credit exposures to its clients and the credit risks arising from its payment, clearing and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.

Framework for managing credit exposures to clients

Policies and procedures

The provision of credit by Euroclear Bank and the related credit risk mitigation measures are governed by Euroclear Bank's Credit Risk Board Policy and related management resolutions and 'implementing procedures'.

The Credit Risk Board Policy defines the limits based on Euroclear Bank's credit risk appetite i.e.

- the available capital allocated annually for credit risk (the 'upper tolerance level') by the Board of Euroclear Bank¹
- regulatory limits including risk concentration limits and capital adequacy ratios
- internal limits, such as credit limits, country limits or treasury limits

The Credit Risk Board Policy sets the general framework, which is detailed in the credit risk management resolutions and related 'implementing procedures'.

The Euroclear Bank Board approves and is accountable for overseeing the implementation of the policy, while its effective implementation, communication and monitoring are delegated to the Euroclear Bank Management Committee.

¹The Economic Capital for credit risk is the measure of the required capital resulting from the actual credit exposures and credit ratings of Euroclear clients and counterparts. The Economic Capital usage for credit risk is recalculated every month; it should not exceed the available capital allocated for credit risk.

Information and control systems

Credit extended by Euroclear Bank is subject to capital concentration, country, global and individual limits. Those limits are translated into individual credit lines that are monitored on a real-time basis. Euroclear Bank has an internal rating model, of which the performance and application review has been outsourced to S&P Risk Solutions.²

Incentives for clients and other entities to manage credit risks

Euroclear Bank has a number of incentives for clients to reduce Euroclear Bank's credit risk.

Euroclear Bank charges debit interests to its clients when a debit position remains overnight. The debit interest rate charged to a client is directly related to its internal rating and is above market rates. Collateral is valued in accordance with Euroclear Bank's collateral valuation model. As a rule, a conservative collateral valuation is applied (See Principle 5). Securities borrowing rates are also above street lending rates.

Credit facilities and exposures

As a single purpose bank, Euroclear Bank provides uncommitted intra-day multi-currency and multipurpose credit facilities to its clients³ only to support their activity in the Euroclear System.

Settlement and securities borrowing

In addition to the client admission monitoring and sponsorship process, Euroclear Bank reviews at least annually the size of its clients' credit lines.

Before granting credit facilities to a client, its financial soundness is assessed and an internal credit rating is assigned, as per Euroclear Bank's internal credit rating model. The size of the credit facility is based on the client's financial soundness and its level and type of activity within Euroclear Bank's Credit Risk Board Policy limits. Facilities must remain consistent with the creditworthiness and the activity of the client, hence they are reviewed at least annually.

Clients' credit usage can be in cash or in securities (i.e. securities borrowing).

Settlement credit exposure in cash occurs when Euroclear Bank debits a client's cash account to execute a transaction for an amount above the available cash in that currency in the client's account. This credit exposure is intraday by nature and therefore not reflected in Euroclear Bank's balance sheet.

Upon appropriate approval, Euroclear Bank may grant temporary extensions to the client credit facilities, authorising its clients to have a credit exposure above their approved credit facilities. The objective of such extensions, which are by nature temporary, is to unblock transactions, which would otherwise prevent settling a chain of transactions. These allow increased settlement efficiency.

² In line with the Basel II regulatory framework, Euroclear Bank uses the Foundation Internal Ratings Based Approach ('FIRBA') in order to compute Euroclear group's capital needs for credit risk since 1 January 2007. In order to comply with the requirements of that approach, Euroclear Bank has developed an internal rating model.

³ Credit granted to Clearstream Banking Luxembourg in the framework of the Bridge activities is covered in Principle.

As a rule, all Euroclear Bank credit facilities are secured by collateral held in the Euroclear System. A few unsecured facilities are provided on an exceptional basis mainly to central banks that are not allowed to pledge their assets.

Since Euroclear Bank guarantees the reimbursement of borrowed securities to lenders, securities borrowing exposures on the borrower are reported in its intraday credit usage and are limited by a cap under its settlement-related credit facility. Only clients with a secured credit line can borrow securities.

Asset servicing

To comply with Principle 4, since October 2014, Euroclear Bank has stopped advancing income and redemption proceeds to its clients.

Measuring, monitoring and reporting credit exposures

The clients' cash positions are net per currency based on the settlement of securities purchased and sold in a particular currency. There is no further cross-currency netting.

Euroclear Bank monitors credit exposures on a real-time basis taking into account the different sources of credit risk. clients' exposures vary on a continuous basis within their credit lines, and this control is embedded in the systems. When clients need more credit than their available credit line, instructions block. Euroclear Bank can unblock them by extending additional credit (if approved by the relevant credit authority and if sufficient collateral is available in the client's account).

Euroclear Bank Credit department is responsible for monitoring and controlling credit exposures on clients on an ongoing basis.

Key risk indicators have been defined for monitoring credit risk. They are reported in the Monthly Banking Risk Report and reviewed by Euroclear Bank Credit & Asset & Liability Committee (CALCO). This report is shared monthly with the national regulator (NBB).

Key consideration 2: An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk management tools to control these risks.

Credit and liquidity risk mitigation

Euroclear Bank respects Belgian and European regulations and has developed mitigation actions and tools aiming at reducing counterparty and credit risks both for clients and Euroclear Bank e.g. Euroclear Bank is running a DVP 1 settlement system providing immediate finality of transactions in most cases.

Concentration limits

Concentration limits are set to ensure that Euroclear Bank does not take too large exposures on too few clients or counterparts. European and Belgian banking regulations also impose risk concentration limits that have to be respected for each applicable exposure. Individual exposures above 25% of Euroclear

Bank's own funds (Tier 1 + Tier 2 – deductions) are reported as breaches to NBB under the large exposures regulation.

Capital adequacy ratios

The capital adequacy European banking regulation imposes capital adequacy ratios, which are percentages of a bank's capital to its risk-weighted assets.

Euroclear Bank has a total capital ratio which is largely above the minimum ratio of 8%, required by the law.

Set-off

In case of default, Euroclear Bank has the possibility to set off clients' exposures in one currency with long cash balances in another currency⁴.

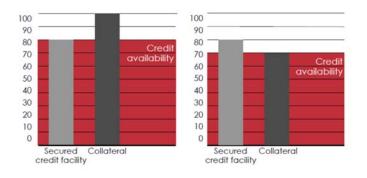
Statutory lien

Euroclear Bank can rely on the Belgian statutory lien on clients' assets held in the Euroclear System to secure any claim against them arising from the settlement of transactions⁵ through or in connection with the System.

Euroclear Bank has discretionarily waived such statutory lien over the balances of all securities that have been separately and expressly identified in writing by the client as an account to which solely customer securities are credited, except where the client has agreed in writing that the lien should continue to apply.

Collateralisation

As a rule, credit facilities are secured with pledged collateral held in the Euroclear System: the availability of credit is dependent on the minimum between the level of the secured credit facility and the amount of pledged collateral.



⁴ It is generally not possible to set off exposures from Euroclear Bank on the same entity being a client and a cash correspondent. As per Euroclear Bank's credit and collateral agreement, different relationships cannot be mixed, except if a pooling and netting agreement is signed.

⁵ Euroclear Bank has also a general pledge right described in Section 10.1 (d) of the *Operating Procedures*, valid for custody related debits.

Appropriation

Top credit users in Euroclear Bank have signed an addendum to their collateral agreement allowing Euroclear Bank to immediately appropriate their pledged securities in case of default giving the right to Euroclear Bank to re-use their collateral to generate liquidity. Appropriation is also included in the standard collateral agreement since 2010.

Evidences supporting the validity of the credit risk management framework

Since its creation, Euroclear Bank has no history of credit losses due to client defaults.

Key consideration 3: A payment system or SSS should cover its current and, where they exist, potential future exposures to each client fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its clients face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two clients and their affiliates that would create the largest aggregate credit exposure in the system.

See Principle 15 on general business risk and Principle 7 on liquidity risk for the composition of financial resources to cover current and potential future exposures.

Key consideration 4, 5 and 6 are not applicable to Euroclear Bank.

Key consideration 7: An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its clients with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.

Explicit rules and procedures to address fully any credit losses

Credit granted by Euroclear Bank should as a rule be secured either by collateral held and pledged in the Euroclear System, or through other recourses (See Principle 5).

In accordance with Euroclear Bank's *Credit Risk Board Policy*, the total amount of unsecured credit exposure extended to any family should not exceed the total of capital (Tier 1, hybrid tier 1 and subordinated debt (Tier 2)). This excludes Eaaa-rated OECD central banks.

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Unsecured credit exposure on clients

Euroclear Bank should cover its credit exposures to each client fully with a high degree of confidence using collateral and other equivalent financial resources (equity can be used as well after deduction of the amount dedicated to cover general business risk).

Approximately 99% of clients' settlement-related credit exposures are secured.

Other financial resources

See Principle 15 on general business risk and Principle 7 on liquidity risk.

Process for the replenishment of financial resources during a stress event

The recovery plan should address the extreme situation where unexpected credit loss could occur, see Principles 13 and 15.

Principle 5: Collateral

An FMI that requires collateral to manage its or its clients' credit exposure should accept collateral with low credit, liquidity and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

Key consideration 1: An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.

Collateral framework

The collateral policy of Euroclear Bank is set out in the Credit Risk Board Policy and in the Collateral Management Resolution.

The collateral arrangements between Euroclear Bank and its borrowing clients are governed by the Collateral Agreement, which is signed at legal entity level.

Euroclear Bank's credit exposures are mainly secured by clients' cash or proprietary securities held in accounts pledged⁶ to Euroclear Bank in the Euroclear System.

In principle, as soon as a security is eligible in the Euroclear System, it can be used as collateral provided Euroclear Bank benefits from a reliable valuation for it. The client can find the information in EUCLID. Euroclear Bank computes the collateral value it attributes to this security based on its collateral valuation estimation methodology. It could also at its own discretion decide not to grant any collateral value to a given security.

Euroclear Bank does not block specific assets as collateral but calculates the collateral value of all assets held in pledged accounts and ensures that sufficient collateral is available at any time in the client's account to cover its credit exposure on the latter.

Euroclear Bank maintains a floating charge of collateral to secure its exposure on a client. In case a client defaults, Euroclear Bank is allowed to select on a discretionary basis the collateral it will liquidate first to cover the exposure. Euroclear Bank will first liquidate the cash via its set-off right and then the securities. Among the securities, Euroclear Bank will first sell the most liquid ones (e.g. government debt) and will continue until full coverage of the client's exposure.

In practice, Euroclear Bank clients tend to be over-collateralised i.e. the amount of collateral pledged by a client is higher than the credit exposure that Euroclear Bank has on this client.

Other types of recourse are possible e.g.: set-off and letters of credit, but their usage is extremely limited in comparison with collateral held in Euroclear Bank books. In case of default, Euroclear Bank has the possibility to set off a client's exposures in one currency with its long cash balances in another currency.

⁶ Assets that cannot be pledged must be segregated in unpledged accounts.

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Both the letter of credit and set-off are used to secure Bridge exposures on Clearstream Banking Luxembourg (see Principle 20).

Euroclear Bank can also rely, as a second line of defense, on the Belgian statutory lien to cover settlementrelated exposures. By law, Euroclear Bank benefits from a statutory lien on client assets held in the Euroclear System. Euroclear Bank has however waived its lien on its clients' client assets, except if the latter has agreed in writing that the lien should continue to apply.

Euroclear Bank finally enjoys a general pledge right on its clients' assets for all types of credit exposures (including custody-related exposures).

In these two latter cases (Belgian statutory lien and general pledge right), the related collateral is accepted and estimated under the same eligibility and valuation rules as pledged collateral.

The acceptance of new recourse types are approved on a case-by-case basis by Euroclear Bank's Management Committee.

Key consideration 2: An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.

Collateral valuation and haircuts

The collateral value of securities held in the Euroclear System is assessed on a daily basis by obtaining a market price and determining the haircut that has to be applied on each security.

Haircuts are computed by the internal Security Valuation Estimation (SVE) model for pledged collateral in order to protect Euroclear Bank against a drop in market prices with a confidence level of 99% over a 10-day period.



The valuation of cash collateral depends mainly on the accuracy of the currency margin and the FX rate used.

- *Currency margin*: for settlement currencies, a 10 day VaR based on FX volatilities of each currency is calculated. For USD, EUR, JPY and GBP, the currency margin is set at 5%. For other currencies, the currency margin is higher.

In addition to this 10 day VaR, Euroclear Bank includes an additional margin reflecting the liquidity of the currency.

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Euroclear Bank defines the collateral value based on the following parameters:

- the security's market value
- the SVE factor: it computes a haircut to protect Euroclear Bank from the market, liquidity and event risk (specific issuer credit or country risk) related to each security
- the FX rate
- the 'own security' margin: it is set to '0' if the client belongs to the same family as the issuer of the security
- the Portfolio Value Estimation (PVE): if necessary, it allows to overall decrease or increase the collateral value at client portfolio level to compensate for some elements such as for instance a lack of collateral diversification.

Euroclear Bank can also take discretionary measures to apply additional margins at any time, and/or block additional specific collateral, or ask for more collateral diversification. The market risk parameters (volatilities), liquidity margins, credit risk values and new spread values for countries e.g. in case of emergency situation (such as market crash, political event, etc...), can be input manually in the system.

Collateral valuation validation and monitoring

Euroclear Bank performs:

- a SVE back test at security and at client portfolio level on a daily basis in order to take immediate corrective action when required
- a SVE stress test on an annual basis to validate the adequacy of clients' collateral portfolios to cover Euroclear Bank credit exposure in extreme scenarios, such as:
 - the default of an issuer
 - a country in financial distress
 - a currency depreciation
 - an interest rate shock
 - a stock index shock
 - an error in the collateral valuation model

In these scenarios, Euroclear Bank simulates a significant one-day market price decrease on pledged assets and considers a defaulting client the next day in order to compute the maximum unsecured amount at client entity level which Euroclear Bank would have to absorb.

Euroclear Bank is usually able to face such scenarios thanks to

- its prudent haircuts
- daily back-testing allowing for immediate corrective actions as well as
- the overall over-collateralisation and diversification of its clients' portfolios.

The Model Validation team of the Risk Management division also reviews the SVE model, like any other Euroclear Bank risk model, on a regular basis and provides recommendations.

Key consideration 3: In order to reduce the need for pro-cyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.

See answer to KC 2.

Key consideration 4: An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.

Client collateral portfolio monitoring

Different controls and reports exist to monitor client collateral portfolios on a:

- punctual basis to help credit decisions
- weekly basis to control their quality and concentration
- monthly basis to assess currency mismatches versus credit and liquidity exposures

Further to this monitoring, relevant mitigation actions are taken when required. For this purpose, Euroclear Bank is also able to apply specific collateral quality parameters on a client basis.

Key consideration 5: An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.

Collateral enforceability

In the Collateral Agreement, the client, as borrower, pledges and grants to Euroclear Bank a 'security interest' in the collateral. With the help of local counsels, Euroclear Bank runs collateral surveys on a regular basis to verify and monitor the validity and enforceability of its Collateral Agreement in the different clients' jurisdictions.

Key consideration 6: An FMI should use a collateral management system that is well-designed and operationally flexible.

Collateral management system

Euroclear Bank collateral management process is quite automated and fully system-embedded. It ensures at all times that any credit exposure on a client is covered by sufficient collateral as valued by SVE. Securities that are purchased in a pledged account provide immediate collateral value and the client only needs a collateral margin to cover the collateral haircut. Real-time reports are available to clients with a credit facility for them to monitor their availability of credit and collateral as well as their credit usage and projected credit needs to settle their activity.

A team of experts manage and control the collateral valuation process while a team of credit officers take credit decisions and monitor collateral adequacy and concentrations in clients' portfolios. The responsibilities of all parties involved in the collateral valuation and monitoring processes are described in the Collateral Implementing Procedure.

Principle 6: Margin

A CCP should cover its credit exposures to its clients for all products through an effective margin system that is risk-based and regularly reviewed.

Not applicable to Euroclear Bank.

Principle 7: Liquidity risk

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the client and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

Key consideration 1: A FMI should have a robust framework to manage its liquidity risks from its clients, settlement banks, nostro agents, custodian banks, liquidity providers and other entities.

Identification of liquidity risks

Sources of liquidity risk

Euroclear Bank can grant credit facilities to its clients to settle a transaction in case their available cash position is not sufficient.

Settlement related credit exposures arise because:

- clients do not hold their cash reserves at Euroclear Bank
- of time lags between the in/outflow of funds due to the different time zones in which clients act.

Settlement related credit exposures can be mainly characterised as intraday credit usage.

The intraday credit is granted from the moment the client's cash account is debited (e.g. for the purchase of securities) until its cash account is credited by an equivalent amount of cash, reimbursing the debit position.

Individual clients' intraday credit exposures may last for a period as short as a couple of seconds up to several hours.

To mitigate credit risk, intraday settlement credit exposures are almost fully covered by pledged collateral in the books of Euroclear Bank.

EB settles in multiple settlement currencies. Euroclear Bank has identified as relevant currencies for liquidity management purposes and stress testing: EUR, USD, GBP and JPY. The liquidity backtests are now ran for all currencies.

Timing of pay-in and pay-out cash flows

The settlement of Euroclear Bank clients' buy and sell transactions results in (net) debit or credit cash balances on their cash accounts in Euroclear Bank.

In the course of the day, clients will instruct Euroclear Bank to either:

- pay-out the available net credit cash balances
- pay-in the amount due, should the net balance of their cash account be negative.

All pay-in and -out flows are processed via cash correspondents or TARGET2.

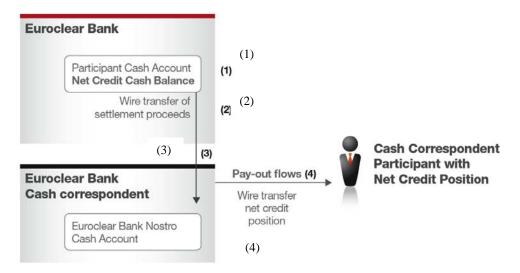
Pay-out flows

Clients with net credit cash balances (i.e. securities sales > securities purchases) (1) can decide to wire their settlement proceeds out of the system for use elsewhere (2). They usually instruct Euroclear Bank to wire cash out early in the morning.

Pay-out flows are processed via Euroclear Bank's nostro cash accounts with its cash correspondents or via TARGET2 (3).

Euroclear Bank's cash correspondent transfers the payment in its own books (in case the Euroclear Bank client has also an account with Euroclear Bank's cash correspondent) or sends the payment to the Euroclear Bank client's own cash correspondent **(4)**.

Pay-out of settlement proceeds



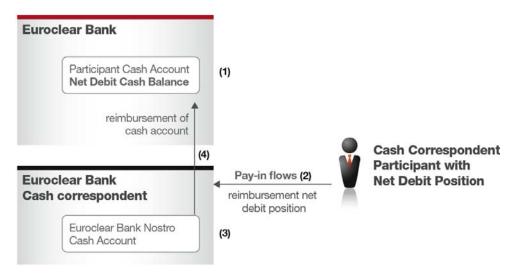
Pay-in flows

clients with net debit cash balances resulting from overnight settlement activity (i.e. securities purchases > securities sales) have been granted (intraday) credit from Euroclear Bank (1).

These clients can reimburse **in the course of the day** their debit cash balances **(2)** by sending funds to Euroclear Bank's nostro account with one of its cash correspondents (or through TARGET2) **(3)**.

As soon as the Euroclear Bank cash correspondent (or NBB via TARGET2) confirms the payment, the client's net debit cash balance (i.e. the intraday credit exposure of Euroclear Bank on the client) is updated accordingly **(4)**.

Reimbursement of net debit cash position



As explained above, clients with net credit cash balances usually instruct to wire their settlement proceeds out of the system **early in the day**. As a rule, clients' intraday debit cash balances, on the other hand, will be reimbursed **in the course of the day**.

Timing of EUR incoming funds/payments

Cash correspondents uncommitted intraday credit facilities help Euroclear Bank process its clients wire transfers before Euroclear Bank's accounts at cash correspondents are funded. These pay-in flows will compensate the intraday credit granted by the cash correspondents.

Liquidity risk framework

Euroclear Bank has established a Liquidity Risk Board Policy complemented by management resolutions.

The Board Policy principles address liquidity risk resulting from client settlement and treasury activities.

The availability of sufficient liquidity is considered particularly critical in the following instances:

- in the evening preceding the overnight process where pre-collateralisation is required in some domestic markets (i.e. Germany, France, Denmark, Italy)
- early in the morning when time critical payments need to be made (cross-border settlement in France and Germany, net payments to Clearstream Banking Luxembourg resulting from Bridge activity)
- when new issue payments need to be made
- throughout the day, to support payment, settlement and custody activity
- in case of stress, to ensure business continuity

Key consideration 2: An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.

Operational tools

Euroclear Bank has an integrated management tool that allows collecting on a regular basis during the day the information on *anticipated* cash movements from different activities (Money Transfer, Settlement, Custody, Bridge, etc.) by Euroclear Bank nostro account and by value date.

Exceptional activity (e.g. large new issues, big income proceeds, important settlement activity) which might put intraday liquidity under pressure are reported separately to the liquidity management team so it can:

- mobilise the required sources
- if needed, contact the relevant cash correspondent to alert them to ensure timely execution of the related payments

Through a daily reconciliation process of all entries on the nostro accounts, Euroclear Bank identifies expost a.o. potential unexecuted clients' payments. Where necessary, appropriate escalation is made to ensure payments are executed with correct value date. 'Liquidity' KRI reports all unexecuted payments.

Existing Euroclear Bank systems do not currently provide a real-time view on the moment the nostro account with the cash correspondent is debited, nor when the effective payment is made by the cash correspondent to the beneficiary.

The delivery of a new monitoring tool to collect real-time information from cash correspondents is planned by end 2015.

In case of contingency, Euroclear Bank has the possibility to consult via web-based/online services some nostro accounts at some correspondent banks. This consultation facility is however not yet fully integrated in Euroclear Bank's day-to-day liquidity management.

Euroclear Bank relies on the cash correspondent to process payments with value date T. Cash correspondents are requested to inform Euroclear Bank in case payments are blocked for execution so that appropriate escalation is made.

Analytical tools

Euroclear Bank has developed a 'liquidity data warehouse'. All liquidity back and stress testing exercises are performed on this database.

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Client tools

Euroclear Bank clients can consult a *Real-time Cash Position Report* and *Real-time Credit Report*.

- The *Real-time Cash Position Report* provides information per currency on the client's real-time cash position resulting from different activities in the Euroclear system (i.e. overnight and real-time settlement, custody, money transfer).
- The *Real-time Credit Report* provides information in USD equivalent only on:
 - o the client's credit line
 - its real-time credit usage (cash & securities) and the available pledged collateral
 - the total number and value of instructions blocked due to lack of credit or collateral
 - the projected net cash value of all eligible receipt and delivery instructions (matched, unmatched and unsettled) for settlement the next day. A similar projection is done for the projected net collateral value of all instructions for settlement the next day.

Key consideration 3: A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the client and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.

Minimum liquidity resource requirements

The quarterly liquidity back test is an ex-post test.

Euroclear Bank's sources of liquidity are compared with the largest exposures observed on the top two clients (at family level) for all relevant currencies and for EUR, USD, GBP and JPY separately.

Liquidity back and stress tests are regularly performed. Their outcome is analysed and recommendations are made accordingly (e.g. on the size of liquidity sources).

Additional liquidity resource requirements

Intraday settlement credit exposures are almost fully covered by pledged collateral in the books of Euroclear Bank. Euroclear Bank can rely on pledged collateral as additional liquidity sources when the client that defaults has signed the APS agreement.

The following scenarios have been stress tested by Euroclear Bank in 2014:

- Scenario 1: IT outage at cash correspondent (€ and \$)
- Scenario 2: Default of a major emerging market country
- Scenario 3: Sudden loss of client balances
- Scenario 4: Multiple Investment Banks in default
- Scenario 5: Cash correspondent/Settlement bank in default
- Scenario 6: Intra-day cut of cash correspondent lines (€, \$, £ and Yen)
- Scenario 7: Default of APS Client being a Depository
- Scenario 8: Daily liquidity back-test (default of top 2 clients run quarterly)

Scenario 1: Country/ies in default

• **Scope**: Euroclear Bank has simulated the default of the PIIGS countries, separately and simultaneously.

Scenario 2: IT outage USD cash correspondent

• **Scope**: The stress test simulated an IT outage for 24 hours at one of Euroclear Bank's USD cash correspondent. USD long cash balances with the cash correspondent were considered to be zero.

Scenario 3: Multiple investment bank failure

• **Scope**: Euroclear Bank simulated a simultaneous failure of three investment banks. These investment banks have signed the APS agreement. The total exposure of Euroclear Bank on the three investment banks is fully covered with securities collateral.

Scenario 4: Intraday cut of EUR, USD, GBP and JPY cash correspondent lines (reverse stress test scenario)

• **Scope**: To assess whether Euroclear Bank disposes of enough liquidity sources to enable business continuity in EUR, USD, GBP and JPY markets whereas the cash correspondent intraday credit lines are not available.

Key consideration 4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the client and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two clients and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.

Not applicable to Euroclear Bank.

Key consideration 5: For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at credit worthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.

Categorization of liquid resources

Euroclear Bank relies on different liquidity resources both for liquidity risks arising from day-to-day operations and in case of contingency. Four classes of liquidity resources are used:

- committed liquidity resources
- APS collateral
- highly reliable liquidity resources
- uncommitted liquidity resources

Committed liquidity sources

- **Investment book:** Euroclear Bank has an investment book invested in ESCB-eligible securities, which are pledged to NBB to obtain liquidity.
- Treasury book: Euroclear Bank has a treasury book partially invested in ESCB-eligible securities, which are pledged at NBB to obtain liquidity.
 ECB eligible securities received in reverse Triparty repos can be used, as of Q3 2014, to increase the pledge ESCB-eligible securities at NBB.
- Bilateral standby facilities: Granted by commercial banks based on bilateral contracts foreseeing that these amounts should be provided same-day to Euroclear Bank upon simple request.
- Backstop facility: Multicurrency contingency liquidity facility provided by a syndicate of banks.
- Committed FX swap facilities: Euroclear Bank has a committed swap facility that could be used to convert liquidity available in one currency into another.

Appropriation of Pledged Securities (APS)

 For clients that are top credit users in Euroclear Bank, an arrangement has been set up allowing Euroclear Bank after such client has been put into default to immediately appropriate the client's pledged securities.

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Highly reliable liquidity sources

clients' 'core' cash balances: clients leave long cash positions on their accounts, which can be used as an operational liquidity source by Euroclear Bank. These long cash positions could (at least partially) be considered as working cash balances for securities settlement in the books of Euroclear Bank.

Uncommitted liquidity sources

- 'Non-core' clients' long cash balances: clients long cash positions that are not considered as liquid resources.
- Intraday line cash correspondents (CACO): Euroclear Bank's cash correspondents provide Euroclear Bank with intraday credit facilities that are uncommitted and undisclosed.
- Intraday credit lines with other commercial banks (non-cash correspondents): credit lines provided by commercial banks that are not linked to daily processing of pay-in and out flows.
- Settlement agents' operational lines: for cross-border settlement in some local markets, Euroclear Bank installs liquidity/collateral arrangements with settlement agents (e.g. Denmark, France, Germany, and Italy).
- Unsecured and secured borrowing capacity: Euroclear Bank has treasury relationships with several market counterparts worldwide from which it might borrow in case of need.
- FX Swap: (see above, but uncommitted).

Key consideration 6: An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.

In case of a failure of a non-APS client, no supplemental liquid resources should be necessary as the potential exposure would be capped at the level of the liquid sources. The purpose for Euroclear Bank is to cover in fact two simultaneous defaults; i.e. 50% of the total liquid sources would cover the liquidity risk created by exposures not covered by APS collateral.

Key consideration 7: An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a client of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.

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The selection process and criteria (financial, reputational, operational), as well as the monitoring process, of liquidity providers is defined in the *Selection and Monitoring of Agents Management Resolution*.

The back-stop facility is provided by a syndicate of banks.

Where applicable, we perform RFPs to select cash correspondents, regular performance scoring and due diligence visits.

The main elements of Euroclear Bank's liquidity risk management, including the distinction between dayto-day versus contingency liquidity management, are disclosed in the Euroclear plc Basel II - Disclosure and the ESCB-CESR Disclosure Framework.

For the bilateral standby facilities, both the communication arrangement and the transfer of funds are tested on a regular basis.

Key consideration 8: An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.

To support day-to-day payment activity, Euroclear Bank relies primarily on:

- a large network of cash correspondents.
- a direct access to TARGET2 for EUR payments.

Euroclear Bank holds accounts at a number of central banks. These accounts have different purposes:

- Euroclear Bank account at the NBB (for EUR):
 - fulfils reserve requirements and accesses the European RTGS system TARGET2.
 - limits Euroclear Bank's credit risk vis-à-vis redeposit counterparties.
- Perform securities settlement in the local market
- Euroclear Bank account at central banks issuing major currencies
 - limits Euroclear Bank's credit risk vis-à-vis redeposit counterparties, Euroclear Bank has contingency deposit accounts at the central banks issuing major currencies. These accounts are intended to be used only in exceptional circumstances, in cases of market wide stress.
- Limit Euroclear Bank's exposure on its local cash correspondents.

Key consideration 9: An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

Identification

Liquidity back test

Following CPMI-IOSCO guidance on liquidity stress test, Euroclear Bank performs a quarterly liquidity stress simulating the default of a Client (at family level) with the highest exposure observed every day of the period under review.

In addition, Euroclear Bank carries out a stress test simulating the simultaneous default of the top two Clients (at family level).

The largest exposures resulting from the default of one or two families is considered:

- in each single relevant currency (EUR, USD, GBP and JPY)
- at aggregated level (multi-currency)

Crisis management exercise

At least on a yearly basis, Euroclear Bank organises a desk top exercise covering an operational or financial incident. These tests also cover crisis management of credit and liquidity risks.

The Liquidity Risk Board Policy states that liquidity stress tests should be conducted on a regular basis to assess the potential impact of extreme but plausible scenarios and the assumptions of the stress tests should be reviewed regularly.

The Board Policy also refers to the liquidity contingency plan which should be reviewed and tested on a regular basis.

Euroclear Bank has developed specific stress testing management resolutions, which includes the list of crisis scenarios to be executed on a regular basis. The Euroclear Bank Management Committee approves (changes to) the liquidity stress testing scenarios and assumptions.

Communication

The results of the liquidity stress tests are reported to the Euroclear Bank Management Committee, with recommendations from Euroclear Risk Management if applicable.

The results of the liquidity back-tests are presented at the Credit Assets & Liabilities Committee (CALCO).

Based on the results of the stress tests, Euroclear Risk Management can recommend to take measures concerning Euroclear Bank's liquidity sources (e.g. maintain or possibly increase the FX swap facilities).

Key consideration 10: An FMI should establish explicit rules and procedures that enable the FMI to effect same day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its clients. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

The Euroclear Bank stress testing management resolutions aim to test the ability of Euroclear Bank to return to a state of full operational readiness following a severe stress event of either operational or financial nature. Intraday settlement credit exposures are for about 99% currently covered by pledged collateral. EB can rely on pledged collateral as additional committed liquidity sources in any participant default. The results of the stress tests (performed by Risk Management) and the resulting recommendations are discussed and approved by the CALCO.

Principle 8: Settlement finality

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

Key consideration 1: An FMI's rules and procedures should clearly define the point at which settlement is final.

The Euroclear System operated by Euroclear Bank is governed by Belgian law. The Euroclear System is designated as a Securities Settlement System (SSS) in accordance with the Belgian Settlement Finality Law which implements the EU Finality Directive. This legislation is publicly available on www.moniteur.be/www.staatsblad.be and provides that the finality rules are determined by the SSS itself.

The *Terms and Conditions*, the *Operating Procedures* and the Euroclear documentation are enforceable in the event of the insolvency of a system client, the operator of the system or the operator of a linked or interoperable system.

The finality rules of instructions in the Euroclear System are detailed in the contractual documentation (*Operating Procedures of the Euroclear System*) which is available on the Euroclear website.

The point of finality depends on whether the transfer is done via internal settlement (i.e. transfer between two clients having an account in Euroclear Bank), via the Bridge (i.e. between an Euroclear Bank and a Clearstream Banking Luxembourg client) or via external settlement (i.e. between an Euroclear Bank client and a client in a local market):

- Internal settlement: Section 5.2.2.5 of Euroclear Bank's Operating Procedures states that 'The settlement of an internal Instruction is final upon execution and the credit/debit of Accounts. As such, the simultaneous transfer of securities and transfer of cash (if against payment) is final at such time.' Provided that all conditions for settlement are fulfilled (e.g. instructions are matched, sufficient cash/credit or securities are available, settlement date has been reached), this execution of internal settlement instructions and generation of records occurs either:
 - o at the end of an overnight securities settlement batch during the night
 - o in real time, during the day, for the real-time processing
- Bridge settlement: Section 5.2.3.7 of Euroclear Bank's Operating Procedures details the finality rules for receipts and deliveries from and to Clearstream Banking Luxembourg over the Bridge. Securities transfers over the Bridge in the real-time processing are final upon successful execution and credit to the Securities Clearance Account (for receipts) or when Clearstream Banking Luxembourg records the credit of securities (for deliveries). For securities transfers via the overnight batch, finality is reached when the other side has confirmed acceptance of the securities.
- External settlement: Section 5.2.4.9 of Euroclear Bank's Operating Procedures states that 'Settlement and finality occurs in the local market in accordance with local market rules and

practice'. A detailed document is provided in the online market guides, available on www.euroclear.com

Consistency between the securities leg and the cash leg of delivery-versus-payment transactions is ensured since both legs are settled in Euroclear Bank's books for Euroclear Bank clients.

For all links it opens in local markets, Euroclear Bank's Network Management department performs a market link risk assessment and obtains confirmation that no provisional credit is made on the securities account opened by Euroclear Bank. Euroclear Bank cannot prevent being credited with provisional transfers of securities across its links with other markets in very limited circumstances. The only case in Euroclear Bank is the US market based on DTCC market rules. In this case, Euroclear Bank prohibits retransfer of these securities until they become final.

Please refer to principle 20 for further considerations on links.

Key consideration 2: An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.

The majority of transactions in the Euroclear System is settled in the overnight batch dated the value date. Transactions that did not settle during the overnight batch and transactions that are entered the same day can settle in the real-time processing with same-day value date.

Since most transactions settle the night dated the intended settlement date or during the real-time settlement processing on the intended settlement date deferrals are rare.

During the daytime, final settlement is provided in the real-time processing from approximately 01:30 to 19:00 Brussels time.

During the night between S-1 and S settlement finality occurs at the end of the overnight batch:

There are three additional ways of improving settlement efficiency:

- <u>Credit facilities</u>: for clients who do not have enough funds, Euroclear Bank may under certain conditions and subject to limits (see Principle 4) provide credit to the client.
- <u>Securities Lending and Borrowing Programme</u>: clients may also under certain conditions borrow securities by subscribing to the Lending and Borrowing Programme.
- Euroclear Bank also provides <u>settlement optimisation features</u> such as technical netting to reduce collateral needs of its clients in the settlement cycle.

Instructions may be recycled in the real-time processing during the settlement date. The system will attempt to settle the instruction during the real-time processing of the settlement date, the overnight batch and real-time processing of the next settlement date and so on until the instruction is settled or cancelled.

Euroclear Bank provides reporting in real time to clients on settlement of instructions and securities account balances.

Key consideration 3: An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a client.

The rules related to when an instruction is irrevocable are articulated in Section 4.1.5 (Cancellation and modification of Instructions) of the *Operating Procedures*, which are part of the contractual framework between Euroclear Bank and its clients and are publicly available on euroclear.com

Section 4.1.5.2 of Euroclear Bank's *Operating Procedures* defines which instructions can be unilaterally cancelled by clients: cancellation instructions must be sent by the input deadline of the settlement process for which instructions are eligible for settlement (i.e. received and validated but not yet executed by Euroclear Bank). After this input deadline, instructions become irrevocable.

The input deadline depends on whether the instructions are to be processed in the internal settlement, Bridge settlement or external settlement:

- Internal settlement: for instructions entered in the system before the settlement date (and that are eligible to be settled during the overnight batch), cancellation instructions must be received before 22:00 Brussels time on the day before the intended settlement date. Settlement instructions entered during the real-time processing dated settlement date settle in principle immediately (provided they are matched and sufficient cash and securities are available). If they have not settled yet, they can be cancelled until the input deadline (19:00 at the latest).
- **Bridge settlement**: the input deadlines are 20:30 Brussels time on the day before the intended settlement date (overnight securities settlement processing) or 17:25 at the latest for the real-time processing dated settlement date (for optional against payment instructions).
- **External settlement**: the deadlines for external instructions depend on the local market rules. These deadlines are detailed in the online market guides, available on <u>euroclear.com</u>

After the above mentioned deadlines, instructions become irrevocable for clients.

Please note that Euroclear Bank has the right to cancel instructions at any stage (section 4.1.5.1 of the *Operating Procedures of the Euroclear System*).

Section 4.1.3.1 (c) of the *Operating Procedures* foresees that Euroclear Bank 'may try to process Instructions received or validated after an input deadline (...)'.

Principle 9: Money settlements

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.

Key consideration 1: An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.

Euroclear Bank does not conduct its money settlements in central bank money. Money settlement in all eligible settlement currencies is carried out in the books of Euroclear Bank itself in commercial bank money, as it is not feasible or practical that Euroclear Bank and/or its clients (both from Belgium and different parts of the world) open accounts at more than 50 central banks of which the currency is eligible in Euroclear Bank. All Euroclear Bank clients have cash accounts in the relevant settlement currencies in the books of Euroclear Bank. Money settlements are effected by crediting and debiting the relevant cash accounts of the clients.

Key consideration 2: If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.

As settlement occurs in the books of Euroclear Bank, the settlement asset used is a claim on Euroclear Bank itself, an AA+ rated de facto limited-purpose bank. More details on how Euroclear Bank manages its credit and liquidity risk can be found in Principles 4 and 7.

Key consideration 3: If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.

This KC is not applicable, as no settlement banks are used in Euroclear Bank to support money settlements. All clients have a cash account directly in Euroclear Bank.

Key consideration 4: If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.

Euroclear Bank is a limited purpose bank that only offers banking and credit facilities that are linked to its custody and settlement functions. All Euroclear Bank clients have cash accounts in the relevant settlement currencies in the books of Euroclear Bank. Money settlements are conducted by debiting or crediting the cash accounts of the counterparties of a transaction with the relevant cash amount of the transaction.

Euroclear Bank manages its credit and liquidity risk taking into account its own Enterprise Risk Management Framework. Its credit risk vis-à-vis its cash correspondents is managed firstly by a careful selection and monitoring of the cash correspondents and secondly by an active management of its long balances (use of reverse repos, central bank accounts, diversification of cash correspondents, etc.). For more details on Euroclear's risk management, please refer to the Principle 3. Euroclear Bank's liquidity risk management is explained in Principle 7.

Key consideration 5: An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its clients to manage credit and liquidity risks.

This key consideration is not applicable, as no settlement banks are used. All clients have a cash account directly in Euroclear Bank.

Principle 10: Physical deliveries

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

Key consideration 1: An FMI's rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.

The Operating Procedures of the Euroclear System clearly state the specific rules in relation to the receipt and delivery of physical instruments. In particular:

Receipts of physical securities (or ownership transference documents) become final only once:

- if received by a Depository directly, the credit to our account at the Depository is final, or

- if received by Euroclear Bank or a Depository through an Other Settlement System - the transfer to our, the Depository's or appropriate nominee's account is final under local market rules/practice.

Deliveries of physical securities become final only once:

- the transfer is deemed final under local market rules/practice, or

- if transferred by Euroclear Bank or a Depository through another Settlement System - our local market account is debited and the intended recipient's account is credited

(Please refer to Euroclear Bank's Operating Procedures Section 2.3.2.1)

If the settlement is through a physical receipt/delivery of securities, it will occur to or from an account outside the Euroclear System with corresponding movements into the Euroclear Bank related Transit Account.

(Please refer to Euroclear Bank's Operating Procedures Section 5.2.4)

Key consideration 2: An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.

Euroclear Bank identifies the physical form of securities and adapts its processes for their receipt and delivery accordingly (see key consideration 1 above). When securities are held in physical form, including in the form of global certificates that are immobilised, Euroclear Bank's due diligence procedures foresee a yearly vault inspection that includes a physical verification of securities in the vault. Euroclear Bank's insurance policies include coverage for losses of physical securities.

Principle 11: Central Securities Depositories (CSD)

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.

Key consideration 1: A CSD should have appropriate rules, procedures, and controls, including robust accounting practices, to safeguard the rights of securities issuers and holders, prevent the unauthorised creation or deletion of securities, and conduct periodic and at least daily reconciliation of securities issues it maintains.

Euroclear Bank has appropriate rules, procedures and controls to safeguard the rights of the securities issuers and holders and prevent unauthorised creation or deletion of securities. Euroclear Bank applies the Belgian and European accounting principles, which are summarised in CBFA Circular 2007-7⁷:

- Client assets and own assets should be completely separated (principle 2)
- The following accounting principles should be used (principle 4) :
 - o Accounts should be of the type of assets and liabilities accounts
 - o Double-entry accounting according to the debit-credit principle
 - o Balance between debit and credit at all times
 - o Daily booking, without delay, of transactions
 - Simultaneous booking of the securities and cash leg

The accounting practices and the reference to Royal Decree 62 can be found in the Terms & Conditions Section 4 (Holding of Securities; Terms of Custody), which are part of the contractual framework between Euroclear Bank and its clients.

Euroclear Bank performs two kinds of reconciliation.

- Internal reconciliation, where the sum of the clients' securities balances is reconciled with the internal account reflecting the total of these securities held at Euroclear Bank's Depository. Any discrepancies between these accounts are detected automatically.
- External reconciliations are performed by Euroclear Bank. Most securities
 movements are reconciled on a daily basis with the Depositories. Each month,
 Euroclear Bank reconciles for all securities the total of clients' securities balances at
 the end of the month in its books with the securities balances reported by the
 Depositories. For certain securities (New Global Notes held at Common Safekeepers),
 Euroclear Bank also performs a daily reconciliation of balances.

⁷ This is a prudential supervision standard, issued by the prudential supervisor CBFA (since 1 April 2011 NBB)

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Creation of securities positions is only performed upon receipt of securities to be credited to client accounts. Removal of these securities positions is generally performed upon final maturity or in the context of a corporate event (e.g. exchange). Both creation and deletion are generally processed without manual intervention at Euroclear Bank upon client instruction and depository confirmation. Movements in client accounts are reported on a daily basis to clients.

These procedures and controls are regularly reviewed by Euroclear's Internal Audit and by its external auditor. The results of this review are made available to clients and authorities via the yearly ISAE (International Standard on Assurance Engagements) 3402 report. In addition, each year, the external auditor reports its findings on Euroclear Bank's internal controls regarding the safekeeping of clients' assets to the Belgian authorities.

Key consideration 2: A CSD should prohibit overdrafts and debit balances in securities accounts.

The Terms & Conditions determine that 'Debit balances or overdrafts in Securities Clearance Accounts are prohibited in the Euroclear System' (Section 15c). Any transaction that may lead to a debit position in the client's account will not be executed.

Key consideration 3: A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry. Where appropriate, a CSD should provide incentives to immobilise or dematerialise securities.

Although many securities that are held and settled in Euroclear Bank are issued in physical form, all securities settled in Euroclear Bank are immobilised or dematerialised and transferred by book-entry in the system. To be held in Euroclear Bank, physical securities need to be immobilised with a CSD or with a Depository.

Key consideration 4: A CSD should protect assets against custody risk through appropriate rules and procedures consistent with its legal framework

Clients' assets are protected through Euroclear Bank's accounting practices and internal controls, the segregation from Euroclear Bank's own assets and the protection against Euroclear Bank's creditors, including in case of bankruptcy of Euroclear Bank. Euroclear Bank is also legally prohibited from using clients' assets without their consent.

In addition, frequent reconciliations allow swift identification of errors if any.

Euroclear Bank has procedures to select its Depositories (see Principle 16). Both Euroclear Bank and its depositories maintain insurance coverage with respect to clients' securities. Euroclear Bank also periodically obtains legal opinions under the local law of the depositories to ensure that the level of asset protection under local law is comparable to the asset protection in Belgium (see Principle 1).

Key consideration 5: A CSD should employ a robust system that ensures segregation between the CSD's own assets and the securities of its clients and segregation among the securities of clients. Where supported by the legal framework, the CSD should also support operationally the segregation of securities belonging to a client's customers on the client's books and facilitate the transfer of customer holdings.

Euroclear Bank segregates its own securities from those of its clients in its own books and/or at the level of Euroclear Bank's Depositories. clients' assets are segregated from the assets of the other clients in the books of Euroclear Bank. Clients may also segregate their own securities from those of their underlying customers in the books of Euroclear Bank. Euroclear Bank will in principle not rely on the assets of its clients' customers to cover exposures on its clients, as Euroclear Bank has waived the statutory lien on all securities credited to a Securities Clearance Account which has been separately and expressly identified in writing by the client as an account to which solely customer securities are credited⁸.

At the level of the Depositories of Euroclear Bank, the clients' assets are held in an omnibus account, segregated from the Depository's own assets and/or from the assets of other clients of the Depository, in accordance with local legal and regulatory requirements.

Customer holdings can easily be transferred to another client via a simple transfer instruction by the client or its liquidator. The underlying customers can however not send transfer instructions themselves, as they are not necessarily known to Euroclear Bank⁹.

Key consideration 6: A CSD should identify, measure, monitor, and manage its risks from other activities that it may perform; additional tools may be necessary in order to address these risks.

Euroclear Bank offers services related to custody and settlement of assets, including the provision of credit to clients in order to facilitate the efficient settlement of their instructions. For all its services, Euroclear Bank identifies, measures, monitors and manages its risks in line with its Enterprise Risk Management framework. Before new services are offered, they need to be approved after a risk assessment (see Principle 3).

⁸ Operating Procedures, Section 10.1 (b)

⁹ If Euroclear Bank adds a designation in an account identifying the name of a person other than the client, such designation does not create any contractual relationship between such designated person and Euroclear Bank, or otherwise give the designated person any claim against Euroclear Bank with respect to any securities or cash held in these accounts (Operating Procedures, Section 3.6.1 b)

Principle 12: Exchange-of-value settlement systems

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

Key consideration 1: An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.

The Euroclear system is a Model 1 DVP system: internal and Bridge instructions are settled between clients on a trade by trade (gross) basis, with finality of the transfer of securities from the seller to the buyer occurring at the same time as the finality of transfer of funds from the buyer to the seller. For cross-border instructions, local rules apply.

The system controls the availability of the cash and securities provisions before executing the instructions (i.e. so-called 'positioning'). If the cash and/or the securities are not available, the transaction will not be settled (but will be recycled later on in accordance with the system's rules). If the cash and/or the securities are available, the instructions will settle and the cash and securities will be transferred simultaneously.

About 90% of the transactions in the Euroclear System are settled Against Payment (AP).

Free of Payment (FoP) instructions cover transactions to which no cash leg is associated within the Euroclear System.

Both the contractual¹⁰ and technical framework of the Euroclear system ensure that delivery of securities takes place if, and only if, payment is received. The two legs of a delivery of securities against payment of cash are processed simultaneously. Both legs are final at the same time.

Please also refer to Principle 8 on Settlement finality.

¹⁰ See *Operating Procedures* Part II - A - Securities Clearance and Settlement

Principle 13: Client-default rules and procedures

An FMI should have effective and clearly defined rules and procedures to manage a client default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

Key consideration 1: An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a client default and that address the replenishment of resources following a default.

Euroclear Bank has implemented a detailed contractual framework which governs the participation to the Euroclear System it operates and a.o. sets out:

- the events Euroclear Bank may consider as default events
- the actions Euroclear Bank may take upon occurrence of default events
- the rights and responsibilities of defaulted clients

Euroclear Bank has also implemented an internal risk management framework which enables it to promptly react to events of defaults, replenish resources smoothly by enforcing collateral securing the borrowings and ensure the continuity of its operations. This framework is subject to supervision by the National Bank of Belgium (NBB).

Declaration of default by Euroclear Bank

Section 6 of the *General Conditions Governing Extensions of Credit to participants* identifies the events of default under this agreement.

Pursuant to section 3 of the *General Conditions Governing Extensions of Credit to participants* in the Euroclear System, each (cash) overdraft is payable immediately upon demand by Euroclear Bank.

Pursuant to section 6 (a) (ii) of the *Collateral Agreement Governing Secured Borrowings by participants in the Euroclear System* and section 13 (a) (iv) (A) of the *Supplementary Terms and Conditions Governing the Lending & Borrowing of Securities*, Euroclear Bank can also ask to immediately return the outstanding securities borrowed ('repayment of securities').

Before the declaration of default, Euroclear Bank will send a 'payment notice' and/or 'recall for borrowings' to the counterpart in writing.

As a rule, in case of non-payment within 24 hours (after the issue of the notice or recall), the default is officially declared by a default notice sent to the counterpart.

Key consideration 2: An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.

Euroclear Bank has established a global Business Continuity Plan to prepare Euroclear Bank crisis management response in case of an operational / financial failure of an external counterpart or Clearstream Banking Luxembourg, as well as a failure of an agent.

In respect of default of clients, Euroclear Bank follows standardised process for all clients.

The process differs depending on whether or not the defaulted client has a credit line.

In case of a country crisis, an additional analysis is required for assessing the legal entities affected residing in that country.

The Euroclear Bank stress testing management resolutions are in principle reviewed every two years. Euroclear Risk Management will report the results of the review, and recommend, if required, amendments, to the Euroclear Bank Management Committee.

The Euroclear Business Continuity Implementing Procedure is in principle reviewed every two years. Euroclear Bank continuity plans are reviewed at a minimum on an annual basis, or more frequently if required.

Key consideration 3: An FMI should publicly disclose key aspects of its default rules and procedures.

The Euroclear Bank *Operating Procedures* and *Terms & Conditions* are publicly available and detail all aspects that are relevant for clients in case of default.

Identification of a default

- Section 2.1. of the *Operating Procedures of the Euroclear System* (OPs) set out admission criteria which the clients must meet on an ongoing basis.
- Besides, Section 14 of the *Terms and Conditions governing use of the Euroclear System* (T&C) contractually define what Euroclear Bank may consider as events of default.
- Section 3.8 of the OPs clarifies the rules applicable to defaulted clients.
- Euroclear Bank also acts as settlement agent of the Euroclear System it operates and may grant credit to clients for the purpose of efficient settlement. Credit lines are governed by a specific contractual documentation, which cross-refers on some aspects to the T&C and OPs.
- Pursuant to section 3 of the *General Conditions Governing Extensions of Credit to participants in the Euroclear System,* each (cash) overdraft is payable immediately upon demand by Euroclear Bank.

• Pursuant to section 6 (a) (ii) of the *Collateral Agreement Governing Secured Borrowings by participants in the Euroclear System*' and section 13 (a) (iv) (A) of the *Supplementary Terms and Conditions Governing the Lending & Borrowing of Securities*, Euroclear Bank can also ask to immediately return the outstanding securities borrowed ('repayment of securities').

Declaration of default by Euroclear Bank

Prior to the declaration of default, Euroclear Bank will send a 'payment notice' and/or 'recall for borrowings' to the client in writing.

By lack of appropriate reaction from the client, Euroclear Bank will declare the default by sending a default notice and will enforce the collateral securing the borrowings.

As crisis situations will by definition differ, Euroclear Bank aims to maintain sufficient room for maneuver to adapt to the specific circumstances. In that regard, the default procedure as such (i.e. the practical details on when and how will Euroclear Bank declare that a client is in default) is not mentioned in the T&C or the Operating Procedures.

Non defaulted clients

For non-defaulting clients, no specific mechanisms need to be disclosed as Euroclear Bank's obligations will be limited mainly to the exchange of information on the default. In case of a failure of Clearstream Banking Luxembourg, Euroclear Bank may in accordance with its Operating Procedures apply the right-to-debit.

Key consideration 4: An FMI should involve its clients and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.

Euroclear Bank does not test its client-default procedures with its clients because most of the procedures to be tested are internal procedures as the interactions with defaulted clients are limited to contacts/communications with the appointed insolvency administrators. These administrators are generally persons or entities external to the client. They are never known up-front, only appointed at the time of the occasion, which makes it impossible to test.

Moreover, Euroclear Bank has dealt with several bankruptcy/insolvency cases of clients, which allowed Euroclear Bank to put in practice its client default procedures. The internal procedures have proven to be adequate.

On a regular basis, Euroclear Bank does organise business continuity testing based on different scenarios (a.o. defaults of a large client with multiple roles in the Euroclear System and in Clearstream Banking Luxembourg.

Principle 14: Segregation and portability

A CCP should have rules and procedures that enable the segregation and portability of positions of a client's customers and the collateral provided to the CCP with respect to those positions.

Not applicable to Euroclear Bank.

Principle 15: General business risk

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Key consideration 1: An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.

Euroclear defines its general business risks both though a bottom-up process, where all business areas assesses their risks in a structured and recurring process (RCSA-risk control self-assessments), including strategic and business risks. These are consolidated for each Euroclear entity. The top-down approach is done by the management team in strategic and business risk assessments, including horizon scanning and out-of-the-box views on the CSD business.

The business risks are monitored through group functions and in the local management team. A systematic and continuous analysis of client preferences and regulatory changes are done in product and client relation functions as well as in the legal department.

The Product Management and Finance functions conduct a monthly revenue assessment of all revenue streams. Market intelligence, regulatory changes and external sources of market statistics are used to evaluate internal revenue outcome and predictions. Forecasts of volumes, value and revenues are officially re-evaluated at Euroclear group level 3 times per year. The monthly analysis and forecasts are sent to the CEO, the group PM function and the Executive Committee of each entity of the group.

Key consideration 2: An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.

Determining capital and liquidity needs: internal view based on risks faced by each entity.

Euroclear determines how much equity it needs to hold based on the risks faced by each of the Euroclear entities. This takes all risk types into account, including, but not limited to, business risk.

The core equity required for the Euroclear CSDs and for Euroclear Bank is determined in line with the Internal Capital Measurement Approach (ICMA). The objective of the Internal Capital Measurement Approach (ICMA) is to establish high-level principles that can be applied to all entities of the Euroclear

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group, to ensure they have sufficient capital to cover their risks. The approach is consistent across all entities of the Euroclear group and is an essential component of the group's Pillar 2 under Basel II.

The internal view on Euroclear Bank's capital needs is based on an economic capital model that is continuously kept up-to-date and regularly validated by an independent party. Euroclear Bank is therefore fully confident that the resulting capital requirements are adequate to support the risks that it faces. The model covers operational, market and credit risks, as well as business risks. Liquidity risk is addressed through strong liquidity plans and strategic risk receives constant qualitative attention from the management. Because Euroclear Bank systematically seeks to minimise risk, the base case figures are small in relation to Euroclear Bank's actual capital, but the capital also aims at covering the worst stress test amongst all risk types, and also includes substantial buffers for model risk and capital stability. This conservative approach to capital, combined with Euroclear's strong risk management and effective controls, has helped Euroclear Bank maintain its high credit ratings in times of market stress.

Determining capital and liquidity needs to ensure continued operation in case of recovery

The regulatory consensus in the EU is that (I)CSDs should maintain at least six months of operating expenses in order to enable a recovery or an orderly wind-down (as will be enacted in the CSD Regulation). At the consolidated level, Euroclear also complies with the regulatory capital requirements under Basel II. Both Pillar 1 and Pillar 2 are based on an assessment of the risks faced by the entities (see section above). For some entities, these requirements exceed the amount that would cover six months of operating expenses.

The time needed to implement recovery measures is expected to vary, depending on the type of measure to be taken. However, as substantial cost reductions could be pushed through quite rapidly, this would be expected to give ample time to support the implementation of more lengthy options. Intra-group recapitalisation may be swift.

Regulatory capital requirements under Pillar 2 of Basel II, which are based on our internal view on the capital Euroclear Bank may need to cover the risks it faces, substantially exceed six months of operating expenses (based on 2014 figures an amount of €406 million would be needed).

This amount would take into account the worst case scenario where all activity stops (no settlement fees will be received from clients, but also no settlement fees to be paid to depositories), while safekeeping and other fees still need to be paid to depositories. Interest expenses (mainly credit interests paid to clients for their long cash balances) are not included as operating expenses, as the clients' long balances generate interest revenue for Euroclear Bank. In scenarios where this interest revenue would decrease (e.g. reduction of clients' long balances), the corresponding cost would also decrease.

End December 2014, Euroclear Bank has \in 1,438 million core capital (and liquid net assets, as its equity is invested in liquid assets), which is more than sufficient to cover six months of current operating expenses (and to cover the time needed to implement the recovery plan, the main solutions of which can be implemented within six months) to cover general business risk.

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Core capital *	Pillar II capital constraint **	Six month operating expenses **
(end December 2014)		
1,438	1,200	406

million euro

* Before any distribution

** Figures based on 2014 requirement approved by the Board in the context of the capital planning exercise

Regarding recovery options, as excess capital located in Euroclear SA/NV is material, it would likely provide enough capacity to Euroclear SA to support any CSD of the group in a recovery scenario.

Key consideration 3: An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover client defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements

Recovery or orderly wind-down plan

See our replies under Principle 3, Key consideration 4.

The recovery plan focuses on recovery and survival of Euroclear entities as going concerns as going concerns . In addition, it identifies and describes recovery options that may imply selling business lines or entities (in the group recovery plan). Such transfers would support the orderly wind-down of any (I)CSD. Since a rapid recovery is essential for maintaining the market's confidence in Euroclear Bank, Euroclear Bank focuses in its recovery plan on solutions that can be implemented reasonably fast. Solutions that are part of Euroclear Bank's 'day-to-day' risk management can be decided on and implemented very rapidly: insurance for operational risk, liquidating clients' collateral, and activating contingency liquidity sources. The recapitalisation of Euroclear Bank via the group's excess capital (located in Euroclear SA/NV, the local CSDs of the group and its other holding companies) or conversion of a subordinated debt instrument can be decided on and implemented quite quickly To facilitate a rapid recapitalisation, Euroclear Bank and all group entities above maintain an adequate level of authorised capital that the Board may issue without the need for shareholder approval. Recapitalisation via (new) external shareholders or via a sale of some of the Group's assets may also be decided on quite quickly, but their implementation may take longer.

Maintain at least 6 months of operating expenses

See our replies under Principle 15, Key consideration 2. Each Euroclear entity maintains a core capital that exceeds six months of operating expense.

Specific amounts of liquid assets are set aside to cover credit, operational, market and business risk respectively. Although the liquid assets designated to cover business risks are not physically separated from liquid assets to cover other risks, the amount set aside for business risk is conceptually separated from the capital and liquid assets needed for compliance with Principle 4 on credit risk.

Euroclear Bank's economic capital for business risk is calculated in accordance with the Basel II - Pillar II framework. In addition, economic capital is held to cover credit risk (using an adjusted FIRBA model), operational risk (using an adjusted AMA model), market risk, off-shoring risk, pension risk, model risk and stress testing. Due to the different approach to define business risk under CPMI-IOSCO and Basel II, it is possible that parts of other economic capital, than the one reserved for business risk, could be used to cover the general business risk (e.g. model risk and stress testing).

Key consideration 4: Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.

Euroclear Bank's capital is invested in debt securities (EU government or supranationals) with a rating of at least AA+, or held in cash at the central bank.

In case of extreme market conditions where Euroclear Bank would not be able to convert AAA or AA+ rated EU bonds it holds into cash, it can use them as collateral for obtaining liquidity via the NBB as these bonds are ESCB-eligible.

The quality and liquidity of the assets in which Euroclear Bank's capital is invested is assessed monthly by Euroclear Bank and the NBB. In case of deteriorating quality (i.e. credit rating downgrades) of some of the bonds held, the investment portfolio is adjusted (to ensure that all bonds in the portfolio are rated AA+ or above).

Key consideration 5: An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.

The recovery plans for the Euroclear entities include options describing how capital could be sought from other group entities or from external shareholders. See our replies under Principle 3, key consideration 4 on recovery planning in the group.

As a mother company, Euroclear SA/NV is particularly well placed to inject capital in its subsidiaries in case of need. It is the group's policy to maintain excess capital in Euroclear SA. Recapitalisation via the group's excess capital can be decided on and implemented quite quickly.

If Euroclear Bank's capital falls below its minimum requirements, the subordinated debt instrument will be converted into profit sharing certificates and will increase Euroclear Bank's core tier 1 capital by about €98 million.

If these measures are insufficient, Euroclear Bank may decide to raise new capital from existing or new shareholders.

Principle 16: Custody and investment risks

An FMI should safeguard its own and its clients' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

Key consideration1: An FMI should hold its own and its clients' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.

Euroclear Bank holds its assets and its clients' assets at supervised and regulated entities (in practice big international or local banks or CSDs) that are subject to and/or on which it contractually imposes minimum requirements for accounting practices and safekeeping procedures.

Upon selection of a new agent, Euroclear Bank conducts a due diligence review of the candidates. The candidates must meet business and quality requirements, accept the terms of the standard Euroclear Bank agreement, comply with data protection and confidentiality requirements, be financially sound, manage their operational risk and meet business continuity requirements. Furthermore, being associated with the candidate should not cause reputational damage for Euroclear Bank.

Euroclear Bank has contractually the right to inspect and audit records at the depository and to perform vault inspections for agents in charge of safekeeping physical securities.

Key consideration 2: An FMI should have prompt access to its assets and the assets provided by clients, when required.

Euroclear Bank ensures via a legal opinion that the ownership rights for its clients' and its own assets are adequately protected. Euroclear Bank only invests in Eurozone securities, eliminating delays with regard to access to its securities due to time zone or jurisdiction problems.

Key consideration 3: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.

Euroclear Bank has developed a tool allowing to have a view on the exposures it has on its custodian banks for all the roles they may have in the system, such as treasury counterparty (for redeposit of cash balances), client (credit line for settlement activity, securities borrowing), issuer of securities (used as collateral by other clients, or securities that are being redeemed/pay interest) and lead manager in the new issues process.

The total stock of securities that Euroclear Bank holds is diversified over several Common Depositories (for Eurobonds) and more than 40 local Depositories. Sometimes, Euroclear Bank has even several Depositories for one market.

Key consideration 4: An FMI's investment strategy should be consistent with its overall riskmanagement strategy and fully disclosed to its clients, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.

Euroclear Bank's (prudent) investment strategy is consistent with its overall risk-management policy of keeping a low risk profile.

Key elements of its investment strategy are disclosed in its Pillar 3 disclosure report (in the sections related to market, credit and liquidity risk).

Euroclear Bank only invests in EUR-denominated bonds of EU governments, supranationals or the EFSF with at least a AA- rating. As these securities are ESCB-eligible as collateral, they can be liquidated via the central bank quickly and without any price effect.

In addition, deep secondary markets exist for such securities, which allow their sale without any significant price effect.

Principle 17: Operational risk

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfillment of the FMI's obligations, including in the event of a wide-scale or major disruption.

Key consideration 1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.

Identification of operational risk

The Board of the parent company Euroclear SA/NV has defined the Operational Risk Board Policy which is also applicable to all entities. The primary goal of this policy is to define an operational risk management framework that ensures that Euroclear takes the necessary steps in its day-to-day operations to effectively identify, assess, monitor and manage operational risk at all levels. The risk management framework describes:

- how operational risks are identified
- who bears responsibility for managing these risks
- how they can be mitigated
- all relevant operational risk processes
- the role of people within the processes
- the information needed to make sound management decisions

Euroclear adopts the Basel II definition of operational risk which views operational risk as an umbrella risk, encompassing:

- Processing risk. The risk of loss (financial or reputation) resulting from inadequate or failed internal processes, people, system or external events
- Accounting risk. The risk of loss (financial or reputational) arising from the failure to produce timely and accurate management reporting and financial statements
- Ethical conduct, legal and compliance risks

The Operational Risk Board Policy defines policy goals for:

- corporate and information security
- services by third parties
- media communications
- accounting risks
- customer affiliation and monitoring
- Treasury counterparties

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Policy goals are then translated by senior management into management resolutions which are further detailed in implementation procedures.

The annually updated *Business continuity* plan assesses threats and risks associated with an interruption to business processes, including those stemming from external sources. Each business area has identified its recovery requirements (staff, communications and records, equipment, procedures) and produced or procedures which fit with the overall business continuity plan. Single points of failure for critical services are assessed and are eliminated as far as possible in the development projects requirements process, and for live services in recurring risk control self-assessments.

Management of operational risk

Operational Risk Management Framework implements a risk management cycle that encompasses:

- risk identification, assessment and measurement
- risk response: mitigate, accept, transfer/insure or avoid
- risk reporting and escalation
- risk monitoring

Risk identification, assessment and measurement by the business areas are performed by:

- systematic risk assessments of new products or services
- monitoring performance and risk indicators of on-going business

Examples of such indicators are:

- settlement volumes
- settlement failures
- number of corporate actions
- revenue monitoring
- service availability
- number of operational incidents
- number of intra-day cash payments
- number of Euroclear Bank/Clearstream Banking Luxembourg realignments
- number of pending realignment request by Euroclear Bank

Business areas use self-assessment processes to identify potential shortcomings and solutions.

For the management of these risks, the Board yearly defines the 'Risk tolerance level' consistent with the available capital and the management the level of risk that can be accepted (risk appetite) with the objective to keep the risk profile low and stable.

Policies, processes and controls

The business areas need to develop solutions to mitigate risks effectively, with the Risk Management function providing an advisory role for material risks. Risk mitigating action plans and their target dates

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are logged. The successful implementation of these mitigating actions is monitored by Risk Management and is reported regularly to management.

The timeliness of risk resolution is counted as a performance indicator in the Euroclear Group's Balanced Scorecard (e.g. addressing the key control and risk issues identified during the annual review of the Internal Control System (ICS)).

Risk monitoring tools are in place and are continuously evolving to follow up risks. Where possible, Line Management puts in place tactical measures to avoid the risks materialising in the advent of a more structural solution. Risks can be accepted when the costs required to mitigate the risk outweigh the benefits. Depending upon the impact of the risk, the decision to accept a risk is made by the business owners or by the Euroclear Bank management. There is a process to re-evaluate all accepted risks annually.

The risk monitoring is performed using a Risk Register, which is an inventory of the risk types that Euroclear faces in pursuing its corporate objectives. The allocation of responsibilities within Euroclear's three lines of defense model is:

first line of defense:

identify the risks that may prevent reaching their objectives, define and operate controls to mitigate the risks and document and demonstrate the control environment. They involve control functions to support them, for instance:

- Compliance: monitors changes in laws and regulations and advises as to what controls are required.
- Risk Management: makes available policies, advices during the implementation of the risk management/control framework
- second line of defense:

- Risk Management defines the control environment framework in line with regulations and internal policies, it monitors the risk and internal control environment against changing internal and external environment and reports, challenges or escalates to management risks or control defects. Risk Management supports the business to implement remedial actions.

- Compliance: monitors, tests and reports to management on controls relating to laws and regulations and advises on remedial actions. Other support functions like Finance or HR monitor specific controls and escalate to management in case of control defects

third line of defense:

Internal Audit independently reviews and tests the controls and reports to management about the adequacy and effectiveness of the control environment.

The Euroclear group aims to align its risk management practices as closely as possible with major recommendations from various regulatory and industry bodies, such as:

- CPMI-IOSCO
- G30
- European Securities and Markets Authority
- European Banking Authority
- European Central Bank
- Basel Committee for Banking Supervision
- Local regulators

Its risk management framework is defined in an Operational Risk Board policy applicable for the group Euroclear. It has been developed and is maintained in accordance with best practices for risk management and regulatory guidelines, including:

- coso¹¹
- ISO 31000:2009 principles and generic guidelines on risk management
- ISO 27001:2013 guidelines for Information Security
- Local regulatory requirements
- Standards and guidelines issued by the Basel Committee on Banking Supervision and the European Banking Authority

The Human Resources (HR) function has established formal hiring policies providing appropriate assurance that new employees are qualified for their job responsibilities. The hiring process includes the communication to HR of an extract for the applicant of national register recording past crimes.

All new employees complete a standard introduction programme. In addition, there are informal departmental seminars, supervised on-the-job trainings, and formal in-house training courses. Certain positions require specialised training provided by third parties. Managers are responsible for encouraging staff to pursue additional training and development to increase expertise within their functional responsibilities.

All personnel agree personal written objectives for the year with their manager, including discussions on training needs and career plans. Appraisal meetings are held to follow-up on objectives and performance during the year. A succession plan is established and covers all managerial positions.

HR maintains a talent management process, where existing staff profiles are tested against upcoming vacancies. It also maintains records of joiners, movers, leavers and updates the management regularly about status and trends. Staff rotation and transfers between departments and even between the entities of the Euroclear group is encouraged. Regarding fraud prevention, Euroclear group has implemented in all its entities policies about:

- Code of conduct
- Ethical Conduct

¹¹ An internal control framework by The Committee of Sponsoring Organizations of the Tradeway Commission

- Accepting gifts
- Whistle blowing

Additionally, in areas where values are handled (e.g. payments), there are numerous operational controls implemented in order to minimise the risk of fraud, e.g. STP-processing, four-eyes principles, reconciliation checks, etc.

Fraud reporting is essential to ensure the consistent treatment of information regarding fraud, the proper investigation by an independent and experienced team, and the protection of Euroclear group's interests and reputation. All staff have been informed on how to report any evidence or suspicion of fraudulent activities.

All staff must complete on a regular basis a compliance test including questions related to fraud prevention.

When designing (new) products and services, all risk types including operational risk are considered via formal risk assessments before the launch. The implementation of the controls or measures that are required subsequent to such risk assessments is monitored.

Changes to operational applications and their supporting systems and networks are planned, developed and implemented in a controlled manner.

The system development methodology takes into account the resilience of the infrastructure and applications which need to be respected for all critical infrastructure components and applications. Compliance to these principles and guidelines is evaluated for every project or change as part of the production acceptance criteria.

Application systems are subject to testing and review in several application environments (integration testing, volume testing, acceptance testing) before they are installed in production. The scope of such testing is defined and the results are reviewed by both technical and business experts.

Once testing is complete, the change is made available for release into the production environment. There is a formal sign off process involving the business management, IT and technical experts to approve change releases. Many key things are checked during the sign off, like:

- the timing of the change
- test results
- customer and user readiness
- risk of other interfering activities or conflicts
- particular risk areas
- the availability of support expertise during and after the launch
- preparedness to back-out the change in case of problems, etc.

Euroclear applies a 'release approach', limiting the number of releases. Therefore, a release may contain several application changes. Only a limited number of authorised individuals, independent from the development team, are able to implement such approved changes, thereby leaving an audit trail of transfers into production.

Key consideration 2: An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.

Roles, responsibilities and framework

Since Risk Management (including operational risk management) and IT are centralised in the holding company Euroclear SA, both Euroclear SA and Euroclear Bank have certain responsibilities for operational risk.

Euroclear Bank level

The Euroclear Bank Board is the ultimate decision making body of Euroclear Bank.

In order to perform its responsibilities more efficiently, the Board has established a number of committees for which the Board has defined Terms of Reference including the roles and responsibility of each committee.

The Risk Committee (RC) is an advisory committee which helps the Board fulfill the following responsibilities:

- risk management governance structure
- risk tolerance, appetite and strategy
- management of key risks as well as the process for monitoring and mitigating such risks

The RC receives input from the risk management function, and at least once a year verifies whether this function is working effectively.

Euroclear Bank Management Committee is responsible for:

- ensuring that line managers take their responsibility for managing risks and control functions within the organisation's business operations as the 'first line of defense'
- ensuring that sufficient resources are allocated to the risk management, finance and compliance functions, who act as the 'second line of defense' and who also provides the frameworks for the management of risks, e.g. policies
- ensuring compliance with policy documents, as well as with local laws and regulations
- reporting to the Board on risk matters and control gaps and about significant actions taken to mitigate detected gaps without delay

Euroclear Bank Management Committee is assisted by local risk and operating committees to assist in the performance of its duty.

Euroclear group level

The Euroclear SA Board has several committees: among them an Audit Committee, a Risk Committee and a Management Committee with similar responsibilities (for Euroclear SA) as described above.

A Group Risk Committee (where all (I)CSDs of the group are represented) has been set up by Euroclear SA Management Committee to assist in assessing group-related risks.

The Group Admission Committee – Euroclear Bank, together with the ESES CSDs- participates in this advisory cross-entity committee to:

- review the new client profiles and their impact on the overall business portfolio
- recommend on new admission requests to the relevant management committee
- propose possible changes to the clients' admission strategy

Euroclear SA has also a Risk Management division, responsible for the following generic types of activity for each of the risks it covers:

- **Risk policy setting**; i.e. definition of the corporate rules of conduct relating to those risk areas where a violation of the corporate policy may lead to (i) severe losses affecting the creditworthiness of each company of the Group; (ii) permanent damage to its reputation or (iii) unacceptable levels of systemic risk
- **Risk assessment & measurement**; i.e. tools and methods for risk definition and measurement; identification and assessment of the various residual risk exposures, their likelihood of occurrence and their impact
- **Risk advice**; i.e. expert impartial risk advice
- Risk monitoring; i.e. follow-up of exceptions, action plans, new products and changes in risk exposure; oversight over the various risk areas and reporting to the appropriate levels (local and group)
- If needed, escalation of material risk issues to the various Management Committees and Board Risk Committees or local Audit and Risk Committees
- Risk transfer; i.e. identification and tracking of situations where large risk exposures can be transferred to a third party via insurance or a hedge at the corporate level (e.g. macrohedges to cover interest rate or FX risks). In cases where such a transfer is not possible, business continuity planning is considered.

Risk Management acts independently of other functions in the group and reports directly to the group CEO. It is headed by the Chief Risk Officer (CRO) who is also a member of the Management Committee of Euroclear Bank and a permanent invitee to the Management Committee of Euroclear SA/NV. Corporate risk managers have been assigned to address the risks of each Euroclear entity and are supported by the Risk Management Division of the group, who develops for instance the risk management framework, capital modeling and data support. A team is also dedicated to banking risks.

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The Risk Management division ensures that risks are known and understood by management. They escalate material risk issues to the appropriate level to ensure that management, the Board, the Audit or Risk Committee are aware of:

- the emergence of new risks
- the evolution of identified risks
 - any cases where the mitigating actions for an existing risk may be:
 - insufficient in scope; or
 - put in place later than originally intended.

The Risk Management division regularly reports on operational risk, tailoring its reports to the audience (group or local audit and risk committees and management committees).

The parent company's Euroclear SA/NV Board has approved the Operational Risk Board Policy which defines the operational risk management framework. The effective implementation and monitoring of this board policy is delegated to the Euroclear SA/NV Management Committee. It reviews the effectiveness and efficiency of the Operational Risk management framework, including through effective and comprehensive independent audit review, and ensures that it evolves to meet strategic needs and compliance requirements.

When Senior Management reviews this document they are considering whether any material information, e.g. regarding major changes in risk management framework, necessitate changes to this document. Senior Management will report on its findings to the Board and, where appropriate, recommend amendments to this document to the Board.

Further reviews may be undertaken in the event of significant changes in the strategic, operating, legal or compliance environment of Euroclear.

The Boards of local entities endorse this policy, as well as any other more local policies in the risk management area.

Review, audit and testing

Control objectives re assessed continuously as part of the bottom-up business control and monitoring processes, reported and discussed in management performance meetings at different levels in the organisation (from lean whiteboards monitoring to reviews by the operational risk committees and management committees of the group).

They are also collectively reviewed top-down through the regular Positive Assurance Report (PAR) selfassessments. In order to prevent that these regular self-assessments become routine exercises, Risk Management ensures that, at least once a year, they are performed with the right mix of people around the table (different layers in the organisation, representatives of quality assurance teams, Risk Management, and any other relevant party) and ensuring systematic availability of comprehensive material (the PAR, near misses, losses, incidents, control maps, accepted risks, risk management reports, internal audit reports, ISAE 3402, etc.).

The PAR of the different entities and divisions of the company demonstrate that controls are adequate and effective or not. A summarised view by division/entity, the Assurance Map and the most important control weaknesses and the related action plans are pulled together for the ICS report. Risk Management stores the PARs twice a year and coordinates the production of the reports.

The mission of the Internal Audit division (IA) is set out in the Internal Audit Charter approved by the Senior Management and the ARC/Board, as providing reasonable assurance, in an independent and objective way, on the adequacy and effectiveness of the Group's system of internal controls to support the Board and senior management of each Euroclear entity in reaching their objectives. IA has set up a comprehensive audit universe including all processes carried out by the group, whether directly or outsourced.

Each quarter, a rolling-forward Plan for the next six quarters and three years are produced on the basis of Risk and Control Assessments (RCA) which determine the need, scope and depth for audits ('risk-based audits'). In any case, a full scope audit is performed on each line of the Audit Universe at least every three years ('rotational audits'). The quarterly plan, with both risk-based and rotational audits, is presented and approved by the Management Committee and by the Audit Committee.

The operational risk management framework is subject to both internal audits, within the framework described above, and to external audits, by the company's external auditor.

Euroclear Bank yearly publishes an ISAE 3402 Report. This report provides substantive information on controls and operating procedures. Euroclear Bank has invited an independent audit firm to confirm the operating effectiveness of its controls. The verification of these controls demonstrates that effective risk management is practiced in the daily provision of new and existing operational services.

Key consideration 3: An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.

The Euroclear group sets out the high level objectives for the organisation, including those related to operational reliability. All day-to-day activities and projects have to be related and contribute to the achievement of these high-level objectives, both on a group and on a local level. Operational reliability objectives are defined in this context, at different levels.

The following are two examples of high-level qualitative objectives, defined in the risk register:

- Euroclear delivers operational services that meet clients' expectations and maintains robust service resilience
- Euroclear operates its systems to achieve defined service levels appropriate to the business application.

Qualitative objectives are e.g. stated in management resolutions and in implementing procedures, which are governing documents on a more detailed level, established within the policy framework and published on the intranet for employees. Further quality statements can be found in the sets of control objectives used and within the departments' own internal process and standards documentation.

Quantitative reliability objectives are primarily defined by the business owners and are documented in SLAs.

An example is that the maximum unavailability of a core service during business hours should not exceed two hours.

Euroclear's controls maturity model and self-assessment guidelines are used to assess the sustainability of the control environment. Control activities are evaluated against a spectrum of maturity attributes. It provides Euroclear with a snapshot of where control activities stand at a particular point in time relative to a standard rating scale. The controls maturity model helps management assess the effectiveness of controls, provides a measure of sustainability over time and enables Euroclear to assess progress in enhancing the ICS over time.

Internal assessments, client interactions and surveys, as well as the monitored track record of operational reliability and follow-up of all incidents, are also used by the management to assess whether the achieved levels are matching the set requirements.

In working towards its corporate objectives Euroclear faces a range of risks. The Risk Register categorises and defines these risk types and identifies where they exist within the group.

The Risk Register is supported by high-level control objectives, established by the Management Committee to mitigate the risks in the Risk Register. These high-level control objectives encompass all high-level processes that need to be realised effectively to allow individual business areas to achieve their business objectives. Control objectives provide guidance to the organisation on the expected level of internal control in each entity and division of the group. Each of the delivered services has a senior business management owner who is overall accountable for ensuring that risks are appropriately mitigated.

The high-level control objectives are supported by level-two control objectives, agreed with business management. They explain in more detail how business areas can achieve their high-level control objectives.

The level-two control objectives are supported by the implemented controls and control processes. The control objectives are the foundation of the Euroclear group internal controls system.

Controls have been built into business processes and their effectiveness is challenged continuously through day-to-day management actions, self-assessments of business risks and controls - including a review of risk and control issues by management - and independent reviews carried out by Internal Audit.

The majority of operational risk processes are frequent and recurring activities. These processes are updated on a regular basis.

The control objectives are the basis of the annual risk and control self-assessments. These qualitative selfassessments and the complementary quantitative self-assessments are key components of the risk management framework.

Key consideration 4: An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.

Capacity Management is in place to ensure that IT capacity meets current and future business requirements. There is a continual monitoring of defined infrastructure services (daily review and dashboards) to identify potential issues ahead of time. Actions are taken to increase capacity (or re-balance workload) as thresholds are approaching.

Capacity monitoring and management are part of the applied ITIL framework and are included in the riskbased internal audit universe.

Capacity management is in place within the project lifecycle to define capacity requirements for new infrastructures and support performance testing within projects.

Key consideration 5: An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.

Physical security

The Euroclear group-wide Operational Risk Board Policy comprises policy goals for corporate and information security. Hence, identifying, monitoring, assessing, and managing the full range of physical vulnerabilities and threats on an on-going basis is part of the operational risk management framework.

More detailed procedures have been defined at entity level to take into account the local specificities. The objective is to prevent unauthorised physical access, damage and interference to business premises and 105

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information and to prevent loss, damage, theft or harm to assets (including personnel) and interruption to Euroclear's activities. Critical or sensitive business information processing facilities should be housed in secure areas, protected by a defined security perimeter, with appropriate security barriers and entry controls. They should be physically protected from unauthorised access, damage and interference.

The physical security takes into account general best practices, both as defined by the parent group and as recommended by international standards like ISO 27000 and by local authorities, recommendations and legislation. Euroclear is also complying with insurance company recommendations.

When compliance with any security standard outlined in the Physical Security Implementing Procedure is not achieved, a formal risk assessment is to be made and an exception is reported either for mitigation or for acceptance by senior management.

Change-management and project-management policies and processes require that physical security related risks are identified, assessed and mitigated in compliance with the physical security implementing procedures.

Information security

Consistent with Basel II, information security risks are a component of operational risk.

Hence the Euroclear group-wide Operational Risk Board Policy is also applicable for identifying, monitoring, assessing, and managing the full range of information security vulnerabilities and threats on an on-going basis. Information security is defined within this policy as the protection of critical assets, by preserving their:

- Confidentiality: Ensuring that information is accessible only to those authorised to have access and is not misused
- Integrity: Safeguarding the accuracy and completeness of information
- Availability: Ensuring that authorised users have access to information when they need it
- Compliance: Ensuring that relevant legal and regulatory requirements in relation to the protection of information are adhered to

Under the group policy mentioned above, an Information Security Management System has also been implemented. This Management Resolution:

- describes how information security (IS) within the Euroclear group and locally is organised, managed, implemented and monitored
- outlines the roles and responsibilities for information security
 - o group's Chief Security Officer
 - Domain Security Managers / responsible (entity level)
 - o Data Protection Co-ordination Officer and Data Protection Officers
 - o IT Security Operations / IT Security Architecture
 - o Group Risk Committee / Local security and operating committees
- translates the Board's intent, as described in the Operational Risk Board Policy, into more detailed IS control principles and measures in order to protect Euroclear's and clients'

critical assets. Information security is addressed through the implementation of controls in four domains:

- Physical and environmental security
- Personnel security
- Logical security
- o Business continuity management

The Chief Security Officer heads a Group Business Resilience and Information Security team in the Risk Management division. The Chief Security Officer is responsible for developing and maintaining the policies, standards, processes and procedures that together form the ISMS.

Through this process, the Chief Security Officer defines the standards to which the Information Technology Security Management department, part of the Corporate Technology division, operates with regard to information security. This department is responsible, with the help of the Technical Domain Owners and System Engineers, to design and define an adequate and effective IT security environment, consisting of technical architecture, standards, tools, processes and services. The daily operational control of these security measures is also under the responsibility of the Information Technology Security Management department.

The Management Committee of each group entity retains responsibility for monitoring and overseeing policies, issues and exceptions that are relevant to for the entity and report any relevant issues to the Business Resilience and Information Security team.

The formal policies and standard procedures governing Information security are based on internationallyrecognised control standards, such as the ISO/IEC 27000:2005 series, BS25999-2:2006, ISO IEC 31000, COBIT and ITIL.

Additionally, where personal or sensitive personal data is concerned, Euroclear is guided by the EU Directive and relevant national legislation.

Euroclear's project management framework mandates risk assessments to be done before implementation starts and before delivery to production. At these check points, information security requirements and residual risks are assessed and appropriate mitigation actions are initiated, if needed.

All changes to the production environment (hardware, software and network devices) need to be formally approved before implementation. Changes to the production environment are only made subject to a standardised process, including specific controls to minimise the risk of errors or disruptions:

- Changes required to hardware, network devices and software are recorded electronically by raising a change request form and need to be approved by authorised staff
- A test approach is defined and approved, determining the level of testing appropriate to the change or project
- The production launch process is controlled by a specifically-designated committee (Change Advisory Board) that reviews changes and verifies that an impact analysis was conducted and that all required approvals are present. Formal production acceptance criteria have been established to support the impact analysis by the different domain experts

represented in the committee; Documentation evidence and approvals are recorded in the change management system

- A verification is done to ensure that earlier identified needs relating to required user training, changes in operational procedures and other support considerations have been addressed adequately
- A group independent from the development team performs the transfer of source code into the production environment using automated tools that are only available to authorised individuals
- The tools provide a complete audit trail of all transfers into production

Emergency changes, required in case of system blockage or non-availability, are following strict procedures and authorisation. Changes performed during emergency are reviewed by the domain experts to make sure they are properly documented and can be kept as such.

Internet facing applications are code-reviewed from security and robustness point of view by external expertise before launch. Vulnerability assessment and penetration tests are conducted on a regular basis with the support of specialised providers.

Key consideration 6: An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.

Objectives of business continuity plan

A formal business continuity framework has been defined that describes roles and responsibilities, and the risk-based approach adopted. It also includes objectives supporting the business targets for the timely resumption of critical operations. The Risk Management division is responsible for the coordination of the Business Continuity plan¹² (BCP) across the group.

The Business Impact Analysis (BIA) is the foundation of Euroclear's BCM process.

A formal BIA is used to identify the critical activities and their recovery time objectives for each of the business processes. During the BIA threats and risks associated with business process' interruptions are identified and assessed by determining the effect of loss, interruption or disruption to business on the function of each department and thus on the organisation as a whole. The analysis considers both the short and long-term effects of an incident, and identifies dependencies on people, information, technology and

¹² The ES BCP is a separate physical folder / electronic document collection, available on demand only

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facilities. The output of the BIA is used to form the Business Continuity strategy and plans, in accordance with the Operational Risk Board Policy.

Business continuity plans have been developed to cover a number of defined scenarios, including the loss of an office, loss of staff and IT disaster recovery incident. They contain the following elements:

- guidelines on how to use the plan
- the process to alert and activate the crises management team
- responses and recovery procedures meant to return the business to normal operations following an incident or disaster
- procedures to continue to maintain critical activities following the widespread loss of staff
- communication contact list with stakeholders, employees, key clients, critical suppliers, stockholders and management
- critical contact information on continuity teams, affected staff, clients, suppliers, public authorities and media

The local senior management committee advises on and approves the business continuity objectives and plans.

Design of business continuity plan

Euroclear has three data centres:

- Two nearby data centres (DC1 and DC2) provide real-time synchronised data mirroring and act as the primary and secondary data centre

- A third data centre (DC3), located hundreds of kilometers away from the two synchronised sites and receives asynchronously replicated data. It allows recovery in a few hours in the event of a regional disaster affecting both other data centres. Euroclear SA/NV, Euroclear Bank, ESES CSDs, Euroclear Sweden and Euroclear UK and Ireland have currently access to DC3.



A local disaster recovery is declared following any disaster that affects one data centre. In such circumstances, for high criticality applications, the recovery time objective is two hours and the recovery point objective is to have zero data loss.

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Exhibit K-5

A Regional Disaster Recover is declared following a failure at both primary and secondary data centres. In such circumstances, for high criticality applications, the Recovery Time Objective is four hours and the recovery point objective is to have data loss of less than one minute (dependent on system volumes at time of failure, and excludes rolling disaster).

The system development methodology includes principles and guidelines with regard to resilience of the infrastructure and applications which need to be respected for all critical infrastructure components and applications. Compliance to these principles and guidelines is evaluated for every project or change as part of the production acceptance criteria. The core processing systems and networks are designed to provide resilience through the use of mechanisms including mirroring (synchronous) of production data, the use of fault tolerant computers or resolving single points of failure. The provision of the communication lines is split across a number of telecommunications suppliers thereby providing additional protection against single point of failure.

The objectives of the Business Continuity Management (BCM) implementing procedure are to:

- outline the BCM system which Euroclear operates
- ensure that:
 - Euroclear is prepared to respond to impacts resulting from a disruption to service
 - all Employees understand their roles and responsibilities when responding to disruptions
 - o BCM is firmly embedded into Euroclear's business culture

Procedures and checklists are maintained and made available in various ways to enable Duty Managers and Senior Management (executives and department heads) to effective management and control of the services at all times, also in case of emergency.

'Battle boxes' (Go bags) are also securely stored at external locations to ensure that the Business Continuity Plan and related procedures are available in case of a potential disaster.

Standard introductory training for new Euroclear staff explicitly covers business continuity in general and personal responsibilities. BCP awareness updates, exercises and training are provided on a regular basis to all Euroclear group staff, using different communication channels and tools.

The core processing systems synchronously mirror production data between the two main data centres. Hence, the status of all transactions is known even in case of a disruption affecting one data centre.

The core processing systems also asynchronously mirror production data between the active data centre and a third data centre. In the extreme case that both primary and secondary data centres would fail, a data loss of less than one minute (dependent on system volumes at time of failure, and excludes rolling disaster) could occur. This is a very low probability but high impact scenario.

Data Loss Response plans have been developed by operations specialists to minimise the impact of data loss whilst aiming to resume computerized operations in a time period which does not cause unnecessary strain on market stability. In extreme cases, given the imperative of maintaining market stability, it may

not be possible to recover 100% of all transactions which were applied to the production system. Therefore, management will monitor reconciliation activities and will resume operations as circumstances dictate.

The Data Loss recovery principles are

- Records of transactions held by National Central Banks (NCBs), Central Securities Depositories (CSD) occurring during the suspected period of data loss will be considered by Euroclear to be the 'master' source
- At all times Euroclear is the 'master' source for clients, this may result in previously executed transactions requiring re-execution by clients following recovery
- Clients will be made aware of their obligation to evaluate the status of trades throughout and following recovery

Crisis management

In order to ensure a systematic and coordinated response to unexpected events, Euroclear established a three-tiered Bronze-Silver-Gold crisis management structure. These three levels deal with operational-tactical-strategic issues respectively.

Communication to internal and external parties during and after an incident forms an essential part of the incident response. The Crisis Management teams are required to assess the need for communication and if so, to communicate to clients, clients facing staff, other staff, and, from Silver on, also to regulators and in case of Gold to the press.

Client communication is to be initiated as soon as possible, with a threshold set at 30 minutes after the calling of the Bronze meeting. The *Commercial Crisis Management* guide also gives guidelines on the message contents. The contents should cover the reason and impact of the problem, contact details, possible mitigating actions by the ICSD (such as extension of input deadlines, settlement windows open longer) and the planned timing of the next update until resolution.

Secondary site

Euroclear has implemented a 'dual office' and/or back up site strategy for staff, with geographicallydispersed business operation sites to limit the risk that a single event will impact a main site and its back up. Business resumption is tested on a regular basis to make sure that in case one site is unavailable, all critical activities can be operated from another site.

Euroclear operates two main data centres fully equipped to provide core critical production services. The sites are linked by real-time synchronous data mirroring and load balanced networks. The critical production services are swapped between these two sites around six times a year, demonstrating their capability to take over production in the event of a disaster impacting any of the data centres.

A third data centre enables the resumption of business critical services within the same business day of a major incident affecting both main sites. The regional recovery capability is tested at least once a year.

The network is active/active/active. Client communications are load balanced and therefore do not rely on just one Data Centre for communications in or out. They are automatically redirected to the right server

depending on where the service is running. Virtual IP addressing is used to aid the failover and avoid the need to change IP addresses.

Review and testing

The Business Continuity Policy is reviewed annually and considers changes to Euroclear risk profile, business objectives, operational environment, legal and regulatory requirements and market expectations.

A formal BCP test framework is maintained indicating how and when each element of the plan is tested. The test framework helps ensure that all elements of the plan are tested periodically.

Each business owner has the responsibility to implement effective BCP solutions in his area. The risk management function has the overall role of coordinating and promoting BCP testing and reviews. RM also consolidates management reporting of the testing and its outcome to management, Audit and Risk Committee and to the group. These tests include:

- IT disaster recovery testing: Production is transferred from data centre one to data centre two at least six times per year and once per year to data centre three.
- office switch tests, simulating the loss of a single office is organised at least twice/year for each department running any critical function.
- several crisis management exercises (alerting tests or desktop or simulation exercises) are organised each year.

The BCP solution and recovery plan including the switch of processing between sites is transparent to clients. This means, that although there may be service interruptions, the recovery process is transparent to users, i.e. the clients does not know from which of the IT centres the services are provided, or if there was a switch of the processing site during the interruption or not. Thus, there is not any particular action for a client to take during a BCP test. (This is the same for all of the Euroclear group).

Key consideration 7: An FMI should identify, monitor, and manage the risks that key clients, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.

Risks to the FMI 's own operations

The Operational Risk Board Policy defines policy goals for services delivered by third parties as well as for client affiliation and monitoring.

For certain aspects of the services offered to clients, Euroclear (I)CSDs use external service providers. The use of services provided by the external parties is governed by local outsourcing management resolutions in line with Operational Risk Board policy.

The relationship between Euroclear and service providers is subject to a formal contract including service level management agreements even when the provider is an entity of the group Euroclear.

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Euroclear has identified the required roles, and assigned appropriate responsibilities to manage and monitor its service providers. Service delivery is reviewed on a regular basis. Services are measured and compared with targets to identify whether the objectives are met, and where applicable, what actions need to be taken to improve the service.

The IT services have been outsourced to a service provider: Euroclear SA/NV which is the parent company of the Euroclear (I)CSDs. The relationship with the provider is defined in a formal agreement including service level agreements. Service delivery is reviewed on a regular basis through Key Performance Indicators (KPI). Corrective actions are requested when the agreed KPI are not met.

Euroclear has signed contracts with different providers avoiding that a single provider would put Euroclear operations at risks.

By contract, Euroclear's auditors have the right to audit the relevant arrangements of the service provider.

Concerning their clients, Euroclear (I)CSDs are providing financial market infrastructure services. An operational failure of a large client or another FMI (such as a CCP) will not pose any significant risks directly to the FMI, but they may pose risks to their counterparts and may pose risks to the efficiency of the systems, e.g. the settlement ratio. Such risks are mitigated in several ways, e.g. by:

- client admission criteria and the continued follow-up of these by annual due diligence visits
- continuous monitoring of system usage and by incitements by clients to follow the established user rules
- offering client the possibility to use different network providers.

In the framework of its market links, Euroclear (I)CSDs review operational risks aspects of linked (I)CSDs or local custodians used as an intermediary to access foreign markets. See also Principle 20.

The main types of risk Euroclear Bank bears from interdependencies are listed in Principle 3. For operational risks, the following interdependencies are mentioned:

- Settlement with Clearstream Banking Luxembourg Banking Luxembourg (Bridge)
- SWIFT and BT: messaging/communication of instructions
- CSDs: non-settlement of instructions

Settlement with Clearstream Banking Luxembourg (Bridge)

The Bridge with Clearstream Banking Luxembourg is the most important link of Euroclear Bank in terms of value settled. Euroclear Bank and Clearstream Banking Luxembourg have jointly developed a common credit risk management framework (See Principle 20).

Each day, there are about 34 files exchanges between the ICSDs. The ICSDs have developed joint operating contingency procedures. These procedures cover different scenarios: continue internal processing without input from the other ICSD, change of sequence in Bridge exchanges, errors in the exposure checking process which may require a re-run of the internal processing. Euroclear Bank conducts internal testing for different scenarios.

SWIFT and BT: messaging/communication of instructions

Only 6% of the traffic is dependent on one channel (1% is dependent on SWIFT, 5% on Euroclear Bank's proprietary communication tool 'EUCLID which can be used via the internet or BT Radianz – see table below).

CSDs: non-settlement of instructions

In the framework of its market link reviews, Euroclear Bank reviews operational risks aspects, including the business continuity plans, of linked CSDs or local custodians used as an intermediary to access foreign markets. See also Principle 20.

Risks posed to other FMIs

By providing (I)CSD services with full delivery versus payment processes, Euroclear entities are reducing the risks encountered by their clients for the settlement of their transactions.

As any FMI and more especially any CSD, if a Euroclear (I)CSD would not be available, this would have a significant impact for clients (e.g. late settlement, potential liquidity issue for clients who were expecting to receive cash), other FMIs such as CCP (e.g. difficulties to identify margin calls / buy in to be processed) and central banks (e.g. settlement of MMIs, new government bond issues, payment of interests / redemptions, bank liquidity management if the collateral in Euroclear cannot be provided).

To reduce the risks related to interconnectivity with external entities (large clients, central banks, CCPs, stock exchanges), Euroclear is participating to a number of national working groups focusing on crisis preparedness and business continuity management. Euroclear's (I)CSDs participates to common exercises with the financial sector to test the effectiveness of crisis management and improve crisis management with the financial market.

The main types of risk Euroclear Bank poses to other FMIs are listed in Principle 3. For operational risks, the following interdependencies are mentioned:

Clearstream Banking Luxembourg execution settlement

Settlement via the Bridge represents a larger share in total settlement turnover in Clearstream Banking Luxembourg compared to Euroclear Bank. The dependency of Clearstream Banking Luxembourg on the well-functioning of the Bridge is therefore much larger.

The ICSDs have developed a common credit risk management framework (See Principle 20) and they have developed joint operating contingency procedures covering different scenarios

Other CSDs local settlement failures

The potential impact of Euroclear Bank settlement failures on the functioning of the local market/CSD depends on the volumes and values of the settlement via external links (i.e.

one counterparty in the books of Euroclear Bank, the other one in the local CSD). The potential impact is therefore different from market to market.

CCPs

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CCPs are sending settlement instructions to Euroclear Bank. If for any reason, Euroclear Bank cannot settle those instructions on time, there is risk that CCPs have to apply margin call to their clients.

TARGET 2

In case, Euroclear Bank would not be able to send cash transfer to TARGET2, the main risk would be for clients who would not be able to manage their treasury efficiently. To reduce the risk of such scenario, Euroclear Bank has implemented contingency procedures with the NBB using back-up files.

ECB

Euroclear Bank plays an important role in the mobilisation of ESCB eligible collateral in the Eurosystem. Euroclear Bank is used to mobilise Eurobonds (as issuer CSD) and certain domestic bonds via ESCB-eligible market links (as investor CSD). In case access to collateral for monetary policy is not available, this would impact monetary policy execution. Again, to reduce the risk of such scenario, contingency procedures have been considered including the manual processing of a limited number of transfer cash or securities.

Principle 18: Access and participation requirements

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access

Key consideration 1: An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect clients and other FMIs, based on reasonable risk-related participation requirements.

Euroclear operates an open and transparent access and participation process, with publicly disclosed, nondiscriminatory participation requirements. The admission criteria are set out in our Operating Procedures and are publicly available on euroclear.com

Euroclear Bank has recently updated its requirements for participation in the Euroclear system with effect from February 2014. These revised admission criteria are designed to ensure fair and open access, secure compliance with the Belgian Royal Decree of 11 February 2013 implementing the Settlement Finality Act of 28 April 1999 (SFAct) and with this CPSS-IOSCO Principle 18.

Access to Euroclear Bank is business driven, taking into consideration the limited risk profile Euroclear must maintain as a financial market infrastructure. As such, Euroclear Bank must:

- not admit natural persons, as these cannot participate in an SSS
- allow for fair and open access to our services, based on reasonable risk-related requirements for participation
- grant to credit institutions and investment firms established in other EU member states a right to access the Euroclear System under the same non-discriminatory, transparent and objective criteria as those applied to Belgian credit institutions and investment firms and for all transactions, whether or not made on a regulated market or MTF established in Belgium
- identify and assess specific risks resulting from the admission of entities that are not subject to supervision in the EU
- comply with applicable AML legislation, identify our clients and monitor their transactions for the purpose of prevention of money laundering and terrorism financing.

Pre-condition to admission to Euroclear Bank

An applicant must meet the following preliminary conditions:

- be established in a jurisdiction that is assessed by us as acceptable from a risk perspective
- provide adequate information enabling us to meet our own Belgian anti-money laundering and

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terrorism financing obligations.

Categorisation of applicants

An applicant is also required to meet the admission criteria set out in the following section (the 5 admission criteria). The five basic criteria are the same for all applicants, with additional requirements applicable in certain circumstances depending on whether the applicant is a standard client, a specific regulated client or a specific ¹³client to reflect the relative risks associated with the client-type.

1. Standard clients	All those falling in the definition of client in the SFAct,
	(Settlement Finality Act) whether or not established in
	the EU and those considered as 'institution' which
	covers credit institutions, investment firms, public
	authorities and publicly guaranteed undertakings.
	Any other legal entity established in the EU and falling
	under the supervision of any competent authority in
	the meaning of the EBA , ESMA and EIOPA regulations
	or EMIR (CCPs, insurance undertakings, UCITS, AIFS).
1	1

2.1. Specific Regulated	Any other legal entity established and regulated
clients	outside the EU or any legal entity listed on a stock exchange.
2.2. Specific clients	Non-regulated legal entities, whether or not established in the EU.

This second category requires us to impose distinct criteria aiming to take into consideration additional risks that may result from such entities' participation in the Euroclear System.

Today, Euroclear Bank clients come from more than 80 different countries and include major international banks and smaller players, different types of institutions (from investment banks, central banks, other FMIs to investment funds and corporates). All of our clients are direct clients.

¹³ In the meaning of the Belgian Settlement Finality law

The five admission criteria

Any applicant is required to meet the following five admission criteria:

Adequate financial resources

You demonstrate adequate financial resources to run your business on a going basis concern and meet your obligations towards us, the Euroclear System and its clients.

Operational & technological capacity

You demonstrate adequate operational and technological capacity to ensure business continuity and avoid material adverse impact on the integrity of the Euroclear System.

Legal capacity

You demonstrate your legal capacity and ability to accept and comply with the rules of the Euroclear System.

Internal control & risk management

You have sound internal controls and risk management that are such as to preserve your and the reputation of the Euroclear System.

Ethical standards

You have implemented ethical standards that are such as to protect the integrity and reputation of the Euroclear System.

If an applicant's request for participation is refused, it has a right of appeal. The appeals process is set out in the *Operating Procedures* and is publicly available on euroclear.com

Key consideration 2: An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least restrictive impact on access that circumstances permit.

Euroclear Bank admission criteria mentioned above are justified in terms of safety and aim to limit either specific risks, including financial risks (financial resources requirement), operational risks (technology capability criterion) and legal risks (legal capacity requirement), or risks in general (internal controls and risk management and ethical standards).

As noted above, the admission requirements are set out in the Euroclear Bank *Operating Procedures* and are publicly available on euroclear.com

Key consideration 3: An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a client that breaches, or no longer meets, the participation requirements.

Euroclear Bank monitors its clients' continued compliance with our participation requirements. It is also a condition of participation in the Euroclear system that a client continues to meet the admission criteria on an ongoing basis. Clients are required to notify us of any material event or changes which may affect their ability to comply with the admission criteria listed above.

All clients are reviewed on a regular basis (the 'sponsorship review') to confirm that they continue to meet the admission criteria.

If a client no longer meets the admission criteria, Section 14 of the *Terms & Conditions* explains the procedure for the termination of participation.

Principle 19: Tiered participation arrangements

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

Key consideration 1: An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.

Euroclear Bank has a contractual relationship only with the direct clients of the Euroclear System; we do not admit or recognise indirect or tiered clients nor have any relationship with underlying clients of our clients. However, Euroclear Bank still manages risks and believes that it is currently not exposed to material risks arising from the clients of its clients.

Risks (such as AML, credit, liquidity, technical or operational risk) – and their materiality - are monitored and assessed at the level of the direct client, taking into account all of its activities in the Euroclear System (whether proprietary or on behalf of underlying clients). There is currently no formal procedure to evaluate potential risks arising from dependencies linked to our clients' underlying clients' activities nor (with certain exceptions noted below relating to beneficial owners) any procedures to gather information from our clients about their underlying clients. We are currently reviewing our approach in this area.

Concerning potential AML risks, whenever a client opens a segregated account for the benefit of an underlying client, then it is requested to provide details of the beneficial owner (as defined under the applicable regulations), unless it is itself exempt from disclosure obligations under applicable AML regulations.

For credit risk, we monitor and manage information in our systems at an aggregated level (at legal entity and global family level) which allows us to adequately manage the credit and liquidity risks associated with both our clients and their underlying client activity.

The table below shows the number of clients (at legal entity level) in the Euroclear system as on 30 September 2015 and the number of securities accounts operated by our clients.

Our clients have full flexibility on how they set up their underlying securities accounts (for example, to segregate own assets and client assets, to segregate assets of different business units within a client; an omnibus account for underlying client assets; segregated sub-accounts to reflect assets of different underlying clients)

Number of clients	Number of securities
	accounts (clients own and
	of underlying clients'
	activity
1,618	15,387

Participation in the Euroclear System (as on 30 September 2015)

Euroclear Bank has no legal right to collect information on clients' clients beyond the existing information available in its system at individual account level. As noted above, Euroclear Bank is reviewing how it might collect additional basic information in line with Principle 19 whilst recognising that seeking additional information directly from the clients raises confidentiality concerns that would have to be addressed. In addition, collecting such information without the underlying clients' prior consent could likely require legal changes in many jurisdictions to allow such collection and to ensure the cooperation of the clients.

Key consideration 2: An FMI should identify material dependencies between direct and indirect clients that might affect the FMI.

This question will be addressed from the perspective of the relationship between the Euroclear Bank clients and their underlying clients as no tiered participation arrangements exist in the Euroclear System.

Statistical evidence shows that large clients usually open many securities accounts, assigned to operating entities of the same client or to specific or global client activity. The capacity of Euroclear Bank to further assess dependencies between clients and underlying clients will remain dependent on the level of segregation that is chosen by the client.

There is currently no formal procedure in place to evaluate any dependencies due to clients' underlying clients' activity that might affect the Euroclear System. However, as noted above, from a banking risk perspective, interdependencies between clients and their underlying clients are managed by Euroclear Bank at an aggregated level to ensure that the capacity of the client is adequate to manage its activities in Euroclear.

Key consideration 3: An FMI should identify indirect clients responsible for a significant proportion of transactions processed by the FMI and indirect clients whose transaction volumes or values are large relative to the capacity of the direct clients through which they access the FMI in order to manage the risks arising from these transactions.

Euroclear Bank now reviews the depot and activity levels of our clients on a regular basis to identify whether there is a material concentration of activity (measured by either depot or transactions) with one or more of our direct clients. Euroclear Bank then reviews whether there is a material concentration of activity at a segregated client account level within any of such clients to establish whether there is potentially a significant proportion of activity processed by us that is being conducted on behalf of an underlying client of a client. To date, no material concentration in segregated accounts have been identified.

As noted earlier, Euroclear Bank assesses and monitors the capacity of its direct clients to manage the activity conducted with us at an aggregated level. Further monitoring of the clients' cash accounts would allow Euroclear Bank to better understand the credit exposures specifically associated to underlying clients and to take – if relevant - the initiative to call for a reduction of credit usage.

Key consideration 4: An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.

See previous comments.

Principle 20: FMI links

An FMI that establishes a link with one or more FMIs should identify, monitor and manage link-related risks.

Key consideration 1: Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.

Before opening a link, Euroclear Bank performs a risk assessment on the local market and the candidateagents. Once the link is open, Euroclear Bank's Network Management department monitors on an ongoing basis the changes that could affect the risk profile of the link or the appointed agents. All market links and agents have to be re-approved every year by Euroclear Bank's Management Committee. Every three years, Network Management performs a complete market link review of each link.

Euroclear Bank's Management Committee is responsible for the approval of any new link set-up and the appointment of any agent (including the depositories and cash correspondents that are involved in the links) as well as for the yearly re-approval of all links and agents.

The risk assessment of the prospective market link includes any legal, tax and regulatory issues as well as risks related to the market infrastructure (CSDs, stock exchanges, CCPs) and operational risks. It is coordinated by the Network Management department with the input from Risk Management, Legal, Credit and other departments. In case the risk assessment identifies major risks in the local market that cannot be mitigated and/or no agent meets Euroclear Bank's criteria, no link will be established with that market. In addition, before opening a market link, the securities of the market are subject to an eligibility review. Securities need to meet certain criteria in order to be accepted in Euroclear Bank (e.g. criteria on registration, ownership restrictions, reporting obligations and disclosure requirements).

All agents are evaluated against criteria with regard to anti-money laundering, operational readiness, good reputation and financial soundness. Upon selection of a new agent, Euroclear Bank conducts a due diligence review of the candidates. The candidates must meet business and quality requirements, accept the terms of the standard Euroclear Bank agreement, comply with data protection and confidentiality requirements, be financially sound, manage their operational risk and meet business continuity requirements. Furthermore, being associated with the candidate should not cause reputational damage for Euroclear Bank¹⁴. The criteria in this process are used to form a judgment about the candidate; no formal acceptance levels for these criteria are used in some instances as guidance, e.g. in case the risk associated with a market or candidate exceeds certain internal thresholds (e.g. credit ratings, FATF compliance, ...), such risk needs to be mitigated or formally accepted.

¹⁴ Selection and monitoring of agents (Euroclear Bank Management Resolution)

Key consideration 2: A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.

The legal framework supporting the Euroclear Bank links includes all contractual documentation with CSDs and agents (for operated links) for direct links and depositories for indirect links, as well as cash correspondent agreements. Such contractual documentation is governed by the laws of the local market.

The Bridge Agreement which governs the interoperable link between the two ICSDs (Euroclear Bank and Clearstream Banking Luxembourg) is governed by both Luxembourg and Belgian law depending on where the operations take place.

For all links it maintains, Euroclear Bank obtains a legal opinion from a law firm with expertise in the local market, which covers the validity and enforceability of the contracts and asset protection among others. A revision process is organised on a three-yearly basis. Ad-hoc revisions within a shorter time frame are performed if needed.

Key consideration 3: Linked CSDs should measure, monitor, and manage the credit and liquidity risks arising from each other. Any credit extensions between CSDs should be covered fully with high-quality collateral and be subject to limits.

The main instance where Euroclear Bank has a direct credit or liquidity risk on a linked CSD is with Clearstream Banking Luxembourg:

- when Euroclear Bank delivers securities that need to be paid for by Clearstream Banking Luxembourg, Euroclear Bank has an exposure on Clearstream Banking Luxembourg
- when Clearstream Banking Luxembourg delivers securities that need to be paid for by Euroclear Bank, Clearstream Banking Luxembourg has an exposure on Euroclear Bank.

The net exposure that results from this Bridge activity is limited to the amount of the letter of credit (L/C) that each ICSD has in favour of the other ICSD. Euroclear Bank has several techniques to keep the exposure under the amount of the L/C. By reducing the amount of deliveries to Clearstream Banking Luxembourg ('deselection'), the exposure on Clearstream Banking Luxembourg is reduced. Early morning payments (between 03:00 and 05:00 Brussels time, possible because Euroclear Bank and Clearstream Banking Luxembourg share the same cash correspondents in EUR and USD) by the ICSD that owes the other ICSD, can reduce the net exposure of the other ICSD. Exposures on Clearstream Banking Luxembourg in one currency can also be secured by cash that Clearstream Banking Luxembourg holds with Euroclear Bank in another currency ('currency set-off'). A capping mechanism aims to keep the net exposures (based on proposed deliveries and re-deliveries by the other ICSD) that the ICSDs have on each other within the amount of the L/C. As this L/C is provided by a syndicate of banks, it is considered as equivalent to high-quality collateral. When Euroclear Bank refuses deliveries from Clearstream Banking Luxembourg because the Euroclear Bank clients lack cash or credit, the netting effect from Clearstream Banking Luxembourg deliveries is reduced and Euroclear Bank's net exposure on Clearstream Banking Luxembourg because

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the L/C. In order to comply with this Principle, advanced income and redemptions between the two ICSDs are since May 2014 systematically secured by the respective L/Cs. In case Clearstream Banking Luxembourg would not be able to settle its net payment obligations (in any currency) with Euroclear Bank on a day when Euroclear Bank's net exposure exceeds the L/C, Euroclear Bank still has the right to reverse cash amounts from Euroclear Bank clients who delivered securities against payment via the Bridge to their counterparties in Clearstream Banking Luxembourg.

Credit exposures resulting from inbound links are discussed in Principle 4, as such CSDs are treated as normal clients. The way Euroclear Bank manages its credit and liquidity risk arising from its local cash correspondents is explained under KC 9.4.

Key consideration 4: Provisional transfers of securities between linked CSDs should be prohibited or, at a minimum, the retransfer of provisionally transferred securities should be prohibited prior to the transfer becoming final.

There is only one case where Euroclear Bank receives provisional securities: newly-issued money market instruments received from DTC in the US market. Euroclear Bank blocks such securities in the clients' accounts until they are final in the local market, thereby prohibiting their re-transfer.¹⁵

Key consideration 5: An investor CSD should only establish a link with an issuer CSD if the arrangement provides a high level of protection for the rights of the investor CSD's clients.

The initial selection process for the opening of a market link is primarily based on the existence of an adequate protection of clients' assets under the local market standards and legal framework (Please refer to Key Consideration 1 above and Principle 11).

The Depository Agreements include provisions aiming at the protection of clients' assets (such as segregation of Euroclear Bank's clients' assets from those of the depository or those of other clients of the depository, a prohibition of sub-deposits without prior approval by Euroclear Bank, existence of an insurance coverage for the securities held via the link).

In addition, Euroclear Bank obtains legal opinions that confirm among others that the depository's creditors do not have a claim on Euroclear Bank's clients' assets held at the depository. Further details with regard to asset protection and custody risk are available in the sections covering Principle 1, 11 and 16.

Euroclear Bank's safeguards include segregation of securities, insurance and vault inspections (in case of physical certificates), as explained in more detail in Principle 16.

¹⁵ Euroclear Bank *Operating Procedures*, Section 24, USA, §5

Key consideration 6: An investor CSD that uses an intermediary to operate a link with an issuer CSD should measure, monitor, and manage the additional risks (including custody, credit, legal, and operational risks) arising from the use of the intermediary.

Many selection criteria for intermediaries used to operate a link are risk-based, covering risks ranging from custody risk to financial and reputational risk. Agents must have a good reputation and financial soundness. They must comply with data protection and confidentiality, operational risk management and business continuity requirements. Other criteria include anti-money laundering requirements, operational readiness and service quality requirements.

The liabilities of the intermediaries are defined in their agreements with Euroclear Bank. Intermediaries are liable for losses subject to the usual force majeure clauses, but they are not liable for losses caused by the issuer CSDs. Euroclear Bank's liabilities towards clients are defined in the *Terms & Conditions* (Section 12), which state that Euroclear Bank shall have no liability for the acts or omissions of (or the bankruptcy or insolvency of) any intermediary or linked CSD.

KC 20.7 to KC 20.9 are not applicable to Euroclear Bank.

Principle 21: Efficiency and effectiveness

An FMI should be efficient and effective in meeting the requirements of its clients and the markets it serves.

Key consideration 1: An FMI should be designed to meet the needs of its clients and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.

The Euroclear group is user-owned and user-governed and operates in a competitive environment. Therefore, there is a constant pressure to meet the needs of its clients and the markets it serves.

Its settlement arrangements, for example, offer real-time settlement from around 01:30 to 19:00 Brussels time in order to meet the needs from clients from different time zones around the world Euroclear Bank delivered end September 2015– together with Clearstream Banking Luxemburg- Phase 1 of the Bridge settlement enhancements, which provides greater flexibility and increased efficiency for clients. Phase 1 brought significant improvement to input deadlines, in particular for core currencies, more efficient settlement turnaround time in the afternoons and the extension of interoperability between the two ICSDs at the end of the day. Phase 2, planned for delivery in 2017, will deliver an even later bridge and faster settlement turnaround; further helping collateral mobility and improving settlement efficiency.

The scope of products offered is very wide. Euroclear Bank does not only offer settlement of Eurobonds, but also settlement of domestic securities via its links with other markets. Based on our clients demand, Euroclear Bank is extending on an ongoing basis, the range of markets it serves. Euroclear Bank now has links with CSDs in 45 countries. In addition to pure settlement, Euroclear Bank also offers a range of related services, such as asset servicing, securities lending and borrowing and collateral management. Furthermore, Euroclear Bank has a dedicated platform for investment funds (FundSettle).

The various communications technologies that Euroclear Bank uses, satisfy the needs of both high-volume users (e.g. STP communication via SWIFT) and users that prefer a screen-based interface (e.g. Euroclear Bank's proprietary EUCLID channel). In its continuous effort to 'make post-trade easy', Euroclear Bank has launched a new browser-based application EasyWay which is being gradually rolled out through the various services of Euroclear Bank and other CSDs of the group. It is designed and built in collaboration with clients and does not only allow them to perform operational tasks efficiently and quickly, but also to manage their operational risks (e.g. by monitoring the corporate actions deadlines easily).

In addition to the day-to-day contacts with its clients, Euroclear Bank also monitors the evolutions in the market and conducts an annual client survey.

Euroclear Bank's Commercial division, in cooperation with the Product Management division, ensures that customers' demands and business needs can be translated into new product/services or enhancements to current services.

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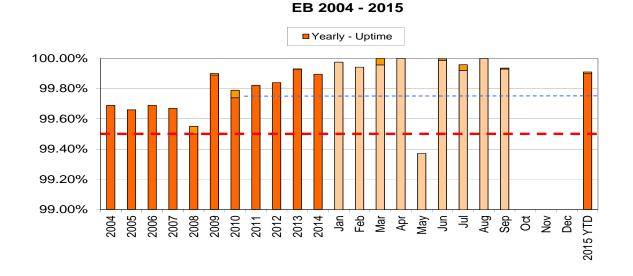
Exhibit K-5

In order to understand the needs of the clients and their evolution, Product Management performs the following tasks: competition analysis, follow-up of market developments and product/service evolution through the review of press articles and specialised publications, presence in various conferences and round tables, ad-hoc consultation with clients and market clients. Those actions are key trigger to support the conception and the development of our business strategy for the future

Feedback from clients is collected and evaluated yearly via the Client Survey, open to all clients across the group and measuring the level of satisfaction for the various services Euroclear Bank offers. It is based on this feedback that Euroclear is establishing the list of key services enhancements it will introduce over the next months and years. For example, over the last two years, Euroclear has worked on a number of service enhancements aiming at increasing our STP rates which now stands at 97% for asset servicing. This has significantly improved the clients' satisfaction measured in the client survey.

Key consideration 2: An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.

In the area of minimum service levels, Euroclear Bank has a 99.50% uptime target for its systems. This objective has been achieved over the last years. Please see the graph below for an overview of the system availability from 2004 until Q3 2015. This objective is not only monitored by Euroclear Bank, but also by the authorities of Euroclear Bank on a quarterly basis.



Key consideration 3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.

The efficiency and effectiveness are measured at different levels. The Balanced Scorecard (BSC, which is the document containing the objectives of the year) is used to evaluate the performance of Senior

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Management against the strategic priorities. The BSC objectives include financial, business, operational, risk and other objectives.

The Euroclear divisions that are relevant for the efficiency and effectiveness of Euroclear Bank continuously monitor Key Performance Indicators (KPIs) which are tailored to their specific functions (e.g. Settlement follows up transaction statistics, IT departments monitor technical indicators). In addition, Key Risk Indicators (KRIs) are monitored to allow proactive identification of risks that may threaten the achievement of objectives. These KRIs cover both general risks (such as people risk indicators, e.g. turnover of staff) as well as specific risks (e.g. on credit usage or collateral).

Efficiency and effectiveness are evaluated on an ongoing basis via the KPIs and KRIs by Euroclear Bank. The ultimate evaluation by clients is done every year in the annual client survey.

Principle 22: Communication procedures and standards

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

Key consideration 1: An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.

Euroclear Bank uses internationally accepted procedures and standards, including for cross-border operations.

Interaction between Euroclear Bank and its clients is either user-to-application (i.e. screens) or applicationto-application (i.e. STP communication solutions). International standards are used in both, but are - for integration purposes - more relevant or needed for the application-to-application channels.

This fully automated interaction on application-to-application channels is possible today in ISO and proprietary formats. Euroclear continues to invest in ISO standard automated communication.

In the area of corporate actions, ISO 15022 standards are available. Euroclear Bank has invested over the last few years to increase SMPG (Securities Market Practice Group) compliance and it will continue to do so. Euroclear also has plans to introduce the use of the new ISO 20022 standards in addition to the existing ISO 15022 in areas where such standards exist.

In addition to the Common Code (a securities identification code shared by Euroclear Bank and Clearstream Banking Luxembourg, Euroclear Bank uses the ISIN to identify financial instruments. Clients can always use the ISIN to instruct and receive reporting with the ISIN if they wish.

For external settlement, instruction format requirements differ from one market to the next. The BIC is one of the possibilities that exist to identify a counterparty. Another possibility is a five-digit Euroclear Bank code corresponding to a local counterparty as identified in Euroclear Bank's online counterparties database available via **my.euroclear.com > My Apps > Counterparties search**

Principle 23: Disclosure of rules, key procedures, and market data

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable clients to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

Key consideration 1: An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to clients. Relevant rules and key procedures should also be publicly disclosed.

The two main documents that comprise Euroclear Bank's rules and procedures are:

- the Terms and Conditions governing use of Euroclear (T&C)
- the Operating Procedures of the Euroclear System ('Operating Procedures' / Ops)

The T&C contains the description of the key rights and obligations of Euroclear Bank and the clients, when using the Euroclear System.

The OPs are much more detailed and are comprised of five parts:

- Part I Introduction: describes the OPs as part of our legal documentation and the different regulators supervising us as a Belgian bank
- Part II General Rules: describes the requirements for becoming a client and gives a detailed overview of the functioning of the Euroclear System
- Part III Rights and Responsibilities: describes your rights and responsibilities as a client of the Euroclear System
- Part IV Connectivity: explains how to connect to and from the Euroclear System
- Part V gives a detailed overview of the functioning of the various services

Rules of some specific services provided by Euroclear Bank such as extension of credit to clients or securities lending and borrowing are stated in separate contracts and documents, for example:

- Supplementary Terms and Conditions Governing the Securities Lending and Borrowing through Euroclear Bank
- General Conditions for the Extension of Credit to Participants in the Euroclear System

Euroclear Bank (Risk Management and Legal departments) has conducted a complete review of the Ops in 2013. The purpose of the review was to bring more transparency in regards to the risks clients incur by participating to the Euroclear System. The revised OPs are made available proactively to clients and the public, via my.euroclear.com

Note: Euroclear Bank manages two distinct websites:

- euroclear.com the corporate website
- my.euroclear.com the operational knowledge portal

The T&C are the high-level description of the clients' rights and obligations. They have precedence over the OPs, which supplement the T&C and set forth detailed rules and procedures with respect to the functioning of the Euroclear System.

Non-routine events such as termination of participation, resignation of clients or securities losses are detailed in the T&C. Section 3.8. of the OPs detail the rules applicable to defaulted clients.

clients receive the T&C and OPs at the start of their relationship with Euroclear Bank.

In addition, both the *Terms & Conditions* and the OPs are available on euroclear.com They are also available upon a client's request.

Updates to these documents are provided via Newsletter that are available on the web and sent proactively by email to all registered clients.

Both the Terms & Conditions and the OPs are available on the public part of the Euroclear website.

Key consideration 2: An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and clients' rights and obligations, so that clients can assess the risks they would incur by participating in the FMI.

High-level information about the system's design and operations can be found on the Euroclear Bank website. The 'About' section provides a general description of our business, mission, clients, structure, history and rules (see screenshot 1 below).

In the 'Services' section, the user can find relevant information about the various services (see screenshot 2 below).

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Screenshot 1

Post-trade made easy

Euroclear is the pre-eminent provider of post-trade services. For more than 60 years, we have worked in partnership with the biggest names in finance and banking.

We help you to be more successful by making it easier for you to settle domestic and cross-border securities transactions and safekeep your investments. We also help you manage the risks and exposures arising from your transactions.

The assets we hold for you are valued at €23 trillion. The total value of securities transactions settled for you by the Euroclear group is over €540 trillion per annum. Our multi-lingual, highly trained team of professionals based in Europe, Asia, the Middle East and the Americas are committed to providing personalised support.

Our business

Increase efficiency and reduce risks with our flexible post-trade services. We are a highly regulated and financially strong part of the capital market infrastructure. > read more

Our clients

Find out more about who our clients are and how you can benefit from our wide range of reliable post-trade services. > read more

Our history

Privacy settings a long history of bst-trade processes and Our mission Our company mission and values serve

as a company mission and values of the market challenges to deliver a 'posttrade made easy' environment for you.

Our structure

Our corporate structure ensures that we give the very highest priority to the interests of our dients.

Our rules

Key documents that govern your relationship with us_including our



> Post-trade made easy

> Contact us

Every 6 days we

settle transactions

equivalent to the

GDP of the EU

Key facts and figures about Euroclear and our services

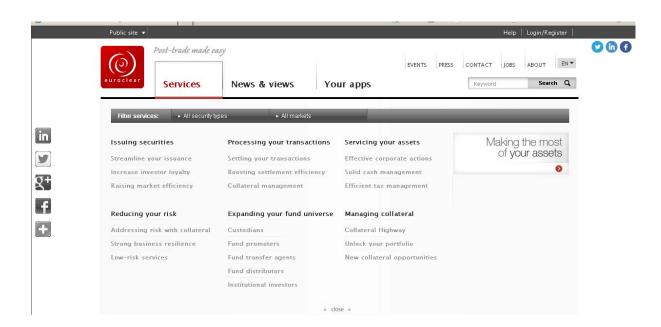
Supplier information >

Our suppliers play an important part in our success by helping us deliver cost-effective and high-quality services to our clients.

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Screenshot 2



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More detailed information about these services can be easily retrieved through the Euroclear Knowledge base on the Euroclear website (e.g. on Collateral Management, an overview of all operational, tariff and legal documentation can be obtained as shown in the screenshot below).

Euroclear 🔻	Help My App	is 🔹 Euroclear Bank 💌
Post-trade		ledge base 🔀
Collateral management ×	Collateral Management - Forms overview	> Service overview Triparty collateral
All information types All markets - Euroclear Bank	Collateral management 5W - How? Forms Euroclear Bank	management services: basics
All instruments All connectivity Euroclear Sank ×	What is Open Inventory Sourcing: basics Last modified: 4/9/2013 15:47	Market overview Market basics overview >
Search > Save search >	Collateral management SW – What? Basics Euroclear Bank	Making the mos of your asset
Saved searches	• Tariff Last modified: 7/8/2013 12:07	
To add saved searches to the dashboard, use the Saved searches app.	Collateral management Corporate actions FundSettle international Lending and borrowing Money transfer Safekeeping Settlement Triparty collateral services Basics Tariff information Euroclear Bank Our tariffs for products and services in Euroclear Bank	
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These documents, among others, complement the *Terms & Conditions* and OPs and give the user a view on the design and operations of the specific services. Euroclear Bank's CPMI-IOSCO Disclosure Framework also provides useful information about the system's design and operations.

The above mentioned information is disclosed to everyone via the Euroclear website.

The process for changing the Terms & Conditions is explained in the Terms & Conditions (Section 19):

The *Terms and Conditions* including the *Operating Procedures* may be amended or supplemented at any time upon notice to you. You will, without prejudice to your rights under Section 14(b), be deemed to have

accepted any such amendment and supplement, either:

- effective immediately, in the case of any amendment or supplement not adversely affecting you
- effective ten Business Days after you are notified, in the case of any other amendment or supplement

As it is disclosed via the publicly available Terms & Conditions, it is disclosed to everyone.

The degree of discretion that Euroclear Bank has in applying the *Terms & Conditions* and OPs are mentioned in the relevant sections of the *Terms & Conditions* and OPs. For example, in Section 5.2.1 of the OPs paragraph (b) 'We reserve the right to add or omit processes to any Processing set out in this section' or paragraph (c) 'We may perform a Processing at any time, and include data, that we in our sole discretion consider appropriate if we are either:

- unable to perform all or part of the OSSP or RTP
- have not received the required data for such processes from external sources by the scheduled time'.

Also more detailed procedures indicate the degree of discretion that Euroclear Bank has. For example Section 3.2. (Reversals) paragraph (b) of the OPs mentions that 'In the event that Clearstream Banking Luxembourg fails to pay us an amount due, we have the right and are authorised by you to debit your relevant Cash Account(s) for a portion of the unpaid amount due by Clearstream Banking Luxembourg to us. [...]' meaning that Euroclear Bank has discretion to use this right (and debit the relevant amounts) or to decide not to use this right for whatever reason.

For other rules of the system, Euroclear Bank has no discretion, e.g. Section 2.2.2 (Securities Clearance Accounts and Cash Accounts) paragraph (a) of the OPs states that 'Once you enter into an agreement to participate in the Euroclear System we will open at least one Account for you which contains [...]' or Section 5.3.1.4 (Execution of Custody Operations) paragraph (c) of the OPs states that 'For Corporate Actions where you have a choice, the following shall apply: [...]'.

All such information is included in the OPs, publicly available .

The clients' rights and obligations are mentioned in the *Terms & Conditions* (including Section 12 'Duties and Liabilities of Euroclear Bank' for the clients' rights and Section 15 'Certain Responsibilities and Liabilities of clients' for the clients' obligations) and OPs (including Part III 'Rights and Responsibilities'). The OPs give a description of the rights and obligations of the clients and Euroclear Bank throughout the whole document (e.g. what a client must do to have his instruction accepted by the system before the deadline). Euroclear Bank has recently enhanced the transparency by summarising the rights and responsibilities after each chapter.

Information on the risks is provided via documents such as the Basel II – Pillar 3 disclosure on risk management or the CPMI-IOSCO / ESCB-CESR Disclosure Framework.

Key consideration 3: An FMI should provide all necessary and appropriate documentation and training to facilitate clients' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.

New clients receive a 'Welcome Pack'. As mentioned on the website, Euroclear offers various training options to help clients get the best out of its range of products and services.

- Local courses
- Online training
- e-Learning
- On-site visit

This is complemented by regular newsletters, brochures and other material that is published regarding specific topics. For example, operational newsflashes are published on the website regularly (see situation on 18 October 2013 below), available to clients only via the password-protected part of the website. Registered client subscribers to these newsflashes also receive emails to alert them to the newsflash.

vEuroclear 🔻	Help My Apps • Euroclear Bank •
All services	
Service update – 🛛 🗶 newsletter – bulletin	Newsletter - Tariff - Securities lending and borrowing rates unchanged 11/10/2013 14:45
All markets - Euroclear Bank	Lending and borrowing Service update – newsletter – bulletin Tariff news Euroclear Bank
All instruments	For November 2013, there are no changes to the securities lending and borrowing rates. Reference: 2013–N–052
All connectivity	P Bookmark
Euroclear Bank 🗶	
Keywords Search > Subscribe >	Newsletter - United Kingdom - Stamp Duty Reserve Tax 10/10/2013 2:30 United Kingdom Stamp duty service Service update - newsletter - bulletin Euroclear Bank
From	This is the yearly reminder of your UK stamp duty obligations under the UK 0.5% Stamp Duty Reserve Tax regime. Reference: 2013–N–051
To 📰	► Bookmark
avourite subscriptions	Newsletter - Italy - IFTT - Latest updates on collection, payment and reporting
uroclear France news	7/10/2013 15:38
iroclear Nederland news	Italy Financial Transaction Tax - FTT
roclear Bank news	Service update - newsletter - bulletin Euroclear Bank
roclear UK & Ireland news	In this Newsletter you will find the latest information we have on the collection, payment and reporting of the Italian Financial Transaction
ustody news	Tax (IFTT) on Italian shares. Reference: 2013–N–050
uroclear Belgium news	P Bookmark
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Euroclear Bank has conducted a complete review of its *Operating Procedures* in July 2013 in order to increase the ease of understanding of the rules and risks that clients face, among others.

However, when Euroclear Bank notices a lack of understanding with one or several clients, Euroclear Bank will provide training to the client(s) either bilaterally or collectively in a way that is most appropriate (including the training options and documents mentioned in Q.23.3.1).

Key consideration 4: An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.

On the public part of the Euroclear website, Euroclear Bank publishes the *General Fees brochure*. This document provides detailed information on the applicable fees for each type of service and the applied discounts (sliding scale).

Euroclear Bank applies the European Code of Conduct for Clearing and Settlement (7 November 2006) and therefore provides price transparency and service unbundling. More information can be found on the Euroclear website (https://www.euroclear.com/en/about/Our-business/code-of-conduct.html).

Euroclear Bank generally follows a process of informing clients and the public of changes to its services and fees through Newsletters as they occur. The newsletters announce the change, are posted on the website and are sent proactively by email to clients and registered users of the website. The tariff brochure is also updated.

The tariff update is issued once a month (instead of on an ad-hoc basis as previously), taking into account a minimum of 10 business days before the implementation of a tariff change if it has an adverse impact on clients, and any time before implementation if the tariff change creates a favorable impact for clients.

Depending on the nature, magnitude and topic of the change, Euroclear may elect to further publish the new tariff or service by attracting the media's attention to it via press releases, advertising campaigns, journalist interviews, and the like. This is a judgment call rather than a set procedure.

Unlike for tariff changes, there is no set rule, as in a specific number of business days, Euroclear Bank follows when announcing service changes to clients and the public. The timing of new service announcements will vary according to their levels of sophistication and to the need for clients to make technical changes to avail of them.

Euroclear Bank applies the Code of Conduct and complies therefore with the following price transparency requirements :

- to enable clients to understand the services they will be provided with, and to understand the prices they will have to pay for these services, including discount schemes

EUROCLEAR BANK SA/NV

- to facilitate the comparison of prices and services, and to enable clients to reconcile ex-post billing of their business flow against the published prices and the services provided

The Euroclear website mentions the different connection types that are possible:

- public internet
- private network providers (SWIFT and BT), as described below

connectivity overview - Eurocle	ar Bank	Client Technical Support
4/06/2013 Basics Connectivity Euroclear Ba		Tel: +32 (0)2 326 1 433 Email
As the market evolves towards real-time processing, info teal-time, event-driven transfer of information is replaci traight-through processing and standardised messaging ncreases system efficiency. We offer various solutions th educe risk, increase settlement efficiency and optimise a Choose how you want to connect Ve offer a range of options for screen-based and comput	ng batch processing and file transfer. solutions are becoming a reality as technology at are fast and cost-effective, enabling you to sset usage.	Full contact info
Screen-based	Benefits	
EUCLID PC: for low- to medium-volume users to access to Euroclear Bank core services EUCLID Server: a central point of access for high-volume users to operate their accounts; synched with Euroclear Bank's real-time process FundSettle browser: for access to FundSettle services Triweb and Biweb: for information on securities holdings and triparty activity as a whole LoanReach browser: for access to LoanReach services	 Efficient interfaces User-friendly functions Real-time validation and matching (for EUCUD PC, EUCUD Server and FundSettle browser) Timely and comprehensive reporting Cost-effective software applications 	
Computer-to-computer	Benefits	
EUCUD Server: gives high-volume users a continuous exchange of information synched with Euroclear Bank's real-time process EUCUD file transfer and FundSettle file transfer: batch-	 Ideal for automating high-volumes Customise to your own needs Limited manual intervention 	

Clients can choose one (or several) of them depending on which is the most advantageous for them.

Key consideration 5: An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.

Euroclear Bank publishes a Disclosure Framework every year. The last version was published in April 2014.

Besides the company information (including financial and governance information) and information on the services that Euroclear Bank offers, Euroclear Bank also discloses risk management information such as the Basel II Pillar 3 disclosure and information on Euroclear's business continuity.

Statistical data can also be retrieved from the Euroclear website (e.g. Weekly/Monthly/Quarterly/Yearly turnover), in addition to the statistical information that is available via publications such as the Blue Book.

The media will vary according to the nature, magnitude and significance of the information. At a minimum, the information will be disclosed in a Newsletter, posted on the website and an alert sent to registered clients and users by e-mail to announce the availability of new information. The 'Asset Protection Pack' is available on the website. Some brochures also exist in paper format.

Euroclear Bank may also use other media that are more promotional in nature, but still have a role to play in disclosure. These media include:

- press releases (as part of a communications plan to support the business. Articles with 'news value' (e.g. on new or expanded services, operating results or tariff reductions) may appear in the financial trade press and/or on the Euroclear website)
- social media
- adverts
- commercial presentations
- speeches at industry events
- videos/banners on the website and elsewhere
- marketing brochures (in electronic and in paper format)
- internal communications channels

All information mentioned in this Principle is available in English.

Principle 24: Disclosure of market data by trade repositories

A trade repository should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

Not applicable to Euroclear Bank.



Post-trade made easy

www.euroclear.com

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EUROCLEAR BANK SA/NV



Risk Management at Euroclear

Including Pillar 3 disclosure 2014 – Euroclear plc

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Reducing risk in the market

Well-functioning post-trade arrangements for financial instruments facilitate the efficient allocation of resources and, therefore, contribute to economic growth. They are also essential for preserving financial stability, as disruptions occurring in the post-trade processing of transactions could lead to systemic risk is the financial market at large. With a sound understanding of systemic risks, central banks and the market issued a number of recommendations regarding risk management.

The Euroclear group has acquired expertise, fosters a strong risk culture and built a solid risk management framework with the aim of minimising the risks involved in the operation of settlement, collateral management and custody services.

Settlement risk

The major risks that can materialise during the settlement process and affect Participants are:

- credit risk, resulting from the possibility that one of the Participants in a transaction is unable to meet its obligations. The main credit risk is principal risk, as both the buyer and the seller of securities are exposed to the risk of losing the full amount of the transaction, from the moment they initiate a securities or funds transfer until settlement is completed. In addition, they incur replacement cost risk, as they need to enter into a new contract, potentially losing any unrealised gain; and
- **liquidity risk**, stemming from the lack of available cash or securities when due; the transaction might then settle at a later date.

Both credit and liquidity risk in settlement transactions can lead to systemic risk, if other Participants are unable to meet their own commitments following the first default or failed settlement. In the worst case, this can threaten the stability of financial markets.

Credit risk arises as a consequence of settlement lags or asynchronous settlement.

The settlement lag is the maximum amount of time between the date on which a trade is executed and the date on which the trade is settled. The longer the settlement lag, the greater the replacement cost risk if the transaction is not executed. The issue of lags in securities settlement has been addressed at a worldwide level. As recommended by CPMI IOSCO principles for Financial Market infrastructures and by the CSD Regulation, the settlement period of transactions has been reduced to T+2 in October 2014. Asynchronous settlement refers to situations in which the payment and the delivery of the assets bought take place as two separate processes. As a result, the buyer of the securities incurs the risk of non-delivery by the seller. If this occurs after the payment has been sent, the full principal amount of the transaction is at risk. Similarly, the seller faces the risk of not receiving the funds due after the securities have been delivered. The introduction of Delivery-versus-Payment (DVP) mechanisms has eliminated the principal risk in securities transactions. For information on DVP transactions, see the 'Delivery-versus-Payment' section below. To further reduce credit risks in securities transactions, market participants have introduced netting arrangements, which, if legally and contractually sound, have the advantage of reducing the need for credit and the overall credit risk in the market, as well as reducing the size of individual market participants' balance sheets. By interposing themselves between the buyer and the seller and becoming the sole counterparty to both sides of securities transactions, Central Counterparties (CCPs) also bring similar credit risk reduction benefit to market participants.

Delivery-versus-Payment

(International) Central Securities Depositories ((I)CSDs) have contributed to reducing the credit and liquidity risks involved in securities settlement transactions through the introduction of DVP mechanisms. Three broad DVP models were defined by the Committee on Payment and Market Infrastructure (CPMI):

- Model 1: systems that settle transfer instructions for both securities and funds on a trade-by-trade (gross) basis, with the final (unconditional) transfer of securities from the seller to the buyer (delivery) occurring at the same time as the final transfer of funds from the buyer to the seller (payment);
- Model 2: systems that settle securities transfer instructions on a gross basis, with the final transfer of securities from the seller to the buyer (delivery) occurring throughout the processing cycle, but settle funds transfer instructions on a net basis, with the final transfer of funds from the buyer to the seller (payment) occurring at the end of the processing cycle;
- Model 3: systems that settle transfer instructions for both securities and funds on a net basis, with the final transfers of both securities and funds occurring at the end of the processing cycle.

The Euroclear system used by Euroclear is a Model 1 DVP system.

Transactions between Euroclear Bank Participants are settled on a trade-by-trade basis, with simultaneous and final transfers of cash and securities in the books of Euroclear Bank.

Settlement over the Bridge with Clearstream also takes place according to DVP Model 1, because there is simultaneous and final transfer of cash and securities between Euroclear Bank and Clearstream via the mutual cash and securities accounts that each holds with the other after each exchange. There are several exchanges each night and an Automated Daytime Bridge during the day.

External transactions (i.e. transactions that settle in a local market between a Euroclear Participant and a local counterpart, which is typically a member of the local Securities Settlement System (SSS)) follow the DVP rules (if any) of the local market.

DVP Model 1 systems often have a single delivery and payment intermediary, except when payments are in central bank money. This is the case of the Euroclear Group CSDs.

Please refer to the Disclosure Frameworks of each Euroclear (I)CSD on www.euroclear.com for more detailed information on the DVP models used.

Managing the risks of the settlement institution

Euroclear has adopted a robust risk management framework to protect its Participants from the risk of the settlement institution failing in its obligations. This framework ensures that any risk faced by entities of the Euroclear group are managed adequately.

On a yearly basis, Euroclear Senior Management provides an assertion on the adequate management of operational risk incidents and risks as well as the effectiveness of the control environment.

Euroclear's risk management approach aims for:

- the right ownership and governance
- a holistic approach
- a dynamic approach
- alignment with established market standards and regulations
- coverage of business-as-usual and crisis management up to recovery and disaster.

Euroclear Group aligns its risk management practices on a fit for purpose basis with major recommendations from various regulatory or industry bodies, such as:

- International Organisation of Securities
 Commission (IOSCO)
- G30
- European Securities and Markets Authority
- European Banking Authority
- European Central Bank
- Basel Committee for Banking Supervision (BCBS)
- Local regulators.

Its risk management framework is defined in a Risk Board policy applicable for the group Euroclear. It has been developed and on a fit for purpose basis is maintained in accordance with best practices for risk management and regulatory guidelines, including:

- COSO (1)
- ISO 31000: 2009 principles and generic guidelines for risk management
- ISO 27001: 2005 guidelines for Information Security
- Local regulatory requirements
- CPMI-IOSCO Principles for Financial Market Infrastructures ⁽²⁾
- European Capital Requirements Directive Regulation
- BCBS recommendations including the International Convergence of Capital Measurements and Capital Standards.

⁽¹⁾ An internal control framework by the Committee of

Sponsoring Organisations of the Tradeway Commission

⁽²⁾ Euroclear entities have published their Disclosure Framework on www.euroclear.com

The implementation of the Basel Framework at Euroclear

Euroclear plc is the ultimate holding company of, among others, Euroclear SA/NV, Euroclear Bank and the Central Securities Depositories (CSDs) of the Euroclear group. Euroclear Bank is the only credit institution in the Euroclear group: the CSDs are settlement institutions and Euroclear SA/NV is an entity closely associated with a settlement institution. Euroclear Bank and all consolidated levels above, as well as Euroclear Belgium and Euroclear SA/NV (stand-alone), have to comply with the requirements formulated in the transposition of the Basel Accord into European regulation (hereafter: "Basel Framework").

What is the Basel Framework?

In response to the shortcomings of the Basel II regulation revealed by the financial crisis, the Basel Committee on Banking Supervision (BCBS) has updated during 2010 and 2011 the Basel II framework in Basel III. The Basel III framework has been implemented in the European Union with effect from 1 January 2014 through a European Regulation and Directive ("CRD IV"), which supersede earlier Capital Directives.

The new elements in the regulation address mainly aspects related to the quality, consistency and transparency of institutions' capital base; risk coverage, mainly in the area of counterparty credit risk; a leverage ratio to supplement the risk-based Basel II framework; and countercyclical measures through capital buffers.

It also introduces a 30-day liquidity coverage ratio and a longer-term net stable funding ratio, to ensure that institutions maintain a sufficient stock of high quality liquid assets to cover potential liquidity gaps, and adopt a healthy balance between short and long-term funding to cover their activities.

The new element of this Basel III framework are gradually being phased in between 2014 and 2018. Banks are offered the possibility to use different risk measurement approaches for calculating their capital requirements, from simple or standardised methods to elaborate models.

These more sophisticated approaches require the consistent understanding and use of data collected internally by the banks.

They generally allow banks to economise on capital, thus introducing an additional incentive to develop and apply strong risk management methods.

The Basel Framework differentiates between three so-called pillars, which are expected to be mutually reinforcing. Pillar 1 is centred on the capital requirements related to the credit, market and operational risks that banks run. Under Pillar 2, banks are expected to produce their own assessment of capital adequacy, based on the risks that they face in their activities, including additional risk types such as market risk in the banking book. Pillar 2 also lays out the interaction between the banks' own assessments and the banking supervisors' response. Pillar 3 aims to promote market discipline through the disclosure of information by institutions. Pillar 3 requirements concern the regular disclosure of information of interest to the market.

Part of the disclosure concerns risk management methods and practices, and the organisation of the risk management function. Another part is focused on, among other things, the actual data relating to exposures and associated capital requirements. Under the Basel framework, the pillar 3 requirements are included in Part eight of the European Regulation ("CRR").

This publication contains Euroclear's Pillar 3 disclosure for 2014.

Pillar 1 at Euroclear

Euroclear has obtained approval from the CBFA⁽¹⁾ to apply the **Foundation Internal Ratings-Based Approach (FIRBA)** for credit risk under Pillar 1 as from January 2007.

The FIRBA is applied at the level of Euroclear Bank and at all consolidated levels above. Euroclear Bank has been using an internal ratings model since 2005. Euroclear Bank determines the ratings of counterparties and Participants, and assigns its own probabilities of default. As Euroclear Bank does not have any history of credit losses, it did not choose to apply an Advanced Internal Ratings-Based Approach (AIRBA). More information on Euroclear Bank's use of the FIRBA can be found in the chapter on credit risk management. With respect to operational risk, Euroclear has been allowed by the CBFA to use the Advanced Measurement Approach (AMA) for the calculation of Pillar 1 capital requirements as from Q1 2008. Euroclear uses a hybrid approach at all consolidated levels above Euroclear Bank, by combining the AMA for Euroclear Bank with a Standardised or Basic Indicator Approach for the group's other entities.

The Standardised Approach (TSA) and the BIA are used respectively for the CSDs and the other group entities. More information on operational risk management can be found in the relevant chapter.

⁽¹⁾ Until 31 March 2011 the CBFA in Belgium was the main supervisor of Euroclear Bank and the lead regulator for Euroclear SA/NV and Euroclear plc. These responsibilities have now been transferred to the National Bank of Belgium (NBB).

Pillar 2 at Euroclear

The scope of Pillar 2 is broader than that of Pillar 1. The Supervisory Review Process (SRP) aims at ensuring that institutions adequately understand and manage their risks through dialogue with their supervisors. Under the **Internal Capital Adequacy Assessment Process** (ICAAP), institutions are expected to identify and quantify the residual risks that they face and to relate these to the level of good quality capital needed to implement their plans. At the same time, the institutions' supervisors will evaluate these risks under the Supervisory Review Evaluation Process (SREP) and assess the adequacy of the ICAAP. Euroclear maintains an active dialogue with the regulators on capital levels

Euroclear's documented ICAAP framework is based on economic capital models and includes a capital planning process. The Board of Euroclear SA approves Euroclear's **Internal Capital Measurement Approach (ICMA)**, which establishes common principles to determine an internal view on core equity requirements for each Euroclear group entity. The ICAAP process has been implemented at the level of each entity, which states that the sophistication of the approach should be determined with consideration for the size and risk profile of the relevant entity.

In addition, Euroclear delivers on a regular basis to regulators standardised reports on risks not covered under Pillar 1 (interest rate risk in the banking book, liquidity risk and concentration risk on specific sectors or geographic areas). Information on these risks is also included in the Pillar 3 disclosure.

Pillar 3 at Euroclear

Scope of application

Complete Pillar 3 information will be disclosed at the highest consolidated level, Euroclear plc. This is appropriate because Euroclear manages the risks that it faces at group level. In addition, specific information, mainly on capital structure and adequacy, will be published for Euroclear Bank, which is considered as a significant subsidiary for the purpose of this disclosure. Euroclear Bank is the only credit institution of the group and, as such, is by far the largest contributor to the credit, liquidity and market risks faced by the group. Information on these risks therefore mainly concern Euroclear Bank. Specific figures for Euroclear Bank would be very close to the figures included in this publication, which apply to the group as a whole.

Basis of consolidation

There are no differences in the basis of consolidation for accounting and prudential purposes at Euroclear.

Subsidiaries are all entities over which the group has the power to govern the financial and operating policies generally accompanying a shareholding of more than one half of the voting rights. Subsidiaries are fully consolidated from the date that control is transferred to the group. They are de-consolidated -from the date that control ceases.

All subsidiaries are fully consolidated, with the exception of the nominee companies. The list of nominee companies can be found in the Euroclear plc Consolidated financial statements and Parent company financial statements at 31 December 2014 (Consolidated financial statements)

Consolidated subsidiaries	Country of incorporation	Nature of business	Proportion of voting rights and ordinary shares held
Caisse interprofessionelle de dépôts et de virements de titres SA ⁽¹⁾	Belgium	Central Securities Depository for Belgium	100%
Calar Belgium SA/NV (2)	Belgium	Property investment	100%
EMX Company Limited (1)	United Kingdom	Dormant	100%
Euroclear SA/NV (3)	Belgium	(I)CSD holding company, ownership of share processing platforms and delivery of shared non- operational services	100%
Euroclear Bank SA/NV (1)	Belgium	Banking, securities settlement and custody services	100%
Euroclear International Services Limited (4)	United Kingdom	Dormant	100%
Euroclear Finance 2 SA (2)	Luxembourg	Financing vehicle	100%
Euroclear Finland Oy (4)	Finland	Central Securities Depository for Finland	100%
Euroclear France SA (1)	France	Central Securities Depository for France	100%
Euroclear Investments	Luxembourg	Investment holding	100%
Euroclear Properties France SAS (3)	France	Property investment	100%
Euroclear Re SA (3)	Luxembourg	Reinsurance	100%
Euroclear Sweden AB ⁽¹⁾	Sweden	Central Securities Depository for Sweden	100%
Euroclear UK & Ireland Limited (1)	United Kingdom	Central Securities Depository for the United Kingdom and Ireland, and Investment-fund order routing	100%
Nederlands Centraal Instituut voor	The Netherlands	Central Securities Depository for the Netherlands	100%

Giraal Effectenverkeer BV (Necigef)⁽¹⁾

 $^{(1)}\,$ Held through Euroclear SA/NV $\,$

(2) Held through Euroclear Bank SA/NV

(3) Held through Euroclear Investments

(4) Held through Euroclear SA/NV

Nederlands Interprofessioneel Effectencentrum NIEC BV (NIEC) located in the Netherlands was liquidated in December 2014. VKI AB in Sweden, a dormant subsidiary of Euroclear Sweden AB, has been merged with Euroclear Sweden AB in December 2014. Xtrakter Limited (TRAX trade matching and reporting) located in the United Kingdom was sold in February 2013, with a net gain of €25,945,000.

EMX Company Limited's investment-fund order routing business was transferred to Euroclear UK & Ireland Limited in September 2010. The company became dormant in the course of 2014.

Source: 2014 Euroclear plc Annual Report

Capital mobility between Euroclear companies

In addition to the capital requirements imposed by local company laws, some Euroclear companies are also subject to regulatory capital requirements. This is the case for Euroclear plc, Euroclear SA/NV, Euroclear Bank consolidated levels as well as, Euroclear SA/NV, Euroclear Bank and Euroclear Belgium stand alone levels, which are subject to the Basel Framework, as well as for the CSDs, which, as settlement institutions, are subject to specific local regulatory requirements. The other entities are not subject to regulatory requirements which limit the transfer of own funds.

At all times, Euroclear ensures that each entity maintains sufficient capital to:

- comply with its legal and local regulatory requirements; and
- allow it to continue to operate properly.

There are no other material impediments to the transfer of own funds between Euroclear entities.

Frequency and medium

Qualitative and quantitative information will be disclosed yearly shortly after the publication of the Annual Report based on the situation at the end of the previous year. The frequency of the disclosure might be increased in the future to respond to market needs. The full disclosure document is published on www.euroclear.com.

Content

Euroclear will disclose the relevant and applicable to Euroclear information specified in Part eight of the European Regulation ("CRR"). As from its Pillar 3 disclosure over 2008, Euroclear has included a chapter on liquidity risk management, as this is an essential part of its risk management processes.

Quantitative disclosures published in Euroclear's Pillar 3 report fall within the scope of Euroclear's internal and external verification processes, including auditing by an independent auditor. This is true for the disclosures that have already been published in the annual report or in the Consolidated financial statements under IFRS, as well as for the quantitative disclosures related to the calculation of regulatory capital requirements that are communicated to the NBB on a regular basis. Some of the qualitative disclosures published in the Consolidated financial statements are also reproduced in this document.

Capital structure and adequacy

The NBB in Belgium is the main supervisor of Euroclear Bank and the lead regulator for Euroclear SA/NV and Euroclear plc. In addition, individual CSDs are regulated by their own local supervisors, which set and monitor their capital adequacy and liquidity requirements.

Composition of own funds

Euroclear plc's total capital is divided into two Tiers: Tier 1 is essentially made up of shareholders' capital, share premium, consolidated reserves and retained earnings, while Tier 2 comprises undated subordinated loans. In accordance with capital adequacy regulations, Euroclear monitors the proportion of the Hybrid Tier 1 instrument (issued in 2005) that can be considered as Tier 1, and reclassifies the remainder to Tier 2.

Goodwill and intangible fixed assets are deducted in full from Tier 1 capital.

The group's policy is to maintain a strong capital base, so that an adequate relationship between total capital and the underlying risks of the group's business exists at all times.

The table on the next page gives details of the total capital of both Euroclear plc and Euroclear Bank, which both comfortably exceed their regulatory requirements. The table below reconciles the composition of regulatory capital for Euroclear plc group and Euroclear Bank stand-alone as at 31 December 2014 to the audited financial statements in accordance with Article 2 in Commission implementing regulation (EU) No 1423/2013. As at 31 December 2014, the regulatory consolidation scope is identical to the statutory consolidation scope.

31 December 2014 (€′000)	Euroclear plc consolidated	Euroclear Bank stand-alone
Called up share capital and share premium	146,592	843,505
- Share capital (1)	3,369	285,497
- Share premium	143,223	558,008
Capital redemption reserve	462	
Other reserves	949,693	94,047
- of which cash flow hedge	(280)	-
Retained earnings (2)	2,147,736	490,043
- Retained earning	2,203,365	490,043
- PY retained earning	1,948,209	503,511
- CY retained earnings	255,156	131,892
- Defined benefit plan	(58,473)	-
- Non taxable reserve	2,844	-
Shareholder's equity as per financial statements	3,244,483	1,427,595
Proposed dividend ⁽²⁾	(106,225)	-
Regulatory adjustments		
- Goodwill and other intangible assets	(934,433)	(12)
- Cash flow hedge	280	-
 Negative amounts resulting from the calculation of expected loss amounts 	(2,410)	(2,266)
Common Equity Tier 1 capital	2,201,695	1,425,317
Subordinated liabilities as per financial statements (3)	98,005	102,505
- Amount not eligible under CRR	(19,601)	(20,501)
Qualifying Tier 1 instruments ⁽⁴⁾	78,404	
Qualifying Tier 2 instruments ⁽⁵⁾		82,004
Total capital base	2,280,099	1,507,321

Any differences between total amounts and the sum of components are due to rounding.

Further details on the own fund can be found in annex.

(1) Euroclear Bank's share capital entirely subscribed and fully paid-up, represented by 70,838 registered shares without par value, each shares representing an equal part of the capital of the Company. The shares are indivisible and the Company recognises only one owner per share for the exercise of the rights attached to the shares.

Euroclear plc's share capital issued is fully paid, represented by 2,868,890 Ordinary shares and 500,120 'S' shares.

- The ordinary shares have attached to them full voting, dividend and capital rights, including on a winding up but do not confer any rights of redemption.

- The class S shares have attached to them voting and capital distribution rights, including on a winding up. They also entitle a simple majority of the holders to appoint and remove a number of 'S' Directors. The holders of the shares are disenfranchised from voting on the appointment of any director of the company other than an 'S' Director. New S shares must be offered to holders of S shares in proportion to their existing holdings. They do not confer any rights of redemption.

(2) Retained earning after appropriation and transfer for Euroclear Bank stand-alone, proposed dividend already deducted in shareholder's equity as par FS

⁽³⁾ excluding accrued interest for Euroclear plc consolidated accounts

(4) Euroclear Finance 2 SA Fixed/floating rate subordinated guaranteed non-cumulative perpetual securities guaranteed on a subordinated basis by Euroclear Bank (nominal amout EUR 300,000,000-outstanding amount- 98,100,000). For more information see summary terms and conditions of the securities

⁽⁵⁾ Euroclear Bank SA/NV Fixed/floating rate subordinated perpetual notes (nominal amout EUR 304,500,000-outstanding amount-102,600,000). For more information see terms and conditions of the notes

Capital adequacy

In accordance with the Basel framework, each bank or banking group is required to maintain a ratio of total capital to risk-weighted assets that cannot fall under a threshold of 8%, and a ratio of Tier 1 capital to risk-weighted assets that must exceed a threshold of 6%. Furthermore, as a company closely associated with a settlement institution, Euroclear SA/ NV is subject to certain specific requirements regarding its solvency and liquidity position.

Risk-weighted assets take into consideration balance sheet assets and off-balance-sheet exposures that may give rise to credit risk, as calculated for both Euroclear Bank and the group on a consolidated basis. Collateral and other eligible guarantees are taken into account appropriately. Euroclear Bank is assigned a AA+ credit rating by Fitch Ratings and a AA credit rating by Standard & Poor's (S&P). In accordance with the Basel framework, Euroclear determines regulatory capital requirements for both credit and operational risk.

For credit risk, Euroclear uses the Foundation Internal Ratings Based Approach (FIRBA). For operational risk, Euroclear is permitted by the NBB to use the Advanced Measurement Approach (AMA) for the calculation of Pillar 1 capital requirements. Euroclear uses a hybrid approach at all consolidated levels above Euroclear Bank, by combining the AMA for Euroclear Bank with a Standardised or Basic Indicator Approach for the group's other entities.

The table below sets out the group's Tier 1 and total capital, which both comfortably exceed the regulatory requirements.

31 December 2014 (€′000)	Euroclear plc consolidated	Euroclear Bank stand-alone
Total capital requirements	465,431	285,943
Capital requirements for credit, counterparty credit and dilution risks, and free deliveries	151,325	70,881
Internal Ratings-Based approach (IRB) - Central governments and central banks - Institutions - Corporates – SME of which: subject to SME-supporting factor - Corporates – Specialised Lending - Corporates – Others	151,325 7,852 47,871 – – – 252	70,881 7,840 41,456 – – – 177
Capital requirements for equity under IRB	42,366	10,389
Other non-credit obligation assets	52,982	11,016
Capital requirements for position, foreign exchange and commodity risks - Standardised Approach (SA) - Foreign exchange	25,701 25,701 25,701	798 798 798
- Commodities		_
Capital requirements for Operational Risk (OpR) - OpR Basic indicator approach (BIA) - OpR Standardised (STA) / Alternative Standardised (ASA) approaches - OpR Advanced measurement approaches (AMA)	288,231 2,881 61,982 223,366	214,089 - - 214,089
Total risk exposure amount for credit valuation adjustment - Standardised method	173 1731	173 173
Capital ratios Total Tier 1	36.6% 36.6%	39.7% 37.5%

Any difference between total amounts and the sum of components are due to rounding.

Economic capital

Economic capital is the internal view on the amount of capital that Euroclear needs to have in order to protect itself from unexpected losses resulting from the risks it faces in its various activities. Euroclear has an internal view on the amount of capital needed by each of its entities. Economic capital is one of the main building blocks of the ICAAP under Pillar 2.

The Internal Capital Measurement Approach

The objective of the Internal Capital Measurement Approach (ICMA) is to establish high level principles that can be applied to all entities of the Euroclear group, to ensure they have sufficient capital to cover their risks. The approach is consistent across all entities of the Euroclear group.

In particular, the ICMA explicitly sets for each "material" entity⁽¹⁾ a 99.98% target confidence level for the probability of not defaulting over a one year horizon. This confidence level is consistent with the systemic importance of each material entity of the Euroclear group.

The ICMA is an essential component of Euroclear's Pillar 2.

Euroclear Bank

Euroclear Bank has adopted a three-step approach for the determination of its economic capital.

The first step aims at quantifying the capital required for Euroclear Bank to maintain a high quality credit rating, given an expected portfolio of risks. A Value-at-Risk (VaR) model, based on the output of Monte Carlo simulations, is used for this exercise.

In a second step, a buffer is added to ensure sufficient capital remains available in more difficult times. That buffer is sized based on the capital impact of a number of risk-specific stress scenarios.

The chosen scenarios are approved by the relevant governance bodies.

In a third step, a few additional buffers are added to cover additional, specific risks. One of them is the buffer for model risk which provides protection against risk arising from the model calibration process.

⁽¹⁾ Entities which offer post-trading services (i.e. clearing, settlement, safekeeping, order routing and other related services) and/or support services to operate these posttrading activities are considered to be material.

Risk appetite and risk tolerance

A risk appetite is set, which corresponds to the amount of risk that Euroclear Bank is prepared to run to carry out its business. It is set per risk type and is limited by the available capital set annually by the Board of Euroclear Bank for the whole portfolio of risks.

The upper tolerance level is set by the Board and is determined by calculating how much the capital contribution of a risk type can increase before exhausting some capital buffers.

Capital planning

Euroclear establishes a 5-year capital plan that is reviewed annually, taking into account strategic developments and expected business evolution, as well as unfavourable scenarios.

Euroclear SA/NV

The capital plan for Euroclear SA/NV (ESA) is based on the following principles:

1. it is assumed that during the next five years each legal entity of the group will need to hold enough capital to cover its own risks.

The ESA consolidated capital plan can thus be viewed as the sum of individual capital plans; it does not take diversification benefits into account;

 the different constraints on the capital are analysed for each entity and include internal (economic capital (EC), stress scenarios) and external (regulators, rating agencies) views on the capital required; and

- 3. for each entity, at least two scenarios are analysed:
 - (i) a scenario based on the financial multi-year plan; and
 - (ii) a 'unfavourable' scenario based on a pessimistic evolution of both our business results and risk profile.

Euroclear Bank

The recommendation for the minimum capital required is determined, subject to the following factors:

- the Economic Capital (EC) requirement, determined according to the methodology described above;
- the preservation of Euroclear Bank's credit rating;
- the Pillar 1 capital requirements, which set the minimum regulatory own funds (Tier 1) required to cover credit, market and operational risks.

Asset encumbrance

In accordance with Article 443 of Regulation (EU) 575/2013 (the Capital Requirements Regulation – CRR), the below information on asset encumbrance is disclosed.

Assets

	Encumbered assets		Unencumbered assets		
	Carrying amount 010			Fair value	
		040	060	090	
010 – Assets of the reporting institution	875,952	_	25,092,807	-	
030 – Equity instruments	-	-	175,816	175,816	
040 – Debt instruments	875,646	875,646	2,713,357	2,713,357	
120 – Other assets	306	-	22,203,634	-	

The broad categories of asset type (column 060) are:

- Debt instruments (2.7 Bn or 11% of total assets): Euroclear capital and part of client end-of-day cash positions are invested in prime European Sovereign debt
- Other assets (22.2 Bn or 88% of total assets)

Client end-of-day balances are also invested with high quality market counterparts, preferably by using reverse repurchase agreements (82%).

Tangible and intangible assets (6%).

Collateral received

	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
	010	040
130 – Collateral received by the reporting institution	-	16,385,508
150 – Equity instruments	-	-
160 – Debt instruments	-	16,385,508
230 – Other collateral received	-	-
240 – Own debt securities issued other than own covered bonds or ABS	-	-

The entire collateral received results from the secured financing transactions concluded by the Euroclear Bank Treasury department. On average, 80% of total client balances are invested in reverse repurchase agreements where high credit and liquidity collateral criteria are required or invested in short term and high quality securities

Sources of encumbrance

	Matching liabilities contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered	
	010	030	
010 – Carrying amount of selected financial liabilities	840,656	840,651	

Activities do not lead to asset encumbrance as Euroclear plc consolidated is not involved in derivatives transactions, neither repo deals nor debt securities issuance. Exceptionally at year-end, EUR 840 Mn of assets (European Sovereign debt) is encumbered to secure an overdraft position at our Central Bank. The encumbrance is fully concentrated on Euroclear Bank SA, representing approx 95% of Euroclear plc total Balance sheet.

Risk management framework and governance

Euroclear plays a central role in securities settlement in Europe. This confers the responsibility to ensure that settlement takes place safely and efficiently. With that in mind, Euroclear manages the risks that it faces conscious of its responsibilities vis-à-vis the market place. Well-functioning settlement systems allow markets to perform their function well and resources to be allocated rapidly where they are most necessary.

Enterprise Risk Management (ERM)

Euroclear uses the ERM framework to ensure a coherent approach to risk management, with effective controls commensurate with Euroclear's intention to maintain a low risk profile.

Risk register & Risk Universe

The risks that Euroclear faces in pursuing its corporate mission are credit, liquidity, operational, market, business and strategic risks. Reputation risk is not considered as risk type on its own but more like a risk that can arise from all the others. The impact of these six risks on the different entities within the group is assessed based on the assessment and rating methodology developed by Euroclear group. To manage these risks, the Board and management set limits on the amount of risk that Euroclear entities can absorb (risk tolerance) and/or are prepared to accept (risk appetite).

Risk Management compiles its view of the inherent and residual risk types across the organisation. This is represented through a risk universe.

Credit	The risk of loss (direct or contingent) arising from the failure of a counterparty to meet its obligations to Euroclear.
Liquidity	The risk of loss (financial or non-financial) arising from Euroclear being unable to settle an obligation for full value when due. Liquidity risk does not imply that Euroclear is insolvent since it may be able to settle the required debit obligations at some unspecified time thereafter.
Operational	The risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. Operational risk can have a financial or a reputational impact. Euroclear adopts the Basel II definition of operational risk which views operational risk as an umbrella risk, encompassing:
Processing risk	The risk of loss resulting from inadequate or failed internal processes, not related to the risks described hereafter. This includes the indirect consequences of operational risk on liquidity, credit and market risks, as well as relationship management risk (lack of adequate knowledge of customers and service partners) and inadequate communication with the media, are also included;
Accounting risk	The risk of loss arising from the failure to produce timely and accurate management reporting and financial statements that provide a fair representation of the company's financial situation.
Ethical conduct, legal and compliance risk	 The risk of loss arising from a failure to: act with integrity, fairness and honesty; adapt to changes in the legal and regulatory environment; anticipate, identify, understand or comply with relevant laws and regulations; competently negotiate, implement, comply with or enforce contracts.
People Risk	The risk of loss due to failure to manage the performance of human resources adequately, social conflicts, lack of development of competencies, lack of appropriate human resources, inadequate management of external parties or a failure to (want to) change
Project Risk	The risk of an uncertain event or condition that, if it occurs, effects one of the project objectives. Project risk management helps the project team to deliver the required functionalities on time within the predefined budget in a qualitative way.
Information and systems	The risk of loss due to loss of data integrity & information or due to system unavailability, breach of confidentiality, lack of systems alignment to the business or inadequate information or system support. This includes risks related to breaches in corporate security and information security (including business continuity).
Market	The uncertainty on future earnings and on the value of assets and liabilities (on or off balance sheet) due to changes in interest rates, foreign exchange rates,equity prices or commodity prices.
Business	The risk of revenues being different from forecast as a result of the inherent uncertainty associated with business planning or of unanticipated changes in the nature or level of market activity serviced by Euroclear.
Strategic	The risk of the business model not being appropriate to deliver the corporate vision as a result of limited ability to implement internal change, external changes in the environment in which Euroclear operates or the inherent uncertainty associated with business planning over a medium to long-term horizon.

Control objectives

High Level Control Objectives (HLCO) establish senior management accountability for settingup a system of internal controls to mitigate the risks of the Risk Register. They set the expectation on the level of internal control in each entity and division of the group.

The HLCOs are complemented by more detailed Control Objectives. The latter are established by business management and are aligned to the mission of each business unit. They set control objectives linked to their core processes and deliverables. Finally, they are cascaded in controls and control processes, designed by the business and describing how the risks impacting business activities are to be mitigated. This cascade of control objectives and controls are the foundation of Euroclear's Internal Control Environment (ICS).

Risk Management offers guidance and tools to support the roll-out of the controls underpinning these control objectives. Business management maintains tools to link the controls with the control objectives and monitoring activity, aiming at building a sound and complete control environment. Line management highlight missing or ineffective controls and help to ensure the completeness of the action plans necessary to close control gaps.

Euroclear's Strategy

		Cont	trol Objective	Control Objective	COSO		_
Credit Risk		1	Euroclear manages its credit risks in line with the company's risk appetite and policies.	Head of Banking	Operations		
Liquidity Risk		2	Euroclear manages its liquidity risks in line with the company's risk appetite and policies.	Head of Banking	Operations		
	Legal&Compliance, Ethical Conduct	3	Euroclear manages its legal, regulatory and contractual obligations and rights properly.	Head of Legal & LMT CEOs	Compliance		
	People	4	Euroclear manages its human resources in such a way as to allow it to manage appropriately its risks.	Heads of HR	Operations	e way, Is.	
		5	Euroclear delivers operational services that meet clients' expectations and maintains robust service resilience.	Heads of Operations	Operations	objective al contro	
Operational Risk	Process	6	Euroclear has an Enterprise Risk Management (ERM) framework in place that helps risk owners take decisions in line with the company's risk appetite.	Head of Risk Management	Operations	endent and em of intern	
l'	Systems & Technology	7	Euroclear operates its systems to achieve defined service levels appropriate to the business application.	Head of CT	Operations	an indep up's syst	•
	Project Risk	8	Euroclear manages appropriately its roadmap project risks, seeking to deliver projects within budget, scope and on time with the required quality.Changes in budget / scope/ timing follow appropriate governance rules.	Head of Project Delivery	Operations	Internal Audit provides reasonable assurance, in an independent and objective way, on the adequacy and effectiveness of the group's system of internal controls.	,
	Accounting	9	Euroclear's financial, prudential and management reporting processes adhere to regulatory requirements and generally accepted standards.	Head of Financial	(Financial Reporting)	es reasonabl nd effective	
Market Risk		10	Euroclear manages its market risks in line with the company's risk appetite and policies.	Head of Banking	Operations	it provide lequacy a	•
Business Risk		11	Euroclear maintains its financial strength to ensure sustainability and competitiveness, including through appropriate cost focus.	Head of Financial	Operations	nternal Aud on the ac	
Business Risk		12	Euroclear sets business objectives consistent with the multi-year plan, monitors its implementation, and takes adequate corrective action when needed.	Head of Product Management	Operations	_	
Strate via Diele		13	Euroclear's strategic plan and objectives derived from that plan are communicated clearly and progress is monitored.	Head of Strategy	Strategy		
Strategic Risk		14	Euroclear's division heads are aware of their responsibilities and are accountable for the results of their division.	Each MC member / Each DH	Strategy		
			ERM Static: Strategy - Governance - Culture				
	ERM Dynamic: Iden	tificati	on, Assessment, Measurement - Risk Response - Reporting - N	Ionitoring		15	

Three lines of defense

In line with best market practice, Euroclear has adopted a three lines of defence model. The allocation of responsibilities within Euroclear's three lines of defence model is:

• 1st line of defence:

Line Management identify, define and operate the control environment to help them achieve their business objectives. Line Management control the risks that would prevent them from achieving these.

- They document and demonstrate the control environment.
- They report and escalate risks or control weaknesses which can prevent them of reaching their objectives.
- They involve control functions such as Risk Management or Compliance and Ethics to support them.
- 2nd line of defence:
 - Risk Management
 - They define the control environment framework in line with regulations and internal policies.
 - They monitor the Risk and Internal Control environment in a changing internal and external environment
 - They report, challenge management or escalate to management risks or control defects.
 - They support the business and gives its independent view of the effectiveness of the controls to implement remedial actions.
 - Compliance monitor, test and report to management on controls relating to laws and regulations and advice on remedial actions.
- 3rd line of defence: Internal Audit independently review and test the control framework and report to management about the adequacy and effectiveness of the control environment.

Assurance and Control Effectiveness

This three lines of defense set-up is a cornerstone of the ERM framework: first line management provides the assurance on the adequacy and effectiveness of the control environment and the second and third lines of defence fulfil afterwards their mission by confirming, nuancing or infirming the assurance provided by first line management.

Positive Assurance reports (PAR) enable first line management to demonstrate that controls are adequate and effective. PAR have been deployed at entity/divisional level and, where relevant, at departmental level. They link business objectives through to control objectives, control activities, and forms of evidences. By keeping track of the main expected internal and external change factors, they allow first line management to timely maintain the adequacy of the control environment when expected changes materialise.

The conclusions of these individual PARs are consolidated and summarised in a **Group Assurance Map (AM)**. The AM is a juxtaposition of assurance provision by the three lines of defence and includes the possible key control gaps. Next to first line management's assessment, the second and third lines of defence will report their own independent assessments, confirming, nuancing or infirming first line management's views. The AM is thus a reporting tool for the Group Risk Committee, the Management Committee and the Board, allowing a frequent, effective and comprehensive monitoring of the control environment.

Risk monitoring through selfassessments

Control objectives are assessed continuously as part of the bottom-up business control and monitoring processes, reported and discussed in management performance meetings at different levels in the organisation (from team meetings to reviews by the operational risk committees and management committees of the group).

They are also collectively reviewed top-down through the regular PAR self-assessments. At least once a year, they are performed with the right mix of people around the table (different layers in the organisation, representatives of quality assurance teams, Risk Management, and any other relevant party). Together with the systematic availability of comprehensive material this enables reflection and step-back.

Through workshops these self-assessments aim to achieve the following objectives:

- build an accurate and consistent assessment of the ICS, i.e. to achieve a good understanding of the risk profile of the business;
- increase risk awareness and promote an ongoing assessment of risks and controls by business managers;
- identify new risks ;
- ensure that individual risks in the ICS are identified proactively and that they are addressed adequately; and
- help management make a well-founded statement on the effectiveness of the ICS.

Risk Assessment and Measurement

Euroclear encourages an environment which proactively identifies risks and control weaknesses, as opposed to the reactive logging of risks.

Among other things, the daily monitoring of **key risk** and **key performance indicators** (**KRIs** and **KPIs**), the systematic risk assessments associated with the new product or service approval process, and self-assessment processes contribute to facilitating pro-active identification.

In addition, Risk Management performs proactive risk assessments on selected topics and reports the outcome to management.

Euroclear has developed an assessment and rating methodology which enables operational risks to be classified according to their impact on the risk profile of the relevant business areas or Euroclear entities. Determining the criticality of other risks also entails an assessment of their potential impact on Euroclear's risk profile.

Risk appetite

A risk appetite is set, which corresponds to the amount of risk that Euroclear Group is willing to take to deliver its business objectives. It is set by entity per risk type.

Risk response

There are four different ways in which business management can respond to risks.

- Mitigate mitigating risks entails reducing the likelihood that they materialise or reducing their potential impact. This can be done e.g. by adding controls or, in the case of credit risk, by making use of collateral. When risks are identified, mitigating action plans and their target dates are all logged. The business areas are responsible for developing solutions to mitigate risks effectively, with Risk Management providing advise for material risks. The successful implementation of these mitigating actions is monitored through KPI reporting and RCSAs. The time allowed for mitigating risks is commensurate with the impact of the risk.
- Accept risks can be accepted when for instance the costs required to mitigate the risk outweigh the benefits. The decision to accept a risk is made by the business owners and is a formal process to re-certify all accepted risks regularly.

- Transfer / Insure / Hedge business owners can transfer a risk to a third party, typically through insurance. Euroclear has a group insurance programme that covers most insurable risks. Situations are tracked where risk exposures can be transferred to a third party via insurance or a hedge at corporate level, e.g. hedges to cover interest rate or foreign exchange risks. In cases where such a transfer is not possible, other business resilience measures are considered.
- Avoid risks are avoided if Euroclear opts not to engage in certain activities (e.g. particular transactions, credit provision, and the launch of a new product or service) or to change its business model, because the risk of having large losses exceeds the risk appetite for any relevant risk type.

Euroclear aims to implement the framework consistently across the group. Detailed implementation may vary to reflect each entity's specificities (e.g. its size, local regulatory requirements etc.).

Specific information on the risk management of credit, market, liquidity and operational risks is provided separately in the report.

Governance

Euroclear plc

The Board of Directors is the ultimate decision making body of Euroclear plc. In order to perform its responsibilities more efficiently, the Board has established the following committees: an Audit Committee, a Nominations and Governance Committee, a Remuneration Committee and an Operations Committee.

Euroclear SA/NV

The Board of Directors is the ultimate decision making body of Euroclear SA/NV. The Board of Directors overarching responsibilities is to define and oversee the implementation of the strategy and objectives of the Company, as well as the risk policies (including the risk tolerance levels of the Company), and to supervise management. The Board of Directors is advised on risk related topics by the following committees, which are exclusively composed of non-executive directors:

- the **Risk Committee** assists the Board of Directors in fulfilling its oversight responsibilities of the Group's:
 - risk management governance structure, including policies;
 - risk tolerance, appetite and strategy; and
 - management of key risks as well as the process for monitoring and mitigating such risks.
- the Audit Committee assists the Board of Directors in fulfilling its oversight responsibilities for the Company, including its branches and subsidiaries, with respect to:
 - the quality and integrity of the accounting, auditing and reporting practises of the Company (stand-alone basis) and the Group (consolidated basis);

- the effectiveness of internal controls and risk management systems; and
- the independence, accountability and effectiveness of the External Auditor.
- the Nomination and Governance Committee assists and advises the Board of Directors in the following matters as they apply to the Company, namely:
 - the nomination of Board and Management Committee members;
 - Board and Committee composition;
 - succession planning; and
 - corporate governance matters.
- The **Remuneration Committee** assists the Board of Directors:
 - in defining the global compensation philosophy for the Group;
 - in ensuring that the members of the Management Committee, the nonexecutive directors and the members of the Board committees are compensated in accordance with the Euroclear Compensation policy; and
 - In advising, as appropriate, the subsidiary companies on relevant matters arising out of the Compensation policy.

The Euroclear SA/NV Board also established a Management Committee with decision making authority and entrusted it with the general management of the Company with the exception of setting the strategy and general policy and other powers reserved to the Board or the Shareholders by law or by the Articles. The Euroclear SA/NV Management Committee is advised on risk related matters by:

- the Group Risk Committee whose main role is to maintain a holistic and structured view of the main risks of the Group and to ensure that these are actively managed. The Group Risk Committee monitors the evolution of the risk profile and control environment, reviews and approves Risk and Compliance related assessments and frameworks (incl. policies), and advises and/ or escalates to the Management Committee if needed. The Group Risk Committee approves Management Resolutions and advises on Board Policies and validates material assumptions related to the operational risk models, as well as risk assessments.
- the ESA Credit and Assets and Liabilities Committee, whose main role is to advise on dividend proposals, capital restructuring proposals, capital planning, funding proposals, investment policy, hedging policy, financial policy and stress testing for Euroclear SA/NV, the group and the CSDs regarding the financial plan, capital requirements and liquidity and cash requirements.

Euroclear (I)CSDs

Each Euroclear (I)CSD of the Group has a **Board of Directors** as their ultimate decision making body. Each Board of Directors' overarching responsibilities are to define and oversee the implementation of the strategy and objectives of the (I)CSD, as well as the risk policies (including the risk tolerance levels of the (I)CSD), and to supervise the (I)CSD's management. These Board of Directors have established committees advising them on risk related topics (along the lines of those established by Euroclear SA/NV). The Board of Directors of each of the (I)CSD's also established a Management Committee⁽¹⁾ or Executive Committee with decision making authority and entrusted it with the general management of the entity within the strategy and general policy decided by the Board, and to implement such strategy and general policy.⁽²⁾

The composition and terms of reference of the Board and Board Committees have been posted on www.euroclear.com. The Management Committee or Executive Committee has set up several internal committees providing advise on risk related matters:

- the Risk, (Local Security) & Operating Committee, which reviews the risks introduced by new services or products and monitors the evolution of the risk profile and control environment. This includes the risk review of operational issues, financial exposures, reputation, business continuity matters, local security, compliance and issues arising during the implementation phase of new projects as well as the impact of such issues on the economic capital and proposes risk mitigation actions. It also monitors the service level management of outsourced services.
- the Group Risk Committee please refer to equivalent section under Euroclear SA/NV.

⁽¹⁾ Naming, structure and objectives of committees may differ by entity, to adapt to local needs.

⁽²⁾ For Euroclear Sweden and Euroclear Finland, the Chief Executive Officer has been given the authority to manage the day-to-day operations, supported by the Executive Committee to manage both entities in a coordinated manner.

- the Credit and Assets and Liabilities
 Committee (for Euroclear Bank), which evaluates the short and long term impact of strategic matters of credit and treasury on the Bank's reputation, financial performance and shareholder's equity and also advises on policy matters and key assumptions and parameters used in the credit risk and asset & liability.
- the Group Admission Committee (for Euroclear Bank and the ESES CSDs), which reviews the new client profiles and their impact on the overall business portfolio and recommends on new client admission requests. This committee also proposes possible changes to the clients' admission criteria and reviews the ongoing compliance of clients vis-à-vis the admission criteria.

These committees also propose relevant policy changes.

Other Euroclear entities

For the CSDs of the Euroclear group, risk committees are responsible for monitoring (potential) risks faced by each entity and advising local management teams with regard to risk matters, like the ESES Risk and Operating Committee.

Risk management responsibilities

To ensure a consistent risk-management approach across all entities, Euroclear has organised its risk management function at parent company level.

Euroclear SA/NV Risk Management provides independent assurance that the relevant risks taken to reach Euroclear's vision are identified and controlled within the risk appetite. Risk Management implements an approach which enables the identification and understanding of all material current and prospective risks and the management of appropriate responses.

This is done by providing a coherent effective framework, suitable training, useful tools, expert impartial advice, timely risk assessments, escalation of material risk issues, informed relevant reporting, all of which enable risks to be managed well.

More specifically, Risk Management develops and oversees appropriate risk management policies and procedures and advises on related risk activities. Risk Management is responsible for the following generic types of activity for each of the risks it covers:

- risk policy setting
- risk assessment & measurement; i.e. tools and methods for risk definition and measurement; identification and assessment of the various risk exposures, their likelihood of occurrence and their impact
- expert, impartial risk advice
- risk monitoring; i.e. follow up of exceptions, action plans, new products and changes in risk exposure, oversight over the various risk areas and reporting to the appropriate levels.

Risk Management operates independently from the business lines they monitor. It is headed by a **Chief Risk Officer (CRO)** who has a dual reporting line to the CEO and the Chairman of the ESA Risk Committee. The CRO is also a member of the Euroclear Bank Management Committee and the Euroclear SA/NV Management Committee. The performance of the CRO is reviewed by the Risk Committee who makes recommendations on the CRO remuneration to the Remuneration Committee. The independence of the CRO is reinforced through his direct access to the Chairman and the members of the Audit and Risk Committee.

Corporate risk managers have been assigned to address the risks of each Euroclear entity. In addition, specialised risk functions are dedicated to information security, business continuity, recovery and resolution planning scenario analysis and banking risks. A Capital modelling team calculates regulatory and economic capital requirements for senior management and the Board of Directors.

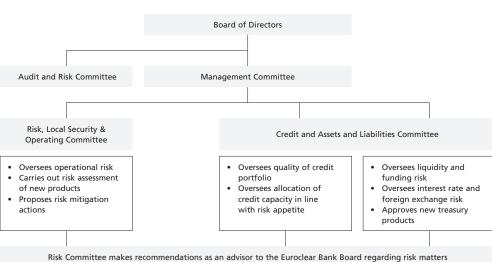
Reporting and Escalation

At least quarterly, Risk Management reports formally to the management teams and audit and risk committees of all entities, detailing the status and trend of the risk profile and commenting on the key risks.

With the same frequency, the CRO reports his view on the Group Risk Profile, summarising the key risks at group level, to the Euroclear SA/NV Management Committee and to the Euroclear SA/NV Risk Committee.

In addition, Risk Management will escalate immediately to the appropriate level material risk issues when, in its opinion, either a new risk emerges or mitigating actions for an existing risk have been insufficient in scope and/or resolution time.

Euroclear Bank Committee Structure



(Committees related to risk management only)

Credit risk management

Credit risk is the risk of loss (direct or contingent) arising from the default or failure of a Participant or counterparty to meet its obligations to Euroclear. The degree of credit risk depends on the credit standing of the Participant or counterparty and on the duration, amount and nature of the exposure that Euroclear has on that Participant or counterparty.

Strategies and processes for credit risk management

Euroclear Bank

Credit decisions are made at the discretion of Euroclear Bank, which accepts credit risk only within its risk appetite. The risk appetite for credit risk in Euroclear Bank is limited by:

- the available capital allocated annually for credit risk by the Euroclear Bank Board;
- regulatory limits caps including risk concentration limits and capital adequacy ratios; and
- internal limits, for example, credit, country or treasury limits.

The risk of a credit loss for Euroclear Bank is very low and Euroclear Bank has never suffered a credit loss in its entire history, not even during the period of market turmoil. This is largely due to the uncommitted nature and the very short duration of the credit exposure which, in general, is intra-day. Additionally, Euroclear Bank applies very strict collateralisation rules in quality and quantity. This results in average collateralisation levels, for its client exposure above 99%.

Euroclear Bank also has treasury exposures resulting from Participants' end-of-day cash balances. Such positions are usually re-deposited in the market with high quality counterparties. Where possible reverse repos are used, but some limited exposure remains unsecured. The risks are limited by their short duration (mainly overnight), as well as by policy limits.

To comply with the qualitative and quantitative requirements of Basel, Euroclear Bank uses an internal rating model. The model allows credit officers to rate all Participants, counterparties and all the countries where Euroclear Bank has credit exposure.

Short-term credit provision by Euroclear Bank

Euroclear Bank extends short-term credit to its Participants to facilitate the settlement of securities transactions. When the buyer does not have sufficient cash in its account to settle a transaction, temporary credit is extended, allowing settlement to take place efficiently. Such credit extensions, which create 'operating exposure', can occur when:

- Participants do not hold their cash reserves in Euroclear Bank; and/or
- There are structural time lags in the flow of funds as a result of time-zone differences and differences in operating hours of the various intermediaries involved in the payments.

In other words, operating exposure results from temporary mismatches between incoming and outgoing funds on a Participant's account.

Outgoing cash flows can:

- Fund purchases of securities within the Euroclear system;
- Fund cross-border receipts of securities; or
- Be sent out of the Euroclear system in the form of wire transfers.

Incoming funds can come from:

- Sales of securities within the Euroclear system;
- Cross-border deliveries of securities; and
- Credit on Participants accounts from external intermediaries.

Generally, the duration of operating exposure is less than 24 hours (i.e. intraday). The duration varies with the sources of exposure and funding.

Participants for which cash flows are mainly driven by purchases and sales within the Euroclear system in a back-to-back mode, need credit only for a few milliseconds, to allow the transactions to settle. Operating exposure that needs to be funded by either cross-border deliveries or credits on Participant accounts from external intermediaries tends to last longer, up to several hours. Only in unforeseen circumstances (primarily as the result of settlement failures or delayed credits) can part of the operating exposure become an end-of-day overdraft retained in the books of the bank until the next day.

Credit facilities for Euroclear Bank Participants

Euroclear Bank may offer credit facilities to Participants on an uncommitted basis. Such facilities are always multi-currency and multipurpose and can be reduced or withdrawn at any time, without notice. Credit officers within the Credit department determine whether or not credit facilities can be offered to a given Participant, and the size of such facilities. The size of the credit facilities is reviewed annually.

Participants may receive temporary credit in excess of their credit facilities, upon appropriate approvals. The objective of the temporary credit is to unblock transactions that would otherwise prevent the settlement of a chain of transactions, which could result in liquidity risks for Euroclear Participants. Such additional credit thus contains systemic risk.

Euroclear Bank limits the aggregate operating exposure to any family of Participants, as explained in the chapter on Liquidity risk management.

Participants that benefit from credit facilities are required to execute special credit documentation with Euroclear Bank. More information on this can be found in the chapter on Operational risk management.

Credit facilities are primarily used for the following purposes:

- Intraday cash borrowing: Use of credit can allow for securities settlement without the need for pre-funding accounts.
- Commitments in connection with local market settlements: Euroclear Bank may extend credit to Participants to facilitate local market settlements, as from when it sends instructions to the local market for either matching or settlement purposes.



General Collateral Access (GCA): Participants must have credit arrangements in place with Euroclear Bank as a prerequisite to borrowing securities through the General Collateral Access Programme. A securities borrowing constitutes an extension of credit to a borrower, to cover the guarantee given by Euroclear Bank to the lender that it will be reimbursed. Securities borrowings are subject to a separate credit line set per Participant.

Credit exposures to other counterparties

In addition to the operating exposure on Participants, Euroclear Bank is exposed to financial institutions as a result of regular treasury operations, including:

- the placements of funds at end-of-day in the market: though Euroclear Bank makes regular use of reverse repos, some of its treasury exposure is unsecured. This type of exposure is usually very short-term;
- the Investment and Treasury Book: Treasury can invest in highly rated securities;
- short/medium-term derivative transactions: Euroclear Bank faces counterparty credit risk when it buys options or enters into forex forwards contracts to hedge its foreign exchange and interest rate exposures. More information on this can be found in the chapter on Market risk management; and
- foreign exchange transactions: as an institution located in multiple countries and active in many markets, Euroclear Bank needs to conduct foreign exchange operations, including FX swaps. Such transactions expose Euroclear Bank to settlement risk.

These credit exposures are limited by specific facilities for market transactions. Additionally, aggregate unsecured exposures to any family of Participants and/or counterparties are expected to remain within the limits set by the Board of Directors.

Credit officers within the credit department determine whether or not market facilities can be offered to a given counterparty, and the size of such facilities. Voluntary exposure on noninvestment grade counterparties is not allowed.

The Euroclear CSDs

As their transactions settle in central bank money, the CSDs have no direct cash relationship with their clients. Consequently, they cannot extend loans or credit facilities to their customers. The CSDs can potentially face a low level of credit risk arising from the nonpayment of fees by their clients. These are limited amounts, considering both the frequency of the billing and their relatively broad customer base. Each CSD of the group is required by its home regulator to hold enough liquidity to cover such risks. As a result, the group CSDs are exposed to the credit risk related to the reinvestment of their cash position (being held for regulatory purposes or not) with their bank counterparties.

To limit the credit risk taken on such counterparties, the banks that are considered for these investments should at least have a rating in the A-range, with investment maturities not exceeding 3 years.

Concentration risk

Concentration limits are set to ensure that the group does not take too large exposures on too few Participants or counterparties. European and Belgian banking regulations also impose risk concentration limits that have to be respected for each applicable exposure. Individual exposures above 25% of the own funds (Tier 1 + Tier 2 – deductions) are reported as breaches under the large exposures regulation. Euroclear SA/NV and Euroclear Belgium, both located in Belgium, are subject to capital adequacy regulations equivalent to those applicable to Euroclear Bank. This stems from their regulatory status, as a settlement institution for Euroclear Belgium, and as a company closely related to a settlement institution for Euroclear SA/NV. Consequently, both entities have to make sure that they do not breach the same concentration limits as defined above for Euroclear Bank.

In order to mitigate their concentration risk, Euroclear SA/NV and Euroclear Belgium invest their cash surplus with a minimum of two external counterparties. Euroclear policy applies this approach to other group CSDs, even though they are not subject to the same capital adequacy rules.

Rating concentration of financial assets

Respectively 98% and 99% of the settlement and treasury exposures of Euroclear Bank were taken on investment grade Participants and counterparties. In addition, on average more than 99% of the settlement exposure is secured and most of this exposure is intra-day. Therefore, there are no expected credit losses and no impairment provision has ever been required.

As for the exposure taken on its investment and treasury books, Euroclear Bank follows a conservative approach. Any security held in the investment book, which in IFRS terms is to be understood as all fixed income securities belonging to the available-for-sale portfolio, needs to have a credit rating equal to, or greater than, AA-.

In December 2014, 100% of the securities held by Euroclear Bank were rated AA or above.

Credit exposures

Standardised approach

Euroclear applies the standardised approach at the level of Euroclear SA/NV stand-alone, and at the level of Euroclear Belgium, as these entities bear very little credit risk. For these entities, there is no intention to evolve towards an Internal Ratings-Based (IRB) approach in the short term, though this might be reassessed at a later stage, if deemed necessary.

For exposures that can be allocated to specific counterparties, Euroclear makes use of external ratings from the three major rating agencies, Moody's, Standard & Poor's and Fitch. Euroclear uses the standard association published by EBA to map the external credit ratings to the credit quality steps. The external ratings are used for the limited credit exposure these entities have to corporates, institutions and equity.

Internal ratings-based approach

For credit risk, the FIRBA is used for Euroclear Bank stand-alone and consolidated, Euroclear SA/NV consolidated and Euroclear plc consolidated. Euroclear makes its own judgements about the ratings of counterparties and Participants, and assigns its own probabilities of default. This gives significant capital benefits compared to the standardised approach. The AIRBA would have required the use of internal Loss-Given-Default statistics, which Euroclear does not have, as it has not incurred any credit loss to date.

Euroclear Bank has been authorised by the NBB to use a maturity-adjustment factor in its model, to account for the very short durations of its exposures. At 14 days, this maturity adjustment factor has been chosen very conservatively to reflect the delays that Euroclear would face when trying to realise the collateral of a defaulting Participant. The maturity adjustment factor is not used for exposures with a clearly defined or longer maturity (e.g. derivatives contracts or investments held in the investment book).

The table on the next page shows total and average exposures under the FIRBA.

		Euroclear plc consolidated and		
31 December 2014 (€'000)	Total exposures	Central governments and central banks	Institutions	Corporates
Total gross credit exposures Euroclear plc	44,740,304	5,633,987	39,045,417	60,900
Total gross credit exposures Euroclear SA/NV	44,667,020	5,633,987	38,906,133	72,900
Average gross credit exposures Euroclear SA/NV ⁽²⁾	44,140,600	5,694,529	37,868,525	577,546

 $^{\left(1\right) }$ Any difference between total amounts and the sum of components are due to rounding.

(2) Average gross exposure is based on four data points taken at the end of each quarter. There are some important fluctuations in the data. Figures for Euroclear plc are only available for Q2 and Q4; the resulting average would be less accurate.

The table below provides information on the geographical concentration of exposures, before credit risk mitigation, which are mostly concentrated in (Western) Europe and North America. The geographical regions are those in which Euroclear Participants or counterparties are located. Cash is always classified under the country of the issuing central bank.

Geographical concentration of credit exposures

		Euroclear plc consolida	ited ⁽¹⁾	
31 December 2014 (€′000)	Total exposures	Central governments and central banks	Institutions	Corporates
European Union	42,178,123	5,366,804	36,491,596	52,723
Other Europe ⁽³⁾	29,033	-	29,033	-
North America	863,111	5	862,472	634
Central and South America	122,787	0	122,777	10
Asia	1,398,075	0	1,390,564	7,511
Middle East	68,763	177	68,578	8
Africa	3,765	-	3,750	15
Oceania	76,572	0	76,572	-
Other	76	-	76	-
Total	44,740,304	5,633,987	39,045,417	

(1) Any difference between total amounts and the sum of components are due to rounding. The classification of countries does not correspond to the *Consolidated financial statements*, where e.g. The Americas encompasses fewer countries than here the total of North and Central and South America.

(2) Including Turkey.

Given Euroclear's role as a provider of posttrade commoditised services to financial markets, its exposures are highly concentrated on the financial sector and it does not incur exposures to non-financial industrial sectors. The table below provides information on the residual contract maturity breakdown of the entire portfolio. Most exposures are very short-term, generally one day.

		Euroclear plc consolida	ated ⁽¹⁾	
31 December 2014 (€'000)	Total exposures	Central governments and central banks	Institutions	Corporates
Less than two weeks ⁽²⁾	35,013,213	3,078,595	31,873,717	60,900
2 weeks - 1 month	2,766,846	218,005	2,548,841	-
1 - 6 months	6,049,158	1,936,425	4,112,733	_
6 months - 1 year	911,087	400,962	510,125	-
Total	44,740,304	5,633,987	39,045,417	60,900

Residual maturity breakdown of credit exposures

⁽¹⁾ Any difference between total amounts and the sum of components are due to rounding.

(2) Nearly all exposures have a maturity of one day. The two weeks correspond to the maturity adjustment that Euroclear has been allowed to use under FIRBA.

Credit exposure on equities

Euroclear applies the simple risk weight method to its banking book equity holdings, as the amount and complexity of its equity holdings is relatively limited. Under that method, a 190% risk weight is to be applied to private equity in a sufficiently diversified portfolio, 290% to exchange traded equity exposure and 370% to all other equity holdings. The table below shows the gross exposure on equity investments, by risk weight.

Equity exposure, simple risk weights

31 December 2014 (€′000)	Euroclear plc consolidated
Risk weight	Total gross exposure
190%	152,141
290%	23,885
370%	176,026

Other non credit-obligation assets

Euroclear applies a 100% risk weight to exposures that are considered as non-material and not related to its core activities. These include other assets, accruals and tangible fixed assets. These exposures cannot be allocated to specific counterparties. The table below shows total exposures related to non credit-obligation assets.

31 December 2014 (€'000)	Euroclear plc consolidated
Total exposures under standardised approach	515,9010
On balance sheet items	515,9010
Risk weight	100%

Impaired exposures

Definition of past due and impaired

In accordance with IFRS 7, assets qualify as past due when a counterparty has failed to make a payment when contractually due.

The group assesses at each balance sheet date whether there is objective evidence that a financial asset or group of financial assets classified as held-to-maturity, available-forsale or loans and receivables is impaired. A financial asset or portfolio of financial assets is impaired or and an impairment loss is recognised where there is objective evidence that an event occurring after initial recognition of the asset has adversely affected the amount or timing of future cash flows, and this effect can be reliably estimated.

For financial assets carried at amortised cost, the amount of the impairment loss is measured as the difference between the carrying amount of the financial asset and the present value of estimated future cash flows discounted at the original market rate of return for a similar financial asset. Cash flows relating to shortterm receivables (less than three months) are generally not discounted. Impairment losses are recognised immediately in profit and loss. If, in a subsequent period, the amount of the impairment or bad debt loss decreases and the decrease can be related objectively to an event occurring after the recognition of the original loss, the loss is reversed. The reversal shall not result in a carrying amount of the financial asset that exceeds what the amortised cost would have been had the impairment not been recognised at the date the impairment is reversed.

For financial assets carried at fair value, if there is objective evidence of the impairment of an available-for-sale financial asset, the cumulative net loss (difference between amortised acquisition cost and current fair value less any impairment loss previously recognised in profit or loss) that has previously been recognised in equity is removed and recognised in the income statement. If in a subsequent period, the fair value of an available-for-sale debt instrument increases and the increase can be related objectively to an event occurring after recognition of the original loss, the loss may be reversed through profit and loss. Impairments on investments in equities cannot be reversed.

Value adjustments and provisions

According to its policies, and in line with sound banking practices and banking regulations, Euroclear makes risk provisions for credit exposures when necessary. Such provisions are made for "doubtful debt", i.e. loans which reimbursement is uncertain. Euroclear does not have any risk provision for credit exposure at present, because it does not have any impaired assets.

Credit risk mitigation

Secured exposures

Due to the international scope of its activities and the multi-purpose and multi-currency nature of the credit facilities granted to its Participants, the collateral pledged to Euroclear Bank is not specifically attributable to any of the different types of credit exposures Euroclear Bank has on one Participant. This means that all the collateral pledged from a specific Participant is there to guarantee all the obligations it has with Euroclear Bank without differentiating within the nature of the exposure and the original currency.

The paragraphs below explain how Euroclear Bank applies credit risk mitigation techniques to its intra-day and longer exposures. Appropriate credit risk mitigation has contributed to the fact that Euroclear Bank has not incurred any credit loss to date.

Use of netting

Euroclear Bank vis-à-vis its Participants

In its relationship with its Participants, Euroclear Bank has a right of set-off upon termination of participation or resignation of Participants based on the Terms and Conditions Governing Use of Euroclear. In these situations Euroclear Bank has the right to:

- (i) set off or retain from the amounts held by Participants in their cash accounts, any amounts that are due to, or may become due to Euroclear Bank; and
- (ii) retain securities held in Securities Clearance Accounts for the payment in full of any amounts which are due to, or which may become due to, Euroclear Bank.

If a Participant has a credit line, it is also bound by the General Conditions Governing Extensions of Credit and the Collateral Agreement. If such Participant is in breach of the Collateral Agreement (event of default), then Euroclear Bank may exercise its rights on the collateral deposited by that Participant. In this respect, Euroclear Bank can exercise its right of set-off or close-out netting as provided under Belgian law.

Participant positions are not netted on a day-to-day basis, as Participant positions on sub-accounts (e.g. in different currencies) are considered separately. However, Participants can use their cash as collateral to mitigate an outstanding position in another currency.

Euroclear Bank vis-à-vis its counterparties

For its treasury activities, Euroclear Bank enters into master agreements with its counterparties. These agreements allow for close-out netting of positions in case of a counterparty default. In practice, however, the impact of the netting of positions on the aggregate value of these positions might be expected to be lower than for other banks given the limited scope of Euroclear Bank's activities in the market.

Nettable positions might, for example, come from opposite treasury operations intra-day and at end-of-day. During the day, Euroclear Bank tries to forecast its end-of-day cash position and, as that position tends to be positive, generally redeposits funds into the market. In practice, the end-of-day position may diverge from the forecast, forcing Euroclear Bank to cover an unexpected debit position or to place any unexpected cash positions it might have. In situations in which Euroclear Bank would have attracted funds from the market during the day and placed funds at the end of the day, or vice versa, with any particular counterparty, exposures on that counterparty might be calculated in case of default by netting the respective positions.

Euroclear Bank uses payment netting for margin payments on its derivatives positions. (margining is limited to interest rate futures).

Collateral valuation and management

Intra-day credit offered to Participants is generally secured by financial collateral or other recourse. Every day, Euroclear Bank assesses the collateral value of the securities held, based on prices obtained from a number of recognised external information providers, whereby the most appropriate price is selected according to the guotation selection rules. More than 80% of securities pledged in Euroclear Bank are priced every day or every second day. Securities for which Euroclear Bank does not obtain external quotations regularly can also be valued according to the price associated with securities transactions in the Euroclear system, or according to theoretical models.

In order to determine the collateral value of securities, the (estimated) market price is reduced by a haircut that depends on, among other elements, the estimated market risk on the security, the creditworthiness of the issuer of the security, the country in which the issuer is located, the denomination and the liquidity risk associated with the security. The delay since the last quotation was obtained is also taken into account, with increasing haircuts associated with longer delays. Securities whose price is not considered as a real market price are also strongly discounted. For debt securities, accrued interest is added to the clean price to obtain the market value, which is used to calculate the collateral value. The collateral valuation methodology is stresstested and back-tested yearly.

The haircuts applied in the valuation of collateral are used in the calculation of economic capital needs. For regulatory capital requirements, standard supervisory haircuts are used.

Types of collateral taken

As a general rule, all Euroclear Bank credit facilities should be secured with CPMI-IOSCO compliant recourse types. The preferred recourse type to secure the credit exposure in Euroclear Bank is a pledge of proprietary collateral (cash and securities) and supported by standard credit documentation.

If it is not possible to obtain collateral from the Participant, recourses that are non compliant with CPMICPMI-IOSCO principles may be possible like letters of credit and guarantees, double claim⁽¹⁾ and statutory lien⁽²⁾. All recourses must be legally valid, binding and enforceable.

The management of (market or credit) risk concentrations

Euroclear Bank uses collateral concentration thresholds as risk indicators to identify exceptional levels of specific collateral that have an impact on the credit risk exposure of the Bank. Particular attention is paid to the collateral issued and/or held by noninvestment grade entities. Other dimensions monitored concern the region and country of the issuer, the liquidity of the collateral, whether it is ESCB eligible, as well as the type of security. Reaching a threshold leads to appropriate approval and reporting requirements.

Credit risk mitigation and capital requirements

To calculate the effect of credit risk mitigation, Euroclear Bank applies the so-called **comprehensive approach**. Collateral valuation is based on standard supervisory haircuts, taking into account holding and revaluation periods.

The table below shows the exposures faced by the Euroclear group that are covered by eligible financial collateral.

All collateralised exposures are incurred by Euroclear Bank and are therefore subject to the FIRBA.

⁽¹⁾ Exposures are double claim when they are to be covered directly by an entity other than the one on which Euroclear Bank has the exposure, while Euroclear Bank also has full recourse on the latter. Such exposures can only be called "double claim" if they are appropriately controlled, monitored and documented.

⁽²⁾ A statutory lien is the right to take and hold or sell the property of a debtor as security or payment for a debt or duty. Belgian law grants a statutory lien to clearing and settlement institutions on assets held by their clients.

Exposures (after netting) covered by (after haircuts) eligible financial collateral

	Euroclear plc consolidated ⁽¹⁾			
31 December 2014 (€'000)	Total exposures	Central governments and central banks	Institutions	Corporates
Foundation Internal ratings- based approach (FIRBA)	21,714,422	75	21,676,303	38,044

Note that in the Consolidated financial statements, reverse repos, overdrafts and exposures related to securities lending and borrowing are considered as secured. In this table, they are only considered as secured when the related collateral is eligible under Basel II.

Only a few credit risk exposures that Euroclear Bank faces are covered by guarantees. Though these guarantees represent valid risk mitigation, they are not taken into account in Euroclear Bank's calculation of regulatory capital requirements. This leads to more conservative estimates of the risks incurred. One guarantee, however, is accurately captured in the model: the letter of credit issued by a syndicate of banks to cover part of Euroclear Bank's exposure arising from activity across the electronic Bridge with Clearstream Banking Luxemburg. Euroclear Bank applies the substitution approach, when relevant. As this information concerns an individual Participant, the details are considered to be confidential and will not be disclosed.

Credit risk measurement and modelling

FIRBA at Euroclear

The NBB has approved the use by Euroclear of the FIRBA, which is applied at the levels of Euroclear plc, Euroclear SA/NV consolidated, as well as Euroclear Bank stand-alone and consolidated. Given their simple balance-sheet structure, Euroclear SA/NV stand-alone and Euroclear Belgium apply the Standardised Approach. For these entities, there is no intention to evolve towards an IRBA. For exposures that can be allocated to specific counterparties, Euroclear SA/NV stand-alone and Euroclear Belgium make use of external ratings from the 3 major rating agencies. In line with Belgian law, the second-best is chosen. The FIRBA is characterised by the use of an internal ratings system and associated probabilities of default for the calculation of an institution's capital requirements to cover the (unexpected) credit risk it faces on its exposures.

The internal ratings system should also serve as a basis for the institution's credit risk management. Though the 'Foundation' approach implies an own assessment of the risk of default of the obligor, only institutions under the 'Advanced' approach need to apply internal estimates of loss given default. Under FIRBA, the estimates of additional risk factors are derived through the application of standard supervisory rules. For exposures under the Standardised Approach, external ratings and standard supervisory rules for other risk factors are used. The internal rating model rates all Participants and counterparties granted credit or market facilities, and all the countries where the Bank has credit exposure. The rating scale is composed of 20 different rating grades and each internal rating is mapped to a probability of default. Given Euroclear Bank's absence of its own default history, it has to use external data to calibrate the probabilities of default.

The internal ratings are used not only for regulatory capital requirements calculations, but also serve Euroclear Bank's own credit risk management and can therefore be found in many applications throughout the Bank. They are used, among others, in processes related to the provision of (intra-day) credit to Participants and counterparties (e.g. to determine credit lines as well as to extend additional credit if needed on a case-by-case basis to determine the frequency of credit line reviews and to put Participants on the special care list, which allows for closer monitoring of lower rated Participants). They are also used as an essential input to Euroclear Bank's economic capital model.

The performance of internal ratings is assessed annually by comparing the internal ratings to similar ratings issued by the major rating agencies. This performance review is combined with an overall review and validation of the model. The Risk Management Division is responsible for validating the model annually.

Model governance

Roles and responsibilities in respect of the internal rating model are shared between various departments of Euroclear Bank and the Risk Management Division (which is part of Euroclear SA/NV), ensuring an appropriate independence of the controlling and validation functions:

- The Credit department of Euroclear Bank has the overall responsibility for the model. It uses the model daily to assign the internal ratings. Entities are rated annually. It is also responsible for maintaining adequate procedures. Finally, it contributes actively, as a user, to improving the model and the procedures and participates in the yearly review.
- The Banking Risk function in the Risk Management Division is responsible for controlling the use of the model. These controls aim at evidencing that, among other things, procedures have been followed correctly (including for the revision and approval of ratings), the ratings of groups and of components of these groups have been conducted appropriately and entities rated Eb+ or lower are rated more frequently (twice a year, compared to once a year for other entities). More specific controls are also performed, on the use of particular submodels, on the quality and consistency of ratings, and on the (justification of the) overriding of model results by credit officers. Attention is also given to the migration of ratings over time.

- The Credit and Assets and Liabilities Committee approves changes to the model that are proposed by the Risk Management and Banking Divisions.
- The Banking Risk and Validation functions in the Risk Management Division perform the yearly validation, issue recommendations and verify compliance. The Risk Management Division also acts as necessary approver for changes in the model.
- Finally, Internal Audit reviews independently the processes related to the use of the model within Euroclear Bank.

Internal rating process

Euroclear uses different models to fit the particular characteristics of its different types of Participant: banks , broker-dealers, asset managers, corporates, central banks and multilateral lending institutions. Euroclear Bank does not have any retail exposures or significant exposure to equities.

Each Participant with a credit facility and treasury counterparty with a market facility are assigned an internal rating that is reviewed at least annually. Reviews are more frequent for lower rated entities and meaningful external news or external ratings changes also trigger a reassessment of the relevant internal ratings. Countries in which Euroclear Bank has an exposure are also rated once a year. The country ratings are an important determinant of the ratings of Euroclear Bank's Participants.

Given Euroclear Bank's long-standing relationship with its Participants, the ratings are long-term.

The table on the next page provides an overview of the various rating categories, and their meaning.

Overview of Euroclear Bank's internal rating grades

	Ec	Obligor is currently highly vulnerable to nonpayment, obligor that is the subject of a bankruptcy petition or similar action which have not experienced a payment default.
	Ecc	Currently highly vulnerable to non-payment.
	Eccc	In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.
	Eb-	Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation. Lower range of 'Eb' ratings.
	Eb	Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.obligor's capacity or willingness to meet its financial commitment on the obligation.
	Eb+	Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation. Upper range of 'Eb' ratings.
	Ebb-	Major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation. Lower range of 'Ebb' ratings.
	Ebb	Major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.
Speculative	Ebb+	Major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation. Upper range of 'Ebb' ratings.
	Ebbb-	Conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments. Lower range of 'Ebbb' rating
	Ebbb	Adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments
	Ebbb+	Adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments. Upper range of 'Ebbb' ratings
	Ea-	Strong capacity to meet its financial commitments. The Participant rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. Lower range of 'Ea' ratings
	Ea	Strong capacity to meet its financial commitments. The Participant rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories
	Ea+	Strong capacity to meet its financial commitments. The Participant rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. Upper range of 'Ea' ratings
	Eaa-	Very strong capacity to meet its financial commitments
	Eaa	Very strong capacity to meet its financial commitments
	Eaa+	Very strong capacity to meet its financial commitments. Upper range of 'Eaa' ratings

Estimation of exposures

Probabilities of default are associated with all Euroclear internal rating grades. These are based on 28 years of external historical default statistics gathered by a top rating agency, as Euroclear does not have sufficient default history of its own. The mapping of these default statistics to the agency's and to Euroclear's ratings scale allows Euroclear to derive Probabilities of Default (PDs) that fit its particular ratings structure.

Euroclear uses the mandatory PD floor (0,03%) for banks and corporates.

Euroclear also does not use own estimates of Loss-Given-Default (LGD), because of the absence of a default history, but instead it applies standard supervisory LGDs. These are 45% for senior unsecured claims, 75% for unsecured subordinated claims and 0% for secured exposure after credit risk mitigation.

For an estimate of Exposures At Default (EAD), Euroclear takes the nominal amount as reflected on its books. For some facilities (e.g. undrawn commitments) it includes an estimate of future lending prior to default.

The tables on the next page shows the credit risk exposure per PD class and the credit exposure by relevant geographical location. ſ

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Euroclear plc consolidated

			Eurocicui pie co	isonaatea	
	Total exposures ⁽¹⁾				
	RWA				
31 December	Exposure-		Central		
2014 (€′000)	Weighted Average		governments		
PD ranges (in %)	(EWA) LGD	Total	and central banks	Institutions	Corporates
0.000 - < 0.006	Total exposures	4.052.954	4.052.954	-	-
	RWA	36.110	36.110	-	-
	EWA LGD	45%	45%	0%	0%
0.006 - < 0.010	Total exposures	1.065.126	1.065.126	-	-
	RWA	34.057	34.057	-	-
	EWA LGD	45%	45%	0%	0%
0.010 - < 0.015	Total exposures	502.936	502.936	-	-
	RWA	23.193	23.193	-	-
	EWA LGD	45%	45%	0%	0%
0.015 - < 0.03	Total exposures	10.037.819	-	10.037.283	535
	RWA	120.792	-	120.770	22
	EWA LGD	12%	0%	12%	45%
0.030 - < 0.038	Total exposures	3.093.711	1	3.074.694	19.016
	RWA	53.646	0	52.847	799
	EWA LGD	11%	45%	11%	44%
0.038 - < 0.058	Total exposures	20.650.467	-	20.650.463	5
	RWA	123.380	-	123.379	0
	EWA LGD	4%	0%	4%	45%
0.058 – < 0.091	Total exposures	4.061.904	-	4.060.934	970
	RWA	124.469	-	124.469	0
	EWA LGD	9%	0%	9%	0%
0.091 – < 0.143	Total exposures	843.066	-	815.498	27.569
	RWA	7.921	-	7.921	1
	EWA LGD	2%	0%	2%	0%
0.143 – < 0.224	Total exposures	43.083	0	35.137	7.946
	RWA	8.377	0	8.377	-
0.004 0.050	EWA LGD	34%	45%	43%	0%
0.224 – < 0.353	Total exposures	174.305	12.447	161.723	135
	RWA	34.936	4.337 45%	30.600	0
0.353 - < 0.470	EWA LGD	26% 9.938	45%	24% 9.601	0% 262
0.555 - < 0.470	Total exposures RWA	3.998	/3	3.998	202
		43%			-
0.470 - < 0.848	EWA LGD	192.006	<u> </u>	44%	<u> </u>
0.470 - < 0.040	Total exposures RWA	1192.000	161	117.161	2.331
	EWA LGD	42%	45%	42%	42%
0.848 - < 1.531	Total exposures	6.463		6.128	335
0.040 (1.551	RWA	2	_	2	
	EWA LGD	0%	0%	0%	0%
1.531 – < 2.763	Total exposures	1.591		1.591	
	RWA	1.093	_	1.093	_
	EWA LGD	31%	0%	31%	0%
2.763 - < 4.986	Total exposures	51		51	
	RWA	7	_	7	_
	EWA LGD	5%	0%	5%	0%
4.986 - < 8.999	Total exposures	4.883	177	4.706	_
	RWA	8.056	296	7.761	-
	EWA LGD	44%	45%	44%	0%
8.999 - < 29.317	Total exposures	3	0	3	-
	RWA	6	0	6	-
	EWA LGD	45%	45%	45%	0%
Total	Total exposures	44.740.304	5.633.987	39.045.417	60.900
	RWA	699.698	98.155	598.390	3.153

EWA LGD Any difference between total amounts and the sum of the components are due to rounding.

(1) Total exposure: exposure at default as defined under Basel II (pre conversion factors). This does not include intraday exposure.

14%

45%

8%

16%

(2) 0.03% represents a floor for institutions and corporates. PD ranges for which there are no exposures do not appear in the table.

Economic capital for credit risk

The economic capital model for credit risk measures, over a one year period, the amount of capital that Euroclear Bank needs to set aside to protect itself from bankruptcy as a result of severe credit losses. The worst case loss is associated with a tail probability of 0.02%, reflecting a desired confidence level of 99.98%.

The model is run monthly to ensure compliance with the upper tolerance level set by the Board.

The economic capital model for credit considers three main elements: the Expected Default Frequency (EDF), the EAD and the LGD.

 The EDF is the probability that an obligor will default on its obligations over a one year period. Each Participant with a credit exposure has an internal rating assigned and hence an associated probability of default.

Counterparty credit risk

Counterparty credit risk is defined by the Basel Committee on Banking Supervision as "the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, counterparty credit risk generates a bilateral risk of loss."

Counterparty credit risk is relevant only for Euroclear Bank. The information below therefore applies only to Euroclear Bank.

By policy, Euroclear Bank does not engage in any activity that is not part of its normal course of business or a consequence of Participant activity.

- The EAD is the amount of credit exposure that Euroclear Bank could be exposed to if an obligor were to default. A number of different exposure types are considered in the model and they are calculated (based on historical data) for each Participant or treasury counterparty.
- The LGD is the amount of credit exposure that could not be recovered in the event of default. The LGD varies dependent on the degree to which the exposures are secured (by collateral) and the level that these collateral agreements are enforceable.

Stress tests are performed to assess the impact on capital of extreme, but plausible, events. Extreme scenarios are applied to key Participants, macro-economic factors and sensitive model parameters.

This means that Euroclear Bank's treasury operations are related to either the management of Participant balances, or long-term investments intended to preserve its capital base. In these activities, Euroclear Bank incurs counterparty credit risk only on the treasury counterparties used to hedge its future earnings or its currency exposures against detrimental market movements.

Euroclear Bank does not have a trading book. Due to their purpose, and their limited scope, Euroclear Bank's hedging activities do not constitute trading book activities but are included in the banking book. Hedging is further described in the chapter on market risk management. For further details on Euroclear Bank's banking book activities, and on the management of market risk, see the chapter on market risk management.

Derivatives instruments used by Euroclear Bank to hedge its future earnings are limited to interest rate swaps, foreign-exchange forward transactions, foreign exchange options, interest rate floors and collars, and interest rate futures. Euroclear Bank does not hold any credit derivatives nor any structured products, as doing this for trading purposes would not be in line with its policy.

Counterparty credit risk is managed through global limits at counterparty family level and limits at individual counterparty level for all types of exposures. These limits depend on both the internal counterparty credit rating and the maturity of the deal. In addition, there are very specific restrictions on longer maturities (longer than one year). Euroclear Bank's treasury activities tend to be very short term.

Collateral for counterparty credit risk

Exposures to derivatives counterparties in exchange-traded interest rate futures transactions are managed through bilateral margin agreements. These exposures are reset fully on a regular basis with the transfer of cash margin. Margin payments may be netted.

Euroclar Bank does not take or give collateral for OTC contracts, as Euroclear Bank enters into such contracts only with high-rated counterparties. Euroclear Bank also only acts as buyer in option contracts, except when it enters into caps and collars agreements, as part of its hedging strategy, and does not face the risk of loss. It does not hedge the replacement cost risk, which is relatively limited. Euroclear Bank is rated AA by Standard and Poors and AA+ by Fitch Ratings. The consequences of a rating downgrade on collateral demand can be considered nil, as Euroclear Bank is structurally a collateraltaker. Euroclear Bank needs to post collateral only at the National Bank of Belgium to obtain liquidity for use in the TARGET system or uses collateral (through collateral providers) to support its settlement in local markets. Cash margin transferred to support exchange-traded futures is not material.

Wrong-way risk

Wrong-way risk occurs when exposure to a counterparty is adversely correlated with the credit quality of that counterparty. In the case of general wrong-way risk, this is due to the evolution of general market risk factors, e.g. interest rates, while in the case of specific wrong-way risk, it is due to the nature of the transactions with that counterparty. Specific wrong-way risk would arise if a transaction with a counterparty was backed by own or related party collateral. General or conjectural wrong-way risk would arise if the evolution of an economic variable would affect both the value of exposures and the credit quality of the counterparty.

Wrong-way risk is not a major concern for Euroclear Bank, given the limited scope of its derivatives activity. In addition, Euroclear Bank avoids specific wrong-way risk in its settlement activity as it does not, as a rule, grant credit to Participants based on collateral issued by themselves or related parties.

Counterparty credit exposures

The table on the next page shows the gross fair value of contracts that have been entered into by Euroclear group.

— Euroclear plc consolidated⁽¹⁾—

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Gross fair value of contracts	Assets	Liabilities
Interest rates derivatives	_	_
- Interest rate options	-	-
- Interest rate swaps	-	-
- Interest rate futures	-	-
Foreign exchange derivatives	6,834	7,148
- Forward foreign exchange instruments held for trading	6,834	6,723
- Forward foreign exchange designated as cash flow hedges		425
 Foreign exchange options designed as cash flow hedges 		
 Forward foreign exchange hedges of net investments 		
in a foreign operation		
Stock options ⁽¹⁾	873	873
Netting benefits		
Collateral held		
Net derivatives credit exposure under the FIRBA ⁽²⁾	17,286	

⁽¹⁾ See Consolidated financial statements for more information on this item.

(2) Expressed as exposure at default (notional value X add-on).

Market risk management

Strategies and processes for market risk management

Euroclear Bank

The majority of market risk in the group is concentrated at Euroclear Bank. As part of the Market Risk Board Policy, an adequate risk framework has been put in place to measure, monitor and control the interest rate and foreign exchange risk supported by Euroclear Bank. Value-at-Risk (VaR) methodologies are used to measure interest rate and currency risk.

By policy, Euroclear Bank's core equity (shareholders' equity plus retained earnings) and subordinated debts are invested in debt instruments rated AA- or higher. The duration of these assets is limited to five years and is currently around four months.

Euroclear SA/NV and the Euroclear CSDs

Interest rate risk exists only to a limited extent in the CSDs and in Euroclear SA/NV. Indeed, the CSDs do not operate commercial cash accounts but invest their cash positions in accordance with regulatory liquidity requirements. The duration of the investments cannot exceed three years, and the types of instruments to be used are limited to straight overnight or term deposits.

Foreign exchange risk is also very limited in the CSDs and in Euroclear SA/NV. To avoid the potential foreign exchange risk that could arise from the investment of their surplus cash, these investments can only be made in their local currency, i.e. in EUR for entities whose functional currency is EUR, in GBP for the entities located in the United Kingdom, and in SEK for the Swedish entities. The most significant source of foreign exchange risk stems from the potential change in net asset values of Euroclear SA/NV's non-euro shareholdings (e.g. Euroclear UK & Ireland and Euroclear Sweden, DTCC Euroclear Global Collateral Ltd).

Market risk appetite for Euroclear Bank

Market transactions are carried out at the discretion of Euroclear Bank which accepts market risk only within its risk appetite. The risk appetite for market risk in Euroclear Bank is limited by the available capital allocated annually to market risk by the Euroclear Bank Board. In addition, Euroclear Bank complies with internal market limits, such as Value at Risk (VaR), proposed by the Risk Management Division and approved by the CALCO.

Euroclear Bank adheres to the following principles relating to the management of market risk:

- Euroclear Bank does not engage in any activity that is not considered as part of its normal business or a consequence of its Participants' activity and as such will not engage in trading activity (even if, under IFRS definitions, certain transactions in derivatives do not qualify as hedges).
- The activities and instruments that Euroclear Bank can engage in must be in line with its low risk profile. Euroclear Bank is not exposed to equity risk or to commodity risk.
- A prudent investment strategy is applied in order to preserve the core equity of Euroclear Bank, in particular, the assets of the investment book can only be invested in highly rated and liquid debt instruments (with the exception of intra-company loans), and an appropriate hedging strategy may be applied so as to protect future earnings against adverse market conditions.

Market risk mitigation (hedging)

Given the exceptionally low level of interest rates, and therefore the marginal downside risk, Euroclear Bank has not entered in interest rate hedges in 2014.

However, Euroclear Bank has engaged in a series of forex derivative transactions in order to hedge the foreign exchange risk resulting from future income streams in foreign currencies. It is compliant with market expectations that Euroclear Bank conducts its business prudently, as a single purpose bank. This hedging strategy must comply with strict guidelines:

- to be hedged, a future cash flow must be expected with a sufficiently high level of certainty;
- a position, once hedged, may not be re-opened; and
- any position above the anticipated level must be reversed.

Market risk measurement

Value-at-Risk

The market risk of Euroclear Bank is measured using a VaR methodology. The VaR is the maximum loss over a determined time horizon at a given confidence level (99%). The VaR model assumes a holding period of one day, until positions can be closed. The market parameters are derived from the volatility and correlation observed either from historical daily changes or from option prices. Euroclear Bank has to comply with a global VaR limit, as well as VaR limits by book.

The market risk exposure that Euroclear Bank takes is segregated in the following books:

 Investment Book: all securities purchased by Euroclear Bank with the proceeds of its subordinated debt issues and its own equity.

- Treasury Book: assets, liabilities and commitments resulting from the activity of the Euroclear Bank Participants.
- Hedging Book: market transactions that are conducted to manage the risk exposure resulting from future income streams.

Given the low market risk appetite and the fact that Euroclear Bank will not engage in trading activities, the VaR figures are low.

The table below shows the average, as well as the minimum and maximum VaR over 2014 and 2013 for the different books and types of risks that Euroclear bank faces.

The VaR model is back-tested twice a year.

	Euroclear Bank SA/NV					
2014 (€′000)	average		minimum		maximum	
	2014	2013	2014	2013	2014	2013
Investment book interest rate risk	241	181	48	72	470	1,163
Treasury book interest rate risk	185	113	87	39	484	289
Treasury book foreign exchange risk	15	20	2	3	110	119
Hedging book	397	636	80	48	1,012	1,713
Total VaR	459	689	197	89	1,014	2,000

Economic capital for market risk

The internal view on Euroclear Bank's capital needs is based on an economic capital model that is continuously kept up-to-date and regularly validated by an independent party. Euroclear Bank is therefore fully confident that the resulting capital requirements are adequate to support the risks that it faces.

The model covers operational and credit risks. In addition, Euroclear bank maintains models that estimate the uncertainty on the loss absorption capacity over a one year horizon due to movements in market risk and business risk factors.

This conservative approach to capital, combined with Euroclear's strong risk management and effective controls, has helped Euroclear Bank retain high credit ratings in times of market stress.

Stress tests

Stress tests provide an indication of the potential size of losses that could arise under extreme conditions. Stress movements are applied to the different risk factors, including interest and foreign exchange rates.

The stress tests follow the 'Principles for the management and supervision of interest rate risk' (July 2004) issued by the Basel Committee on Banking Supervision.

Foreign exchange risk

The group's entities have the euro as their functional currency with the exception of subsidiaries located in the United Kingdom and Sweden. The Euroclear group's structural currency exposures can be found in the consolidated financial statements.

The majority of the foreign exchange risk is concentrated at Euroclear Bank. As part of the Market Risk Board Policy, an adequate risk framework has been put in place to measure, monitor and control the foreign exchange risk supported by Euroclear Bank. VaR methodologies are used to measure the currency risk.

The foreign exchange risk is hedged through plain vanilla foreign exchange forwards.

Capital requirements for market risk

Euroclear uses the Standardised Approach to calculate its regulatory capital requirements for market risk. As Euroclear does not seek market risk and does not have a trading book, using the internal model approach was not deemed appropriate.

The table below shows regulatory capital requirements for market risk:

- Only foreign exchange risk, which is calculated on all exposures, including non-trading book exposures, is reflected in this table.
- Other items do not apply to Euroclear.
- Other market risks in the banking book are discussed below.

31 December 2014 (€′000)	Euroclear plc consolidated
Total	25,702
Settlement risk	
Position risk in traded debt instruments	
Position risk in equities	
Interest rate risk	
FX risk	25,702
Commodity risk	

Equities in the banking book

Equities held in the banking book concern participations in companies with a business related to the business of Euroclear. They are either strategic participations, or they are held for historical reasons. None of them are held in order to make capital gains.

Valuation and accounting of equity holdings in the banking book

Available-for-sale investments are those financial assets including debt securities and equity shares which are intended to be held for an indefinite period of time, but which may be sold in response to changes in the group's financial environment.

Available-for-sale investments are recognised in the balance sheet on settlement date at fair value. Gains or losses arising from changes in the fair value of such assets are recognised directly in equity, until the asset is either sold, matures or becomes impaired, at which time the cumulative gain or loss previously recognised in equity is released to the income statement. Interest revenues are recognised using the effective yield method.

The fair value of listed debt securities and equity shares reflects the published price at the balance sheet date. In the case of investments with no listed market price, a valuation technique (e.g. recent transactions between willing and knowledgeable parties, discounted cash flows and market multiples) is applied. Where the fair value of unlisted equity investments cannot be reliably measured, they continue to be valued at cost.

Impairment of available for-sale equity investments

The group determines that available-forsale equity investments are impaired when there has been a significant or prolonged decline in the fair value below its cost. This determination of what is significant or prolonged requires judgement. In making this judgement, the group evaluates among other factors, the normal volatility in share price. In addition, impairment may be appropriate when there is evidence of a deterioration in the financial health of the investee. industry and sector performance, changes in technology, and operational and financing cash flows. The group determines that available-for-sale equity investments are impaired when there is a constant decrease of fair value of more than 50% compared with the fair value at inception for a period greater than 1 year. Where appropriate, the group has recourse to adequate valuation techniques (e.g. discounted cash flows, market multiples) to estimate the value of nonquoted available-for-sale equity investments.

The table on the next page shows the fair value of equity investments held by the Euroclear group.

Equities in the banking book

31 December 2014 (€′000)	Euroclear plc consolidated
Fair value of investments disclosed in balance sheet	161,923
Publicly quoted share values when different from fair value	-
Exchange-traded exposures	152,141
- equity shares	152,141
Private equity exposures in diversified portfolios	-
Other (unlisted, but fair value determinable)	9,782
Realised gains (losses) from sales and liquidations	606
Total unrealised gains (losses) ⁽¹⁾	46,954

 $^{(1)}\,$ included in common equity Tier 1 capital

Interest rate risk in the banking book

Euroclear typically has net long cash positions and its earnings therefore are sensitive to future changes in interest rates.

The table below shows the interest rate sensitivity of Euroclear's Banking Book positions. The figures relate to Euroclear SA/NV consolidated, as communicated to the National Bank of Belgium in the framework of standardised reporting under Pillar 2 of Basel. The figures for Euroclear plc are not expected to diverge materially from the content of this table. Assets and liabilities held in the Banking Book are predominantly denominated in euro, and they are expressed at market value for the purpose of this disclosure. The economic value of the Banking Book is computed by discounting the future cash flows for assets and liabilities present in this book. The sensitivity of the economic value of the Banking Book to interest rate shocks is presented in the first column of the table below. The change in value mainly arises from the assets held in the Investment and Hedging Books of Euroclear Bank. Indeed, assets and liabilities of the Treasury Book are almost fully matched and have no material impact on this sensitivity measure.

The remainder of the table illustrates to which extent the net interest income of Euroclear Bank is sensitive to interest rate movements, compared to the amount earned in 2014. For the purpose of this disclosure, the latter is limited to pounds sterling, US dollars, euros, Australian dollars and Russian rubles, as is the analysis of future earnings sensitivity.

The interest rate risk and economic value are measured on a quarterly basis.

Euroclear SA/NV consolidated

At 31 December 2014 (€'000)

Interest rate increases/ decreases, in basis points	Economical value of banking book	Interest result Effective 2014	Income sensitivity – interest result Expected 2015
+ 300	1,798,619		437,250
+ 200	1,815,734		324,274
+ 100	1,832,991		209,875
+/- 0	1,850,394	62,719	95,901
- 100	1,867,946		52,174
- 200	1,885,651		47,710
- 300	1,903,514		45,308

⁽¹⁾ The figures for Euroclear plc are not expected to diverge materially from the content of this table.

Liquidity risk management

Liquidity risk is the risk of loss (financial and non-financial) arising from Euroclear being unable to settle an obligation for full value when due. The purpose of liquidity risk management is to help Euroclear avoid liquidity risk by ensuring that it has adequate funds to meet its obligations.

Strategies and processes for liquidity risk management

Euroclear Bank

Euroclear Bank is the main entity within the Euroclear group facing liquidity risk. Liquidity is an important factor in offering efficient settlement and custody services in Euroclear Bank. Liquidity ensures timely payments and timely cross-border settlement with domestic markets, supports new issues and custody activity and allows clients to receive sales and income proceeds in a timely manner. The successful management of liquidity risk allows Euroclear Bank to provide liquidity to the market and to facilitate settlement and related operations.

Euroclear Bank's liquidity risk is largely intraday and transactional and results from the secured intra-day credit it extends to facilitate settlement on a Delivery Versus Payment (DVP) basis. Euroclear Bank's overnight settlement process, which allows clients to settle a wide range of currencies within a single time window, efficiently recycles and minimises liquidity needs, as clients have to fund only the resulting net debit position. Although the daily incoming and outgoing cash payments are typically matched, Euroclear Bank may still end up with cash positions at the end of the day. Daily, Euroclear Bank is typically long of cash, which is invested mostly on a very short term basis (within 2 days) to match the volatility of clients' settlement and money transfer activity.

Euroclear Bank liquidity is managed centrally, at the head office. Specific policies exist to describe how Euroclear Bank liquidity risks are monitored and controlled. Euroclear Bank does not depend on other Euroclear group entities for its liquidity.

In addition to other requirements, Euroclear complies with the requirements detailed in the Principles for Sound Liquidity Management and Supervision published by the Basel Committee on Banking Supervision⁽¹⁾ and with principle 7 of CPMI-IOSCO (Committee on Payment and Market Infrastructures-International Organization of Securities Commissions).

⁽¹⁾ CBFA circular 2009-18 dated 8 May 2009.

The Euroclear CSDs and Euroclear SA/NV

The Euroclear CSDs and Euroclear SA/NV face very little liquidity risk. It arises from the related credit risk that they are exposed to when awaiting the payment of fees from their Participants or depositing their cash surplus with their bank counterparties (including Euroclear Bank).

The chapter on Credit risk management outlines how these risks are managed.

Euroclear SA/NV, Euroclear Belgium, Euroclear France and Euroclear UK and Ireland are subject to regulatory liquidity requirements. These entities are required to hold liquid reserves equal to a few months' operating expenses or be able to rely on appropriate liquidity facilities, to ensure that they can continue operating under all circumstances.

The investment guidelines that apply to Euroclear SA/NV and the group CSDs distinguish two types of cash:

- the cash position linked to the regulatory liquidity requirements, for entities for which such requirements apply. This cash position should be invested on a roll-over basis; and
- the surplus cash, including the working cash requirements of these entities. Surplus cash investments should always be cashflow driven. This means that the amount of cash and the period of the investments should take into account the evolution of working cash needs and capital expenditure needs.

For both types of cash, in accordance with the low interest rate risk objective, the investments should not exceed 3 years term. The type of instrument used is limited to overnight or term deposits.

Intra-group liquidity management

The capital/dividend policy applicable to all Euroclear group entities reflects the following principles:

- each entity manages its level of capital in line with its local needs, taking into account its (i) minimum regulatory requirements;
 (ii) specificity of risk profile; and (iii) future investment programme and earnings expectations;
- any available free capital is transferred to the parent company to be used for Group initiatives. For the (I)CSDs specifically, this means that all available free capital is to be transferred to the group level, where it can be used to finance group investments, or support special initiatives. Available free capital of any (I)CSD should however not be used to cover possible shortfalls in other (I)CSDs.

However, the following arrangements are in place to allow for intra-group support:

- ESA will support the CSDs (support letters are in place, for the ESES CSDs), among others, in the case of liquidity shortfalls.
- ESA has a line of liquidity in place with Euroclear plc to cover its regulatory obligations.

The remainder of this chapter applies to Euroclear Bank only, except where otherwise stated.

Liquidity risk appetite

Given the criticality of intra-day liquidity for the efficient delivery of settlement and custody services, Euroclear Bank's liquidity risk appetite is very low.

In particular:

- Euroclear Bank should not fail on its settlement and payment activity to the extent that it causes significant financial loss or damage to the reputation of Euroclear Bank; and
- an adequate liquidity contingency plan should be in place to ensure the continuity of Euroclear Bank's settlement and payment activities, even under exceptional circumstances. The objective of the contingency plan is to maintain an adequate level of intra-day liquidity even if the Participant with the largest payment obligation to Euroclear Bank was unable to make payment when due, as per principle 7 of CPMI-IOSCO.

Euroclear Bank has adopted a strong risk management framework to anticipate, monitor and manage intra-day liquidity flows to ensure the quality of its services and prevent problems. Liquidity risk is further mitigated by Euroclear Bank's strict client admission policy and the continuous monitoring of its clients, by the fact that the transactional credit is secured and very short term (usually intraday), and by limits on the total amount of credit granted to any single family of Participants.

Funding liquidity

Euroclear Bank's settlement system allows for an efficient recycling of liquidity. Although Euroclear Bank settles transactions amounting to over EUR 1,300 billion each day (2014 average), it only extends between EUR 70 and EUR 81 billions in secured intra-day credit to its clients. The large amount of 'off setting' transactions and Euroclear Bank's efficient lending and borrowing programme allow it to reduce Participants' liquidity needs. Since Euroclear Bank's daily cash flows are typically matched (i.e. the receipts match the payment obligations), additional liquidity is only needed to smooth or accelerate the payment process and to ensure the timely execution of critical payments throughout the day.

To support its daily payment activity, Euroclear Bank relies on a large network of highly rated cash correspondents and has a direct access to TARGET2 system for EUR payments. In order to raise liquidity, Euroclear Bank can also use its investment book, funded by the long-term debt, equity and retained earnings. The investment book must be invested with the objective of capital and liquidity preservation, i.e. in EUR-denominated sovereign, supranational or agency debt instruments rated AA- or above and ESCBeligible. Furthermore, Euroclear Bank has a broad access to the inter-bank market and has contingency liquidity sources in place for the major currencies.

Euroclear Bank continuously develops strategic initiatives to ensure adequate access to liquidity on a day-to-day basis and in contingency situations. The adequacy of the bank's liquidity capacity is assessed and approved quarterly by the Credit and Assets and Liabilities Committee (CALCO). It also monitors the trend of liquidity risk that Euroclear Bank faces through liquidity key risk indicators, allowing for instance to identify changes in Participants' cash management behaviour that may affect Euroclear Bank's liquidity.

A first indicator shows the timing at which funds are received throughout the day, as late credit confirmations can impact remaining wire transfers. A second indicator focuses on the adequacy of collateral to support crossborder activity. A last indicator monitors whether the liquidity risk arising from credit granted to Participants can be supported by Euroclear Bank's liquidity sources.

Additionally, Risk Management informs the CALCO of any notable change in Euroclear Bank liquidity capacity in the major currencies.

Liquidity contingency plan

In accordance with principle 7 of CPMI-IOSCO, Euroclear Bank maintains an appropriate liquidity contingency plan to ensure the business continuity of its core settlement and custody services. The plan documents the relevant operational procedures and ensures access to (contingency) liquidity in the event of an operational or financial crisis.

To cover its short-term liquidity needs resulting from the default of a Participant, Euroclear Bank has agreements in place with its largest credit users allowing Euroclear Bank to appropriate the participant pledged collateral (immediate transfer of ownership). In order to generate liquidity, this appropriated collateral is then re-used with liquidity providers or pledged with the National Bank of Belgium, pending full liquidation.

Finally, Euroclear Bank has negotiated additional committed liquidity lines and can call upon a EUR 1 billion syndicated backstop facility and a total of EUR 160 million bilateral stand by facilities. The contingency plan and the availability of contingency liquidity are tested regularly and subject to stress-testing. The table below shows the size and composition of Euroclear's liquidity buffer. It is one of the standardised tables used for the reporting of Pillar 2 information to the NBB. It shows liquid financial assets available at the end of the day on the reporting date, and excludes encumbered financial assets.

31 December 2014 (€′000)	Euroclear SA/NV consolidated ⁽²⁾
Cash and balances at central banks	13,753
Cash	13
Credit balances at central banks	13,740
Securities and loans available at ECB/Eurosystem, Bank of England (BoE) or Swiss National Bank(SNB)	2,694,231
Debt certificates issued by central governments and central banks	2,344,334
Debt certificates issued by credit institutions	349,897
Securities and loans available as repo-transactions (or other type of loan against guarantee)	11,918,068
Securities realisable through sale operation	0
Potentially reusable securities received as guarantee	4,235,621
Securities available at ECB/Eurosysteem, BoE or SNB	2,561,108
Securities available as repo-transactions (or other type of loan against guarantee)	1,674,513

(1) Aggregate value, expressed in EUR, of liquid financial assets denominated in any currency (including EUR). Does not include accrued interest.

(2) The figures for Euroclear plc are not expected to diverge materially from the content of this table. Note that the rules regarding the classification of assets, namely between the category 'securities and loans available as repo-transactions' and 'potentially reusable securities received as guarantee', have changed per 31 march 2011. The latter should only reflect the value of collateral received in transaction which maturity exceeds one month

Liquidity risk measurement and modelling

Cash flow projections and management of intra-day and end-of-day liquidity

At all times, Euroclear Bank ensures that it has access to sufficient liquidity to support its core services. To achieve this, Euroclear Bank forecasts, monitors and measures the net intra-day funding requirements, which are derived from the cross-border settlement activity, Clearstream Bridge activity and new issues, in a timely manner and at various critical moments throughout the day.

The intra-day liquidity need is assessed:

- the previous day, by forecasting the funding requirements; and
- throughout the day, by controlling the intra-day liquidity position at the cash correspondents and monitoring the liquidity flow.

Euroclear Bank anticipates and monitors the end-of-day position at each of the cash correspondent banks. End-of-day long balances may be invested at short term, provided that the investment complies with liquidity gap limits, defined by currency and maturity buckets. Except for committed treasury transactions between trade date and settlement date and some limited derivatives transactions⁽¹⁾, Euroclear Bank has no significant potential cash-flows relating to off-balance sheet positions. Euroclear Bank is not subject to liquidity risk arising from special purpose vehicles because the company does not engage in securitisation.

The table below shows liquidity inflows and outflows at Euroclear, per time bucket, as reported to the NBB (monthly) under the standardised Pillar 2 reporting. These figures are not cumulative, which means that inor outflows expected in the coming week are not included in in- or outflows for the coming month.

⁽¹⁾ This concerns Euroclear Bank stand-alone. All consolidated levels above Euroclear Bank report fair values under IFRS; derivatives transactions are treated as being on balance sheet.

		– Eurocle	Euroclear SA/NV consolidated ⁽¹⁾			
At 31 December 2014 (€'000)	< 1 week	< 1 month	< 3 months	< 6 months	< 12 months	
Inflow of liquidity (not cumulative)						
Provisioned inflow related to credit supply witho	out liquid financial asse	ts as a guarantee	•			
Central governments	262					
Credit institutions	3,942,896	112,808	37,658	138,380	47,419	
Other institutions ⁽²⁾	-	-	-	-	-	
Others	46	-	-	-	305	
Provisioned inflow related to transactions with li	quid securities and loa	ns				
Cash	9,822,454	1,801,485	2,184,180	1,927,428	-	
Liquid securities and loans-	-	-	-	-	-	
Provisioned and potential net cash flows relate	ed to derivatives ⁽³⁾					
Foreign exchange derivatives	11,197	4,298	857	268	666	
Interest rate derivatives	-	-		-	-	
Provisioned inflow coming from related parties						
Cash	-	-	-	-	-	
Liquid securities and loans	-	-	-	-	-	
Potential inflow						
Related parties – confirmed credit lines	20,000	-	-	-	-	
Third parties – confirmed credit lines	3,993,386	-	-	-	-	
Outflows of liquidity (not cumulative)						
Outflow related to financing without liquid finar	ncial assets as a guaran	itee ⁽⁴⁾				
Central governments	3,304	-	-	-	-	
Credit institutions	18,464,971	166,724	12,180	100,963	-	
Other institutions ⁽²⁾	97,867	-	-	-	-	
Others	968,729	6,366	-	-	-	
Provisioned outflow related to transactions with	liquid securities and lo	ans				
Cash	-	-	-	-	-	
Liquid securities and loans	-	-	-	-	-	
Outflow to related parties						
Cash	4,249	-	-	-	-	
Liquid securities and loans	-	-	-	-	-	
Potential outflow						
Related parties	-	-	-	-	-	
Third parties	-	-	_	_	_	

(1) Aggregate value, expressed in EUR, of liquid financial assets denominated in any currency (including EUR). Does not include accrued interest.

 $^{\left(2\right) }$ This includes local governments, multilateral development banks and public institutions.

(3) Excluding credit derivatives. Note that Euroclear is not active in credit derivatives. Expressed as exposure at default (notional value x add-on), not in fair value, in contrast to the Consolidated financial statements.

(4) Operational deposits receive a run-off factor of 100% in the Belgian regulatory stress test ratio. They are weighted at 25% under Basel III.

Global family limit

To fulfil the principle 7 of CPMI-IOSCO, Euroclear Bank has defined a methodology to determine an aggregate global family limit, which limits the maximum exposure that Euroclear Bank could face on a single family, in any currencies.

The extent to which credit is limited is based on Euroclear Bank's assessment of available sources of liquidity.

Liquidity preservation limits

Euroclear Bank invests mostly on a very short term basis. However, investments can be made with a longer term within the liquidity preservation limits.

The aim of these limits is to control the net treasury short-term investment outstanding position beyond 1 week, 2 weeks, 1 month, 3 months and up to 6 months for some predefined currencies(1) and also at an EUR equivalent aggregate level. The outstanding position must remain within the limits in order to avoid any liquidity shortage in case of unusually high liquidity needs or low end of day Participant balances.

The EUR equivalent aggregate limit is set to comply with the National Bank of Belgium liquidity stress test ratio (see next item below). This ratio will be replaced by the Liquidity Coverage Ratio (LCR from Basel III) by October 2015.

Regulatory stress test ratio

The National Bank of Belgium

The National Bank of Belgium (NBB) has introduced a liquidity 'stress test ratio', which became a regulatory requirement in January 2011. It is designed to reflect the liquidity position of the institution under exceptional circumstances (combining an idiosyncratic shock with a general liquidity crisis), by comparing the potential liquidity needed and the potential liquidity available. Basically, this ratio ensures that Euroclear Bank has enough liquid financial assets to cover the net outflows resulting from the run off of all our Participants cash balances.

In this exercise, the NBB assumes that unsecured financing or credit lines from counterparties are unavailable, and 100% of the on-demand deposits from wholesale Participants are lost. Credit lines at the central bank, financing through repos, sale of assets and re-use of collateral are considered accessible.

It is defined as:

liquidity inflows – outflows liquidity assets

The resulting stress ratio should be less than 100%. The ratio is calculated for maturities of one week and one month.

This Belgian ratio will be replaced by the Liquidity Coverage Ratio (LCR) from Basel III.

⁽¹⁾ End of 2013, the pre-defined currencies are EUR, USD, GBP, JPY, CHF, SEK, NOK, DKK, AUD, NZD, CAD, ZAR, RUB, MXN, SGD, HKD.

Liquidity Coverage Ratio (LCR)

There are some differences between the NBB and the Basel ratios, mainly with regards to the definition of liquid assets The LCR is defined as:

liquidity assets

and should be higher than 100%.

The LCR reporting has started since March 2014 in the context of the observation period. The NBB requires a 100% LCR compliance as from October 2015.

Net Stable Funding Ratio (NSFR)

The NSFR ensures that there is a minimum level of stable sources to fund a bank activities over a 1 year horizon (assets & off B/S). Similarly to the LCR, the NSFR should be higher than 100% and the reporting has started since March 2014 (observation period). Compliance will be required as from 2018.

Liquidity stress testing

Euroclear Bank regularly performs idiosyncratic and market wide liquidity stress tests to assess potential liquidity strains and to ensure adequate access to enough liquidity sources to fund any shortfalls. For the group CSDs and Euroclear SA/NV, liquidity stress testing is also performed to ensure, where applicable, compliance with local regulatory obligations as well as adequate funding. Currently, three types of stress-tests are conducted regularly:

 A daily liquidity back test (run quarterly) is conducted in order to assess whether the committed and contingency liquidity sources are sufficient to withstand the default of the family with the largest aggregate payment obligation, which is defined in accordance with principle 7 of CPMI-IOSCO.

In addition, Euroclear Bank carries out a stress test simulating the simultaneous default of the top two largest clients, including all Euroclear Bank participants belonging to these client's groups.

- In order to assess the adequacy of the liquidity sources and of the business continuity plan under extreme circumstances, a number of plausible operational and financial scenarios are defined and analysed on a regular basis. These scenarios include idiosyncratic and market-wide stress events such as an operational failure of a key cash correspondent, a financial problem with a large Participant, etc...
- A few ad hoc scenarios often also including other risk types – may be retained and run as role-plays, as part of Euroclear Bank's business continuity exercises, involving various layers in the organisation.

Operational risk management

All Euroclear entities face operational risk. In line with Basel II, Euroclear defines operational risk as 'the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events'. Euroclear considers operational risk to encompass:

Processing risk	The risk of loss resulting from inadequate or failed internal processes, not related to the risks described hereafter. This includes the indirect consequences of operational risk on liquidity, credit and market risks, as well as relationship management risk (lack of adequate knowledge of customers and service partners) and inadequate communication with the media, are also included;
Accounting risk	The risk of loss arising from the failure to produce timely and accurate management reporting and financial statements that provide a fair representation of the company's financial situation.
Ethical conduct, legal and compliance risk	The risk of loss arising from a failure to: • act with integrity, fairness and honesty; • adapt to changes in the legal and regulatory environment; • anticipate, identify, understand or comply with relevant laws and regulations; • competently negotiate, implement, comply with or enforce contracts.
People Risk	The risk of loss due to failure to manage the performance of human resources adequately, social conflicts, lack of development of competencies, lack of appropriate human resources, inadequate management of external parties or a failure to (want to) change.
Project Risk	The risk of an uncertain event or condition that, if it occurs, has effects one of the project objectives. Project risk management helps the project team to deliver the required functionalities on time within the predefined budget in a qualitative way.
Information and systems	The risk of loss due to loss of data integrity & information or due to system unavailability, breach of confidentiality, lack of systems alignment to the business or inadequate information or system support. This includes risks related to breaches in corporate security and information security (including business continuity).

Strategies and processes for operational risk management

The Enterprise Risk Management framework applied to operational risk management

Euroclear uses an ERM framework to ensure the coherence of its risk management activities, in particular in the area of operational risk management.

The ERM framework describes how operational risks are identified, who bears responsibility for managing these risks, and how they can be mitigated. The ERM framework also describes all relevant operational risk processes, the role of people within the processes, and the information needed to make sound management decisions. It has been implemented consistently across the group, but in ways that are appropriate to the businesses of the different entities.

Operational risk monitoring and controls

Operational risk is monitored and managed with the help of a number of tools:

 Euroclear has set up a database of potential risks and control weaknesses and carefully records incidents. Euroclear's database now has more than ten years of historical data on operational losses. Internal data is complemented by external loss data, as Euroclear is among the banks that provide information to the ORXdatabase⁽¹⁾. In benchmarking exercises conducted among the banks that contribute to the ORX database, losses related to operational risks (expressed relative to gross income), appeared to be significantly lower for Euroclear, compared to the other contributors to the database;

- Each of the departments within the group participates in annual Risk & Control Self-Assessments. Through workshops, the business owners revalidate both the high level and level two control objectives and identify weaknesses;
- Standard operating procedures, written by each department in which they are to be used, help employees to execute their tasks appropriately and reduce the risk of errors;
- In recent years, Euroclear has developed control maps or equivalent tools that map key processes and key controls against stated control objectives as a continuous controls effectiveness monitoring tool.

Security and resilience

Information security

The corporate objective of the group security activity is to assure management that Information Security (IS) risks in the personnel, physical, logical and technical domains are properly identified and correctly ranked and that IS control processes are effective and in line with the defined risk appetite and relevant legislation. Euroclear has adopted a standardised threat profile that is supplemented annually by a more strategic IS threat assessment. Together these provide the baseline for the annual IS risk assessment from which risk treatment plans are derived.

⁽¹⁾ The Operational Riskdata eXchange Association (ORX) was founded in 2002 with the primary objective of creating a platform for the secure exchange of (anonymous) high-quality operational risk loss data. ORX currently has more than 60 members and has developed a database with more than 350,000 operational risk losses, each over EUR 20,000 in value, totalling a little bit less than EUR 200 billion (April 2014)

The IS internal control system has been included in the ERM framework, allowing compliance with the requirements associated with Euroclear's adoption of the AMA under Basel. Euroclear takes as a reference for its IS framework internationally recognised standards such as ISO 27001:2013.

Euroclear is designated as critical infrastructure in Belgium, Finland, France, The Netherlands and the United Kingdom. Euroclear receives threat assessments from the national security agencies of these countries on a regular basis and can draw upon their expertise to resolve IS issues. These agencies conduct periodic assurance reviews of Euroclear's security standards and procedures.

Business resilience

To ensure continuous availability of business-critical services, Euroclear carefully reviews its use of technology, buildings and staff using CPMI-IOSCO Principles for FMIs, and ISO22301:2012, Societal security - Business continuity management systems -Requirements as a reference framework.

Euroclear has three data centres sufficiently distanced from each other to sustain operations in the event of a regional-scale disaster. The effectiveness of data centres and recovery procedures is assured through the transfer of production activity between sites every two months and regional disaster recovery exercises at least once a year.

Euroclear Finland and Euroclear Sweden operates two geographically separated IT centres in which all critical systems and networks are present and data is replicated in real time. To preserve continuity of service Euroclear Bank and Euroclear UK & Ireland operate their respective services concurrently from multiple offices. The ESES entities (Euroclear France, Euroclear Belgium and Euroclear Nederland) utilise cross border recovery plans between the three entities to ensure the immediate continuity of critical services while staff are relocated. ESES can also use recovery office space in Paris and Brussels as a remote backup.

Euroclear Finland and Sweden has access to separate backup offices outside their respective city centres with enough capacity for staff to run all critical business processes, including the IT operations and maintenance.

All entities perform annual business impact analyses to identify their critical business services and recovery time objectives. Business continuity plans have been harmonised at corporate and departmental levels throughout the group.

Finally, each element of the strategy is regularly maintained and tested. This includes a comprehensive crisis management training programme that uses increasingly sophisticated market-based scenarios to further develop the capabilities of the crisis response teams, including those involving top management.

Legal protection

The Euroclear CSDs

TThe Euroclear CSDs have in place a robust legal framework applicable to the relationship with their clients, including a liability regime reflecting their risk-averse nature and their role as market infrastructure. The respective duties of the CSDs and their clients are well-defined.

Euroclear Bank

Euroclear Bank is protected against the consequences of a bankruptcy, insolvency or contractual default of any one of its Participants by a number of provisions contained in the credit documentation signed with the Participants. Euroclear Bank also aims to ensure the protection of Participants' assets, even if held with a sub-custodian.

Contractual protection

Euroclear Bank may offer credit facilities to its Participants on an uncommitted basis. Participants benefitting from credit facilities are required to execute special credit documentation with Euroclear Bank.

Credit facilities are generally required to be secured. Secured credit facilities are typically collateralised by Participant assets held within the Euroclear system. Participants that pledge assets within the Euroclear system sign a collateral agreement with Euroclear Bank.

The principal legal risk that arises in connection with collateral pledged to Euroclear Bank is the uncertainty that exists as to whether or not, in the event of bankruptcy of a Participant, a court would recognise and enforce a Belgian law pledge. To limit the risk associated with such uncertainty, Euroclear Bank has obtained opinions from reputable local counsel in the relevant jurisdictions, on whether or not such jurisdictions recognise that securities in the Euroclear system are located in Belgium for purposes of conflict-of-law issues, and accordingly recognise the Belgian law pledge. The legal opinions are renewed periodically. This has been further strengthened for European Union countries since the adoption of the Settlement Finality Directive, which confirmed that Belgian law (the jurisdiction where the security rights are recorded) would apply, for the purposes of enforceability of the collateral, if a Euroclear Bank Participant becomes insolvent.

The Terms and Conditions that Participants are required to sign before becoming Euroclear Bank Participants include clauses that protect Euroclear Bank. The most important clauses are the following:

Upon the effectiveness of any termination or resignation, or as soon thereafter as is reasonably practicable, we will effect the return to you of the amounts you hold in your Cash Account(s) and securities credited to your Securities

Clearance Account(s), provided, however, that we, without affecting any other rights we may have, have the right to:

- set off against or retain from such amounts to be so returned any amounts which are due to, or which may become due to, us from you
- ii. retain securities held in such Securities
 Clearance Account(s) to provide for the payment in full of any amounts which are due to, or which may become due to, us from you.

Unity of account and right of set off – Except as otherwise provided by law or otherwise agreed in writing between you and us with respect to any specified account, all Cash Accounts and other current accounts with us in Belgium opened in your name are part of one single and indivisible current account of which they are mere subdivisions for bookkeeping purposes.

This is the case even if:

- such subdivisions are maintained in different currencies, earn credit interest or are charged debit interest at different rates
- ii. the transactions therein are reported in different statements of account.

Consequently, we have the option, among others, of transferring the balance of any subdivision of our current account that is in credit to any subdivision that is in debit or vice versa, at any time and without prior notice.

Liens, rights and obligations

In addition to any pledge of Securities Clearance Accounts, Transit Accounts, Cash Accounts and other assets held in the Euroclear system specifically agreed to by a Participant, Participants' assets held in the Euroclear system (except, unless otherwise agreed, assets held for customers and identified as such) are subject to a statutory lien in favour of Euroclear Bank, pursuant to Article 31 of the Belgian Law of 2 August, 2002 related to the surveillance of the financial sector.

Asset protection

Due to the fact that Euroclear Bank holds its interest in securities in a network of subcustodians located in more than 40 countries, its holdings may also be subject to legal uncertainty in the event of the bankruptcy of a given sub-custodian. Euroclear Bank Participants' assets need protection from the risk of a sub-custodian becoming insolvent and from the risk of attachment by the creditors of such sub-custodian.

To limit the legal risk arising in connection with the holdings of securities with subcustodians, Euroclear Bank has obtained formal legal opinions from reputable local counsel in each jurisdiction in which it holds securities with a custodian. These legal opinions are renewed periodically.

Insurance

In addition to these control processes, Euroclear maintains a comprehensive insurance programme to protect against operational risk. All insurance policies are held with first-rank insurance companies, rated at least A-. The programme includes coverage for crime and civil liability, physical securities loss and cyber risks.

Operational risk measurement and modelling

Regulatory capital requirement

Euroclear uses a hybrid approach at all consolidated levels above Euroclear Bank and Euroclear SA/NV, by combining the AMA for Euroclear Bank and the simplified AMA for Euroclear SA, with a Standardised Approach (TSA) for the group CSDs or a BIA for the group's other entities.

The main building blocks of the AMA model are scenarios that describe potential severe losses. The set of scenarios is defined to cover all event types defined under Basel II. For each scenario, the risk is expressed by way of frequency and severity distributions, the parameters of which are estimated or calculated using data that is compliant with the Basel II soundness standards. They include the four required elements: internal losses, relevant external ORX losses, scenarios, and business environment and internal control factors. The tail of the severity distribution of scenarios is assumed to follow a Pareto distribution Though Euroclear uses insurance to mitigate operational risk, it does not take insurance into account when calculating regulatory capital requirements for operational risk under the AMA.

The following table shows the capital requirements for operational risk for Euroclear plc.

31 December 2014 (€'000)	Euroclear plc consolidated
Capital requirements for operational risk ⁽¹⁾	
Basic Indicator Approach component	2,811
Standardised Approach component	61,982
Advanced Measurement Approach component	223,366
Total	288,231

⁽¹⁾ Basic Indicator Approach is used for the administrative entities of the group, Standardised Approach is used for the CSDs and Advanced Measurement Approach is used for Euroclear Bank and Euroclear SA/NV.

Economic capital

For Euroclear Bank, the AMA is used both for the determination of minimum operational risk regulatory capital under Pillar 1 of the Basel framework, and for the calculation of economic capital. For the regulatory capital calculation, a confidence level of 99.9% is used. For the economic capital calculation, a confidence level of 99.98% is used, consistent with Euroclear Bank's target rating.

For the economic capital calculation, the model recognises the mitigation of operational risk due to insurance. The insurance policies have been mapped to the Basel II event types to identify insurance coverage gaps. This allows for a clear assessment of the coverage of each scenario of the model by the different insurance policies.

For the other material entities of the Euroclear group, which incur almost no operational losses, no sound and relevant economic capital model can be built. Therefore, for the Internal Capital Measurement Approach, the internal view on the capital requirement is calculated using the Basel II TSA approach. Though TSA is normally calibrated to a 99.9% confidence level, it is sufficiently conservative to be used as a proxy for a confidence level of 99.98%, as TSA does not take into account insurance mitigation or the liability caps applicable in some CSDs.

Assessment and Rating Methodology

The Assessment and Rating Methodology (ARM) helps business experts to assess and rate operational risk with financial and/or reputation impact, at aggregated (entity, service) risk levels and at individual risk levels.

Under the ARM, the impact of these risks is assessed at a lower confidence level than for the calculation of economic capital requirements. The assessment focuses on operational losses that have one chance out of ten to materialise over a one-year horizon. It is more intuitive for business experts than the level set for economic capital calculations, which considers events that have one chance out of 5,000 to occur in any given year.

Any risk impact is then compared to the risk appetite and upper tolerance levels set relative to the management capital level, which allows these risks to be rated and relevant mitigation actions to be prioritised.

The risk appetite and upper tolerance levels are set relative to the economic capital level. These are set for each material entity of the Euroclear group, respectively by its management committee and by its board of directors.

Remuneration policies and practices

Overall Purpose

The overall purpose of the Euroclear compensation policy is to align the interests of our employees with the long-term interests of our stakeholders.

Our compensation framework is designed to attract and retain talented human capital, in a market infrastructure business where technical knowledge is not widely available in the general market. Our compensation framework takes into account the risk profile of the Euroclear Group.

The principles of the incentive compensation system are performance-related, fair and equitable across the organisation. They are made transparent to all our employees.

These principles are applied with a view to aligning the compensation policy with the company's strategy and objectives, its values, and the long term interests of the company.

Scope

These principles apply specifically to the Belgian companies within the Euroclear Group but for reasons of equitable treatment, we adopt a similar approach as far as possible across all the countries in which we operate (recognising that there are certain local specificities and differing national legislative and regulatory requirements). Non-cash benefits are provided to employees appropriate to the country they work in and are market relevant.

Governance Structure

Remuneration Committee

The Remuneration Committee has the following remit:

- oversees the application of the policy
- oversees the compensation of the nonexecutive Directors of Euroclear SA/NV (ESA) and PLC with the support of external advisors where necessary. The compensation of the non-executive directors in the operating entities below ESA is overseen by the relevant entity's Compensation/ Remuneration Committee.
- periodically reviews and makes
 recommendations to their respective
 Boards in relation to remuneration of
 Board members within the limits set by
 shareholders. It has the responsibility to
 review such overall limit from time to time
 and to make recommendations to the
 Board to be submitted to the shareholders.
- reports to the Board on a regular basis as to the exercise of its duties.
- reviews periodically its terms of reference.
- reviews and advises the Board on the annual quantum of the remuneration and the appropriateness of the individual remuneration for Identified Staff members of the Management Committee as well as the heads of the control functions (Compliance, Risk and Internal Audit);

- recommends to the Board on the remuneration policy for the relevant entity and for each of the Identified Staff. The Remuneration Committee is supported by specialised advice from Risk, Audit, HR or external consultancy where necessary;
- oversees any malus decisions.

In 2014 the Remuneration Committee met four times for ESA, for EB one Remuneration Committee meeting took place. No external consultant assisted the Remuneration Committees in 2014.

Board of Directors

The Board of Directors has the final decision making authority in such remuneration matters. The approval principles and methodology are applied uniformly across the respective operating entity boards.

Management Committee

The Management Committee of the relevant entity is responsible for:

- the compensation principles for the Group, including any affordability or risk-related issues;
- the continuous assessment of the adequacy of the remuneration principles taking into account the company objectives and long-term interests as well as the external environment and legislative environment the company is operating in;
- approving the variable compensation of the members of the Extended Management Committee.

Compensation Non-Executive Directors

Compensation for the non-executive Directors (where fees have not been waived) comprises an annual gross fee. This fee is pro-rated to the number of board meetings attended and reflects any additional formal responsibilities held. The Chairman and Deputy Chairman of ESA and PLC receive a fixed fee. The fees of the board members are set by relevant boards on the recommendation of the relevant company's Compensation/Remuneration Committee within the overall limit set by the Shareholders.

Non-executive directors (including the Chairman and Deputy Chairman of ESA and PLC) do not receive incentive compensation (short or long-term) or stock options or employment benefits (other than reimbursement of expenses). Their remuneration is not linked to the performance of Euroclear.

Compensation Management and Staff

Compensation for all groups of employees is comprised of fixed and variable compensation. In addition a range of country-relevant benefits (including pension) is provided. Compensation is aligned to the relevant market.

The variable compensation is zero-based and carries no acquired rights.

Variable compensation rewards for performance, individually and/or collectively, and is based on pre-set qualitative and quantitative objectives. Variable compensation is paid proportionally to fixed remuneration within the limits of the overall group bonus pool decided by the Board of Directors after advise of the Remuneration Committee.

The primary measure of performance is progress against the strategic priorities of the Group. These not only cover Financial Strength but also Client, Risk awareness, Operational Performance and People and Organization. These objectives are advised on an annual basis by the Remuneration Committee prior to the approval by the Board.

The realization of these collective objectives are monitored closely through-out the year. The stand of affairs is periodically reported and communicated.

At year-end, the results are internally audited prior to submission to the Remuneration Committee. The Board consequently decides on the bonus pool, also taking into consideration any other criteria that may be of relevance to preserve the long term interests of the company.

Quantitative information related to remuneration is disclosed in the annual report.

Deferred Compensation for Top Management

It is a group-wide policy, to defer part of the overall compensation on behalf of the member of the Management Committee, the Extended Management Committee, the heads of the Control functions and any other function that could have – individually or collectively – an impact on the overall risk profile of the Group.

The Group has determined which employees fall within this category and has notified such employees in their compensation letter.

The award and payment of part of the upfront and deferred compensation is linked to the overall stability of the group in terms of Financial stability, Risk profile & Systems availability over a period of maximum 3 years.

Securitisation

Euroclear does not engage in any securitisation activities.

List of acronyms

AIRBA	Advanced Internal Ratings-Based Approach for credit risk
AMA	Advanced Measurement Approach for operational risk
ARM	Assessment and Rating Methodology
BCBS	Basel Committee on Banking Supervision
BIA	Basic Indicator Approach for operational risk
CALCO	Credit, Assets and Liabilities Committee
ССР	Central Counterparty
CEBS	Committee of European Banking Supervisors
CESR	Committee of European Securities Regulators
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CPMI	Committee on Payment and Market Infrastructure
CRD	Capital Requirements Directive
CRM	Corporate Risk Manager
CRO	Chief Risk Officer
CSD	Central Securities Depository
DVP	Delivery-versus-Payment
EAD	Exposure At Default
EAR	Earnings-at-Risk
EC	Economic Capital
EDF	Expected Default Frequency
ERM	Enterprise Risk Management
ESA	Euroclear SA/NV
ESCB	European System of Central Banks
FIRBA	Foundation Internal Ratings-Based Approach for credit risk
HSA	Horizontal Self-Assessment
ICAAP	Internal Capital Adequacy Assessment Process
ICMA	Internal Capital Measurement Approach

ICS	Internal Controls System
ICSD	International Central Securities Depository
IFRS	International Financial Reporting Standards
IOSCO	International Organization of Securities Commissions
IRB	Internal Ratings-Based approach for credit risk
IS	Information Security
KPI	Key Performance Indicator
KRI	Key Risk Indicator
LCR	Liquidity Coverage Ratio
LGD	Loss-Given-Default
NBB	National Bank of Belgium
OTC	Over-the-Counter
ORX	Operational Riskdata eXchange
PD	Probability of Default
RCSA	Risk and Control Self-Assessment
SREP	Supervisory Review Evaluation Process
SRP	Supervisory Review Process
SSS	Securities Settlement System
TARGET	Trans-Automated Real-time Gross Express Transfer system, the Real-Time Gross Settlement System of the ESCB
TSA	The Standardised Approach for operational risk
VaR	Value-At-Risk



Annex I – Euroclear plc consolidated – own funds

31 December 2014 (€'000)

Со	mmon Equity Tier 1 capital: instruments and reserves	Amount at disclosure date	Amounts (eu) 575/2013 ⁽¹⁾	Reference to balance sheet
1	Capital instruments and the related share premium accounts	146.592		a
	of which: Ordinary shares and related share premium	146.592		
2	Retained earnings	2.097.140		d
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	894.526		b
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	3.138.258		
Cor	nmon Equity Tier 1 capital: instruments and reserves			
8	Intangible assets (net of related tax liability) (negative amount)	(934.433)		e
11	Fair value reserves related to gains or losses on cash flow hedges	280		c
12	Negative amounts resulting from the calculation of expected loss amounts	(2.410)		
28	Total regulatory adjustments to Common equity Tier 1 (CET1)	(936.563)		
29	Common Equity Tier 1 (CET1) capital	2.201.695		
Ade	ditional Tier 1 (AT1) capital: instruments			
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	78.404	78.404	f
36	Additional Tier 1 (AT1) capital before regulatory adjustments	78.404	78.404	
Ade	ditional Tier 1 (AT1) capital: regulatory adjustments			
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	0		
44	Additional Tier 1 (AT1) capital	78.404	78.404	
45	Tier 1 capital (T1 = CET1 + AT1)	2.280.099	78.404	

31 December 2014 (€'000)

Tie	r 2 (T2) capital: instruments and provisions	Amount at disclosure date	Amounts (eu) 575/2013 ⁽¹⁾
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2		
51	Tier 2 (T2) capital before regulatory adjustments		
Tie	· 2 (T2) capital: regulatory adjustments		
58	Tier 2 (T2) capital	2.280.099	78.404
59	Total capital (TC = T1 + T2)	5.817.895	
60	Total risk weighted assets		
Cap	ital ratios and buffers	Percentage	
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	37,84%	
62	Tier 1 (as a percentage of risk exposure amount)	39,19%	
63	Total capital (as a percentage of risk exposure amount)	39,19%	
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	7,00%	
65	of which: capital conservation buffer requirement	2,50%	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	27,28%	
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	154.749	
73	Direct and indirect holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)		
74	Empty Set in the EU		
75	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)	106.186	

Annex I – Euroclear Bank stand-alone – own funds

31 December 2014 (€'000)

Common Equity Tier 1 capital: instruments and reserves	Amount at disclosure date	Amounts (eu) 575/2013 ⁽¹⁾	Reference to balance sheet
1 Capital instruments and the related share premium accounts	843.505		a
of which: Ordinary shares and related share premium	843.505		
2 Retained earnings	490.043		d
3 Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	94.047		b
6 Common Equity Tier 1 (CET1) capital before regulatory adjustments	1.427.595		
Common Equity			
8 Intangible assets (net of related tax liability) (negative amount)	(12)		e
11 Fair value reserves related to gains or losses on cash flow hedges	-		
12 Negative amounts resulting from the calculation of expected loss amounts	(2.266)		
28 Total regulatory adjustments to Common equity Tier 1 (CET1)	(2.278)		
29 Common Equity Tier 1 (CET1) capital	1.425.317		
Additional Tier 1 (AT1) capital: instruments			
 Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1 	-	_	
36 Additional Tier 1 (AT1) capital before regulatory adjustments	-	-	
Additional Tier 1 (AT1) capital: regulatory adjustments			
43 Total regulatory adjustments to Additional Tier 1 (AT1) capital	0	-	
44 Additional Tier 1 (AT1) capital	-	-	
45 Tier 1 capital (T1 = CET1 + AT1)	1.425.317	-	

31 December 2014 (€'000)

Tie	r 2 (T2) capital: instruments and provisions	Amount at disclosure date	Amounts (eu) 575/2013 ⁽¹⁾	Reference to balance sheet
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	82.004	82.004	f
51	Tier 2 (T2) capital before regulatory adjustments	82.004	82.004	
Tie	r 2 (T2) capital: regulatory adjustments			
58	Tier 2 (T2) capital	82.004	82.004	
59	Total capital (TC = T1 + T2)	1.507.321	82.004	
60	Total risk weighted assets	3.574.296		
Сар	ital ratios and buffers	Percentage		
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	39,88%		
62	Tier 1 (as a percentage of risk exposure amount)	39,88%		
63	Total capital (as a percentage of risk exposure amount)	42,17%		
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	7,00%		
65	of which: capital conservation buffer requirement	2,50%		
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	31,88%		
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	2.717		
73	Direct and indirect holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)			
74	Empty Set in the EU			
75	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)			

Annex II – Capital instruments' main features template

lssi	Jer	Euroclear plc consolidated	Euroclear Bank
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	xs0219847364	xs0219842563
3	Governing law(s) of the instrument Regulatory treatment	Belgium and Luxembourg	Belgium and Luxembourg
4	Transitional CRR rules	yes	yes
5	Post-transitional CRR rules	?	?
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	consolidated	solo and consolidated
7	Instrument type (types to be specified by each jurisdiction)	perpetual securities	perpetual notes
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	78.404.000	82.004.226
9	Nominal amount of instrument	300.000.000	304.500.000
9a	Issue price	100%	100%
9b	Redemption price	nominal amount	nominal amount
10	Accounting classification	subordinated liabilities	subordinated liabilities
11	Original date of issuance	08/06/05	08/06/05
12	Perpetual or dated	perpetual	perpetual
13	Original maturity date	n.a.	n.a.
14	Issuer call subject to prior supervisory approval	yes	yes
15	Optional call date, contingent call dates and redemption amount	15/06/2015	15/06/2016
16	Subsequent call dates, if applicable	each 15/03-15/06-15/09- 15/12 after 15/06/2015	each 15/03-15/06-15/09- 15/12 after 15/06/2016
	Coupons / dividends	coupons (yearly till 15/06/2015 and then quarterly)	coupons (yearly till 15/06/2015 and then quarterly)
17	Fixed or floating dividend/coupon	fixed till 15/06/2015 at 4.235% and then floating at Euribor 3 months+ 1.83 %	fixed till 15/06/2015 at 4.2% and then floating at Euribor 3 months+ 1.7945%

Issuer

18	Coupon	rate	and	anv	related	index
	coupon	race	ana	any	related	mack

- 19 Existence of a dividend stopper
- 20 Fully discretionary, partially discretionary or mandatory (in terms of timing)
- 21 Existence of step up or other incentive to redeem
- 22 Noncumulative or cumulative
- 23 Convertible or non-convertible
- 24 If convertible, conversion trigger(s)
- 25 If convertible, fully or partially
- 26 If convertible, conversion rate
- 27 If convertible, mandatory or optional conversion
- 28 If convertible, specify instrument type convertible into
- 29 If convertible, specify issuer of instrument it converts into
- 30 Write-down features
- 31 If write-down, write-down trigger(s)
- 32 If write-down, full or partial
- 33 If write-down, permanent or temporary
- 34 If temporary write-down, description of write-up mechanism
- 35 Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument
- 36 Non-compliant transitioned features
- 37 If yes, specify non-compliant features



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Euroclear is a carbon neutral company – PAS2060 certified in 2015

www.euroclear.con

EXK70097

FORM CA-1

Attach as **Exhibit L** a description of the measures or procedures employed by registrant to provide for the safeguarding of securities and funds in its custody or control. Identify any instances within the past year in which the described security measures or safeguards failed to prevent any unauthorized access to securities or funds in possession of registrant and any measures taken to prevent a recurrence of any such incident.

* * *

For a description of Euroclear Bank's systems safeguards, please refer to Euroclear Bank's Disclosure Framework (attached as <u>Exhibit K-5</u>) and Euroclear Bank's most recent ISAE 3402 Report (attached as <u>Exhibit K-6</u>).

In addition, a well-established asset protection regime exists under Belgian law to safeguard securities and other instruments held in EB Accounts (including the segregated Collateral Accounts). For further details regarding asset protection under Belgian law, please refer to pages 22 and 23 of Euroclear Bank's Disclosure Framework – Observance by Euroclear Bank of the CPMI-IOSCO Principles for Financial Market Infrastructures, which is attached hereto as Exhibit K-5.

Euroclear Bank makes available to its participants information describing the applicable asset protection regimes, including the following documents: Rights of Participants to Securities Deposited in the Euroclear System (attached as <u>Exhibit L-2</u>); Disclosure Framework (attached as <u>Exhibit K-5</u>); ISAE 3402 Report (attached as <u>Exhibit K-6</u>); and other documents attached as <u>Exhibits L-1</u> and <u>L-3</u> through <u>L-8</u>.

With regard to the safeguarding of funds, as described in <u>Exhibit S-1</u>, Euroclear Bank is a credit institution authorized in Belgium and supervised by the NBB. As such, it is subject to relevant European Union and Belgian laws and regulations providing for the safeguarding of funds held by authorized credit institutions.

FORM CA-1

If clearing agency functions are performed by automated facilities or systems, attach as **Exhibit M** a description of all backup systems or subsystems which are designed to prevent interruptions in the performance of any function as a result of technical or other malfunction. Include backups for input or output links to the system and precautions with respect to malfunctions in any areas external to the system.

* * *

For a description of Euroclear Bank's backup systems and business continuity and recovery arrangements, please refer to Euroclear Bank's Disclosure Framework (attached as <u>Exhibit K-5</u>) and Euroclear Bank's most recent ISAE 3402 Report (attached as <u>Exhibit K-6</u>).

Business Impact Analysis ("BIA") and Business Continuity Plan ("BCP") Objectives

Euroclear Bank uses a BIA to identify critical activities and their recovery time objectives for each of its business processes. Under the BIA, threats and risks associated with business process interruptions are identified and assessed by determining the effect of loss, interruption or disruption on the functionality of each department and Euroclear Group as a whole. The analysis considers both the short- and long-term effects of an incident, and identifies dependencies on people, information, technology and facilities. The output of the BIA is used to formulate BCPs in accordance with the Operational Risk Board Policy.

BCPs have been developed to cover a number of defined scenarios, including the loss of an office, loss of staff and IT disaster recovery incident. Each plan contains the following elements:

- guidelines on how to use the plan;
- the process to alert and activate the crisis management team;
- responses and recovery procedures meant to return the business to normal operations following an incident or disaster;
- procedures to continue to maintain critical activities following the widespread loss of staff;
- communication contact list with stakeholders, employees, key clients, critical suppliers, stockholders and management; and
- critical contact information on continuity teams, affected staff, clients, suppliers, regulatory authorities and members of the media.

BCP Design

Data Centers

Euroclear Group operates three data centers to provide resilience and help ensure the capability to recover computerized services following local or regional disasters.

Euroclear Group operates two data centers located at sufficient distance from each other to mitigate the risk that a single event halts operations. Sites are linked by real-time synchronous data mirroring and load-balanced networks. The effectiveness of the data centers' operational and recovery procedures is verified through the transfer of production activity between sites multiple times a year (currently six times a year).

A third data center is located in a separate country to provide a regional disaster recovery capability. This site is asynchronous and enables the resumption of business critical services within the same business day if a major incident affects the other two sites. The regional recovery capability is tested annually.

Local and Regional Disaster Recovery

A local disaster recovery is declared following any disaster that affects one data center. In such circumstances, for high criticality applications, the recovery time objective is two hours and the recovery point objective is to have zero data loss.

A regional disaster recovery is declared following a failure at both main data centers. In such circumstances, for high criticality applications, the recovery time objective is four hours and the recovery point objective is to have data loss of less than one minute (depending upon system volumes at time of failure, and excluding rolling disasters).

Data loss response plans have been developed by operations specialists to minimize the impact of data loss while aiming to resume computerized operations in a time period which does not cause unnecessary strain on market stability. In extreme cases, given the imperative of maintaining market stability, it may not be possible to recover 100% of all transactions which were applied to the production system. Therefore, management will monitor reconciliation activities and will resume operations as circumstances dictate.

Materials and Training

Procedures and checklists are maintained and made available in various ways to enable duty managers and senior management to effectively manage and control Euroclear Bank's services in event of an emergency. "Battle boxes" are securely stored at external locations to ensure that the BCP and related procedures are available in case of a potential disaster. Standard introductory training for new employees explicitly covers business continuity responsibilities. BCP

awareness updates, exercises and training are provided on a regular basis to all employees using different communication channels and tools.

Systems Development

The systems development methodology includes principles and guidelines regarding infrastructure and applications resilience for critical infrastructure components and applications. Compliance to these principles and guidelines is evaluated for every project or change as part of the production acceptance criteria. The core processing systems and networks are designed to provide resilience through the use of mechanisms, including mirroring (synchronous) of production data, using fault-tolerant computers or resolving single points of failure. The provision of the communication lines is split across a number of telecommunications suppliers to provide additional protection against single point of failure.

Crisis Management

To help ensure a systematic and coordinated response to disruptive events, Euroclear Bank has established a three-tiered Bronze-Silver-Gold crisis management structure. These three levels deal with operational, tactical and strategic issues, respectively.

Each location operates a Silver team, which includes representatives from critical divisions and can call upon specialist support from Legal, Financial, Security and Risk Management. Silver teams are concerned with the tactical response to the incident – from the local impact and criticality assessment to the response implementation with the operational/Bronze level. The Silver team's objectives include informing and, where necessary, escalating to the Gold team.

Euroclear Group has a single Gold team for the group composed of the ESA's Management Committee and a Euroclear Group spokesperson. It is supported, if required, by the Human Resources, Legal and Risk Management division heads and by representatives of the local entities. Gold's primary function is to provide strategic direction, to manage communication and to protect the company's reputation.

Multiple Offices

As noted in <u>Exhibit I</u>, Euroclear Bank has implemented a "multiple office" concept with geographically dispersed business operations sites in the following locations:

- one in Brussels and one in its periphery;
- one in Kraków; and
- one in Hong Kong.

Key staff is balanced across two or more sites, and operations are conducted from different sites simultaneously.

As noted above, Euroclear Bank operates two main data centers fully equipped to provide core critical production services. The sites are linked by real-time synchronous data mirroring and load-balanced networks. The critical production services are swapped between these two sites multiple times a year (currently six times a year), thereby demonstrating their capability to take over production in the event of a disaster. In addition, the third data center enables the resumption of business critical services within the same business day of a major incident affecting both main sites. The regional recovery capability is tested once a year.

Participant communications are load balanced and therefore do not rely on just one data center for communications in or out. Such communications are automatically redirected to the right server depending on where the service is running. Virtual IP addressing is used to aid the failover and avoid the need to change IP addresses.

Review and Validation

The BCP is reviewed annually. A formal BCP test framework is maintained indicating how and when each element of the plan is tested or otherwise validated. The test framework helps ensure that all elements of the plan are tested periodically. Each manager has the responsibility to implement effective BCP solutions in his or her area. The risk management function has the overall role of coordinating and promoting BCP validation and reviews, which include the following:

- IT disaster recovery validation in which live production is transferred between the two main data centers multiple times a year (currently six times a year) and once per year to data center three;
- office switch testing in which the loss of a single office is simulated at least twice a year for each department running any critical function; and
- several crisis management exercises per year.

Euroclear Bank participants are made aware of scheduled BCP testing. However, participants typically do not know from which of the data centers the services are provided, or if there was a switch of the processing site during a scheduled BCP test. Thus, there is not any particular action for a participant to take during a BCP test.

FORM CA-1

Attach as **Exhibit** N a list of the persons who currently participate, or who have applied for participation, in registrant's clearing agency activities (if registrant performs more than one activity, a columnar presentation may be utilized).

* * *

Attached as <u>Exhibit N-1</u> is a list of all Euroclear Bank participants involved in the clearance or settlement of Eligible U.S. Government Securities. Attached as <u>Exhibit N-2</u> is a list of all persons that have applied for participation in the clearance or settlement of Eligible U.S. Government Securities as U.S. Participants. Attached as <u>Exhibit N-3</u> is a list of all Euroclear Bank participants.

FORM CA-1

Attach as **Exhibit O** a description of any specifications, qualifications or other criteria which limit, are interpreted to limit or have the effect of limiting access to, or use of, any clearing agency service furnished by the registrant and state the reasons for imposing such specifications, qualifications or other criteria.

* * *

Euroclear Bank's criteria for all participants in the Euroclear System (including U.S. Participants using the Clearing Agency Activities) are set forth in the Operating Procedures attached as <u>Exhibit E-5</u>. Among other things, the Operating Procedures requires an applicant to be established in a jurisdiction that is not subject to international or European sanctions or that is not subject to a call for action from the Financial Action Task Force (FATF) in the context of the fight against money laundering and terrorism financing. As part of the application process, the applicant must provide adequate information enabling Euroclear Bank to meet the relevant Belgian anti-money laundering and terrorism financing requirements.

In order to utilize the Clearing Agency Activities, a participant must additionally execute the relevant documentation provided in <u>Exhibit P</u>. There are no additional specifications, qualifications or other criteria which limit or restrict participants from utilizing the Clearing Agency Activities.

FORM CA-1

Attach as **Exhibit P** copies of any form of contracts governing the terms on which persons may subscribe to clearing agency services provided by the registrant.

* * *

Attached to this <u>Exhibit P</u> are the agreements governing the terms on which persons may subscribe to Euroclear Bank's services that impact Clearing Agency Activities. Also attached to this <u>Exhibit P</u> are the agreements governing the terms on which persons may subscribe to other clearance and settlement services that directly relate to the Clearing Agency Activities.

Euroclear Bank's general Terms and Conditions, Supplementary Terms and Conditions and Operating Procedures are attached as <u>Exhibit E-3</u>, <u>Exhibit E-4</u> and <u>Exhibit E-5</u>, respectively.

Exhibit P-1	Single Collateral Management Form of Agreement

- Exhibit P-2 Collateral Profile Form
- Exhibit P-3 August 2015 Collateral Service Agreement Terms and Conditions
- Exhibit P-4 January 2016 Collateral Service Agreement Operating Procedures
- Exhibit P-5 August 2015 Derivatives Service Agreement Terms and Conditions
- Exhibit P-6 September 2015 Derivatives Service Agreement Operating Procedures
- Exhibit P-7 August 2015 Repurchase Service Agreement Terms and Conditions
- Exhibit P-8 January 2016 Repurchase Service Agreement Operating Procedures
- Exhibit P-9 August 2015 Securities Lending Service Agreement Terms and Conditions
- Exhibit P-10 September 2015 Securities Lending Service Agreement Operating Procedures
- Exhibit P-11 August 2015 Loan Service Agreement Terms and Conditions
- Exhibit P-12 September 2015 Loan Service Agreement Operating Procedures
- Exhibit P-13 2011 Edition Single Pledgor Pledged Account Terms and Conditions
- Exhibit P-14 July 2013 Supplementary Terms and Conditions Governing the GC Access Service (Borrowers' Version)
- Exhibit P-15 June 2015 GC Access Operating Procedures (Borrowers' Version)

P-1

- Exhibit P-16 July 2013 Supplementary Terms and Conditions Governing the GC Access Service (Lenders' Version)
- Exhibit P-17 August 2015 GC Access Operating Procedures (Lenders' Version)
- Exhibit P-18 August 2015 Collateral Allocation Interface Service Agreement Terms and Conditions
- Exhibit P-19 March 2014 Collateral Allocation Interface Service Agreement Operating Procedures

With respect to the U.S. Equities Proposal, Euroclear Bank will revise its Operating Procedures related to collateral services (<u>Exhibit P-4</u>), derivatives services (<u>Exhibit P-5</u>), loan services (<u>Exhibit P-12</u>), repurchase services (<u>Exhibit P-8</u>), securities lending services (<u>Exhibit P-10</u>) and collateral allocation interface services (<u>Exhibit P-19</u>). Specifically, the relevant Operating Procedures will provide that a U.S. Participant may undertake the following: (i) receive and/or deliver externally U.S. Equities into/from its account only via the securities settlement link Euroclear Bank has established with DTC; and (ii) receive and/or deliver internally U.S. Equities into/from its account only when the instructions are entered by Euroclear Bank under the relevant agreement. The relevant Operating Procedures will further provide that in event of default, U.S. Equities held by a non-defaulting U.S. Participant in its account could only be: (i) delivered internally, from its account, to an account of a non-U.S. Participant in Euroclear Bank, or (ii) delivered externally, from its account, to an account in DTC.

RG 810 Form of Agreement

Single Collateral Management Form of Agreement

Purpose and action to be	Use this form to enter into one or more collateral management service agreement(s).				
taken	Please complete this form and post it to:	Euroclear Bank SA/NV Attention: Triparty Client Service 1 Boulevard du Roi Albert II B-1210 Brussels – Belgium			
Parties to this Agreement	 The Participant, as specified in the next sec Euroclear Bank (the 'Bank'), as the collate 				
Participant information	Company name:	('Participant').			
Service(s) to which this Agreement applies	 management services. All services – tick the box below if you wish Participant agrees to enter into all collater Agreement, Securities Lending Service A Agreement, Collateral Service Agreement Specific services – tick the relevant service(sif at any time you would like to change your service) 	al management service agreements (Repurchase Service greement, Derivatives Service Agreement, Loan Service and Collateral Allocation Interface Service Agreement) (a) for which you would like to register. Please note that, selection, you will be required to complete this form again. Wing collateral management service agreement(s):			
Terms and conditions	Procedures and the Annexes thereto, for which time, are to be read and construed as, and toge The Participant agrees to be bound by the Agr constitutes an integral part of this Form of Ag Capitalised words used in this Form of Agreen The Participant agrees to enter into the Agreen If any provision of this Form of Agreement is	reement and the Agreement is incorporated by reference into and			

RG 810 Single Collateral Management Form of Agreement Authorised **Euroclear Bank** signatures Name and title of authorised signatory Authorised signature Name and title of authorised signatory Authorised signature Place Date Participant Name and title of authorised signatory Authorised signature Name and title of authorised signatory Authorised signature

Place

Date

Exhibit P-3

EUROCLEAR BANK SA/NV



August 2015

Collateral Service Agreement

Terms and Conditions



Collateral Service Agreement

Terms and Conditions

(to be read in conjunction with the CSA Operating Procedures)

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Exhibit 1 – Addresses Annexes I and II (included in folder)

Collateral Service Agreement

The triparty collateral service agreement (the 'Agreement') comprises two parts, the CSA Terms and Conditions and the CSA Operating Procedures.

All references to 'the Agreement' or 'this Agreement' are to the CSA Terms and Conditions and the CSA Operating Procedures, both as amended from time to time, which are to be read and construed as, and which together form, one contractual agreement.

CSA Terms and Conditions

Collateral Giver or one or more of its Clients (if applicable) and Collateral Taker or one or more of its Clients (if applicable) have entered into a collateral agreement under which Collateral Giver may provide collateral from time to time to Collateral Taker (as the same be amended from time to time, the 'Collateral Agreement'). If Collateral Giver and/ or Collateral Taker is a Representative, it has agreed with each Client to enter into this Agreement for its benefit.

Collateral Giver and Collateral Taker have requested the Bank to perform certain service functions and procedures in connection with the provision of collateral by Collateral Giver or its Client (if applicable). Therefore, in consideration of the mutual promises included in this Agreement and intending to be legally bound hereby, the parties agree to the following terms.

Capitalised words used in these CSA Terms and Conditions have the meanings assigned to them in Section 19 (Glossary). Capitalised words used only in the CSA Operating Procedures have the meanings assigned to them in Chapter 9 (Glossary) of the CSA Operating Procedures. If any capitalised word is defined in both these CSA Terms and Conditions and the CSA Operating Procedures, and the definitions assigned are inconsistent, the definition in these CSA Terms and Conditions will prevail. If capitalised terms are used but not defined, they have the meaning assigned to them in the Terms and Conditions and the Operating Procedures. The use of the term 'type' with respect to securities means securities with the same security code and description.

1. Appointment and Acceptance of the Bank

Each of Collateral Giver and Collateral Taker appoints the Bank as collateral service agent to carry out the duties described in this Agreement and to take any actions incidental to those duties. The Bank accepts such appointment and consents to act as collateral service agent to carry out only those duties.

2. Selections

(a) Eligible Securities and Eligible Cash

Collateral Giver and Collateral Taker, with the consent of the Bank, by executing Annexes I and II, have selected in Annexes I and II Eligible Securities and Eligible Cash, in one or more sets, to be used with respect to Transactions under this Agreement.

(b) Eligibility Set Profiles

Collateral Giver and Collateral Taker, with the consent of the Bank, by checking the relevant boxes or filling in the relevant lines in Annexes I and II and executing Annexes I and II, have selected certain options, amounts and percentages applicable to each set of Eligible Securities and Eligible Cash. If no selection is made with respect to a given option, amount or percentage, the default selection, as indicated in Annexes I and II, will apply.

(c) Annexes

Collateral Giver, Collateral Taker and the Bank agree to the selections made in Annexes I and II (as the same may be amended from time to time in accordance with Section 12 (Amendments)). Annexes I and II and any numbered Annexes to this Agreement form an integral part of this Agreement.

(d) Conditional SWIFT Elections

If only Collateral Giver or Collateral Taker executes Annexes I and II, the provisions of this paragraph (d) and Section 2(e) and (f) shall apply instead of Section 2(a) to (c).

Collateral Giver or Collateral Taker, with the consent of the Bank, having completed and executed Annexes I and II, sends such Annexes to the Bank, indicating the name of the Eligibility Set and set number (the 'Completed Annexes'). The Bank will upon receipt of the Completed Annexes, provide this documentation to the counterparty Collateral Giver or Collateral Taker, as indicated by Collateral Giver or Collateral Taker.

If Collateral Giver and Collateral Taker want to initiate Transactions on the basis of the Completed Annexes, Collateral Giver and Collateral Taker shall each send a SWIFT message to the Bank in a form specified by the Bank which refers to the (i) name of the Eligibility Set, (ii) set number, and (iii) account numbers of Collateral Giver and Collateral Taker.

The elections made in the Completed Annexes and confirmed by each of the Collateral Giver and Collateral Taker in a SWIFT message are together the 'Conditional SWIFT Elections'.

(e) Unconditional SWIFT Elections

Conditional SWIFT Elections will only become binding on the parties (i) if the Bank notifies Collateral Giver and Collateral Taker by SWIFT message that it consents to them and (ii) from the time specified by the Bank in any such notice.

Conditional SWIFT Elections that have become effective under this Section 2(e) or Section 12(a), together with the related consenting SWIFT message sent by the Bank, constitute the 'Unconditional SWIFT Elections'. Unconditional SWIFT Elections, as amended or modified from time to time, form an integral part of this Agreement. Collateral Giver, Collateral Taker and the Bank agree that the Unconditional SWIFT Elections may be amended or modified from time to time in accordance with Section 12 (*Amendments*).

(f) Parties' obligations in relation to SWIFT Elections

- (i) The Bank agrees to maintain a record of all Unconditional SWIFT Elections which have, from time to time, come into effect under this Agreement and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).
- (ii) The parties agree not to object to the admission as evidence in any legal proceedings of any Unconditional SWIFT Elections and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).

3. Euroclear System

Each of Collateral Giver and Collateral Taker acknowledges that securities and cash credited to Collateral Giver's Account or any Collateral Taker's Account are held in the Euroclear System pursuant to the Terms and Conditions and the Operating Procedures.

4. Representations

(a) Representations of Collateral Giver and Collateral Taker Collateral Giver and Collateral Taker each represents to the Bank and to each other, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of the jurisdiction of its organisation with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all requisite corporate action, and this Agreement is a legal, valid and binding obligation of it enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally;
- (iii) the execution, delivery and performance by it of this Agreement have been and will be duly authorised by all necessary governmental and other approvals, including exchange control approvals;
- (iv) the execution, delivery, and performance by it of this Agreement and the transactions contemplated under this Agreement do not and will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any statute, regulation, rule, order or judgment applicable to it (including any statute, regulation, rule, order or judgment relating to taxes);
- (v) it has (and if it is a Representative, it has been granted by each Client for whose benefit it has entered into the Collateral Agreement and, if any Client is a party to the Collateral Agreement as of such date, such Client has) the power and authority to enter into the Collateral Agreement and the transactions undertaken pursuant thereto;

- (vi) to the extent that the Collateral Agreement authorises rehypothecation or other disposal or use of any Collateral Securities, it has carried out its own independent investigation as to, and agrees that it is solely responsible for, the validity under Belgian law of any rehypothecation or other disposal or use of any Collateral Securities effected by Collateral Taker;
- (vii)it has the power and authority to deliver and transfer the securities and cash delivered or transferred and to take any other action hereunder and, if it is a Representative, each Client has authorised it to execute and deliver this Agreement and to take all such actions hereunder for such Client's benefit; and
- (viii) in the case of Collateral Giver, if it is a Representative and has selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, either:
 - (A) (x) it is not acting for the benefit of more than one Client under this Agreement and (y) it is not acting through Collateral Giver's Account for the benefit of any other client under another Triparty Agreement; or
 - (B) it has received from each such Client or client a specific authorisation to engage in transactions under Triparty Agreements for the benefit of other clients out of the same Collateral Giver's Account.

(b) Representations of the Bank

The Bank represents to each of Collateral Giver and Collateral Taker, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of Belgium with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all required corporate action, and this Agreement is a legal, valid and binding obligation of the Bank enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally; and
- (iii) the execution, delivery, and performance of this Agreement will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any Belgian statute, regulation, rule, order or judgment applicable to it.

5. Transactions

(a) Authority of the Bank to Enter Instructions into the Euroclear System

Each of Collateral Giver and Collateral Taker authorises the Bank to enter or cancel instructions on its behalf into the Euroclear System and to take all other actions in connection with such instructions in accordance with the terms of this Agreement. Without limiting the foregoing, Collateral Taker authorises the Bank to accept, subject to the satisfaction of any relevant conditions, the written notices of Collateral Giver identifying Securities and/or Cash to be transferred pursuant to the CSA Operating Procedures until receipt by the Bank of written notice of withdrawal of any such authorisation.

(b) Authority of the Bank to Use AutoSelect

If Collateral Giver and Collateral Taker have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Collateral Taker has not discontinued AutoSelect pursuant to Section 12(c) (Unilateral Amendment to Discontinue AutoSelect), each of Collateral Giver and Collateral Taker authorises the Bank to select Securities on its behalf and deliver them to the other in accordance with the AutoSelect Methodology, as described in Chapter 6 (AutoSelect Processing Methodology) of the CSA Operating Procedures, with respect to AutoSelect Transactions assigned to the corresponding Eligibility Set(s).

(c) Authority of Collateral Giver to Use AutoSelect and of Collateral Taker to Discontinue AutoSelect

If Collateral Giver and Collateral Taker have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Collateral Taker has not discontinued AutoSelect pursuant to Section 12(c) (Unilateral Amendment to Discontinue AutoSelect), Collateral Taker authorises the Bank to accept the written notice of Collateral Giver identifying or converting an AutoSelect Transaction or a Manual Transaction assigned to the corresponding Eligibility Set pursuant to the procedures set forth in the CSA Operating Procedures; provided, however, that:

- (i) if Collateral Taker gives the Bank a notice to convert an AutoSelect Transaction to a Manual Transaction prior to the relevant deadline indicated in the Timetable, the Bank will process the Transaction as a Manual Transaction beginning on the Business Day indicated in the Timetable, and
- (ii) if Collateral Taker has amended this Agreement to discontinue the use of AutoSelect for one or more Eligibility Sets or for all Eligibility Sets by providing a notice pursuant to Section 12(c) (Unilateral Amendment to Discontinue AutoSelect), the Bank will process all Transactions in those Eligibility Sets as Manual Transactions beginning at the time that amendment is effective.

Until the time, if any, that the Bank receives a notice from Collateral Taker stating that it is willing to resume AutoSelect processing of the Transaction (or of all the Transactions), the Bank will not process the Transaction(s) as an AutoSelect Transaction even if Collateral Giver gives the Bank a notice to convert the Transaction to an AutoSelect Transaction.

Collateral Taker will send to Collateral Giver a copy of any notice it gives to the Bank to convert an AutoSelect Transaction to a Manual Transaction or to discontinue AutoSelect for all Transactions in one or more Eligibility Sets or all Eligibility Sets, but the failure of Collateral Taker to do so will not affect the Bank's obligations under the previous two paragraphs. Collateral Giver will have no right to contest Collateral Taker's notice to the Bank. The Bank will send to Collateral Giver a copy of Collateral Taker's notice as soon as reasonably practicable.

(d) AutoSelect Acknowledgements

- (i) Each of Collateral Giver and Collateral Taker acknowledges that instructions with respect to AutoSelect Transactions (if any) are being generated and entered by the Bank on behalf of Collateral Giver and Collateral Taker in accordance with the AutoSelect Methodology and such other procedures consistent therewith as agreed to from time to time by Collateral Giver and the Bank and that such instructions are generated and entered only to the extent Securities are, in accordance with such procedures, available for allocation and transfer.
- Each of Collateral Giver and Collateral Taker acknowledges that each of them may enter into other Triparty Agreements with the Bank under which AutoSelect processing is used for transactions.

(e) Access of Collateral Giver to Collateral Taker's Reports Collateral Taker agrees to provide Collateral Giver access to information on future income payments and redemptions relating to Collateral Securities that the Euroclear Operator provides to Collateral Taker in accordance with the Operating Procedures through Euroclear Advance Notice of Income and Redemption (ANIR) reports, or any similar successor report.

Collateral Taker also agrees to provide Collateral Giver access to provisional and definitive details about upcoming option deadlines and corporate events affecting securities held in Collateral Taker's Account(s) through Euroclear DACE reports that the Euroclear Operator provides to Collateral Taker in accordance with the Operating Procedures, or any similar successor report.

(f) Authority for Internet Reporting

Each of Collateral Giver and Collateral Taker authorises the other to access, and the Bank to make available through the Internet, the Internet Reports.

6. Bank Fees

Unless otherwise agreed, Collateral Giver agrees to pay to the Bank all fees relating to Collateral Taker's Account(s) and all amounts (other than keying, query and communication fees, which will be payable by the user thereof) relating to this Agreement, in each case as such amounts are set forth in monthly billing statements sent by the Bank to Collateral Giver in accordance with the Euroclear Tariff, as in effect from time to time. Amounts payable by Collateral Giver will be debited from Collateral Giver's Account or such other Cash Account as Collateral Giver may specify by written notice to the Bank from time to time or, if no such Cash Account has been duly specified, any Cash Account of Collateral Giver. Amounts payable by Collateral Taker will be debited from Collateral Taker's Account or such other cash account as Collateral Taker may specify by written notice to the Bank from time to time or, if no such cash account has been duly specified, any cash account of Collateral Taker. No amount may be debited from any account which is subject to the Pledged Account Agreement, and a party with such an account must specify in writing another account for the purposes of debiting amounts under this Section 6.

7. Duties and Liabilities of the Bank

(a) General

- (i) The Bank has no obligations except as expressly set out in this Agreement.
- (ii) The Bank is not liable to Collateral Giver or Collateral Taker for any Losses arising in connection with:
 - (A) any event or matter referred to in paragraphs (i), (ii) or (iii) of Section 8(a) (Indemnitor's Instructions, Default or Breach) or paragraphs (i) or (ii) of Section 8(b) (Bank's Performance) or Section 9 (Effect of Certain Events and Disputes) of this Agreement, or Section 12(c) of the Terms and Conditions; or
 - (B) any act or omission of the Bank in connection with this Agreement, except in the case of its negligence or wilful misconduct.
- (iii) The Bank is not liable to anyone for unforeseeable Losses, Losses not flowing directly and naturally from a breach of this Agreement or Losses representing loss of profit, except in the case of its wilful misconduct and then only to Collateral Giver or Collateral Taker.
- (iv) In the event of any dispute, Collateral Giver or Collateral Taker, as the case may be, bears the burden of proving negligence or wilful misconduct by the Bank.
- (v) The Bank is not liable to anyone for any Losses arising in connection with this Agreement, the Collateral Agreement, the Pledged Account Agreement (if applicable) or any other related agreement except, but only to the extent specified in paragraphs (ii) and (iii) above, to Collateral Giver or Collateral Taker.

- (vi) Acceptance of securities into the Euroclear System is governed by the Operating Procedures and not this Agreement. Acceptance and setting up new securities for use in the services described in this Agreement is not part of the services which the Bank agrees to provide pursuant to this Agreement.
- (vii) All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from this Agreement.

(b) Collateral Giver's and Collateral Taker's Responsibilities The Bank makes no representation regarding, need not inquire into, does not guarantee and is not liable to anyone for any Losses arising in connection with the following, all of which are Collateral Giver's and/or Collateral Taker's sole responsibility:

- (i) the title, validity or genuineness of any Security;
- (ii) the legality of the delivery or transfer of any Cash or Security;
- (iii) the correctness of any financial or other information derived by the Bank, in connection with its duties under this Agreement, from any source nominated or approved by Collateral Giver and Collateral Taker;
- (iv) the due authorisation of any person to act on behalf of Collateral Giver or Collateral Taker in connection with Eligible Cash or Eligible Securities held in Collateral Giver's Account or Collateral Cash or Collateral Securities held in any Collateral Taker's Account;
- (v) the capacity and authority of a Representative to act for the benefit of any Client;
- (vi) the characterisation of any Security as a Net Paying Security or the eligibility of any Security as a Collateral Security under the Collateral Agreement;
- (vii) the validity or enforceability of, or any statement or representation made by Collateral Giver and/or Collateral Taker in connection with, this Agreement, the Collateral Agreement, the Pledged Account Agreement (if applicable) or any other related agreement;
- (viii)the performance of the obligations of Collateral Giver or Collateral Taker under this Agreement, the Collateral Agreement, the Pledged Account Agreement (if applicable) or any other related agreement or the performance of any Client (if applicable) under the Collateral Agreement or any other related agreement;
- (ix) an extension of credit in connection with any Transaction;
- (x) the settlement of instructions entered into the Euroclear System; or

(xi) the value (or the sufficiency of the value) of any Securities delivered or transferred.

(c) Bank's Notice and Inquiry

Except as expressly set out in this Agreement, the Bank:

- (i) will be deemed to have no notice of, and need not inquire into, any transaction between Collateral Giver and Collateral Taker (or one or more of their respective Clients, if applicable) under the Collateral Agreement or otherwise or the performance or breach of this Agreement, the Collateral Agreement, the Pledged Account Agreement (if applicable) or any other related agreement; and
- (ii) need not give Collateral Giver or Collateral Taker notice of any breach by Collateral Giver or Collateral Taker of this Agreement or any breach by Collateral Giver or Collateral Taker (or one or more of their respective Clients, if applicable) of the Collateral Agreement, the Pledged Account Agreement (if applicable) or any other related agreement.

(d) Notices to Bank

- (i) The Bank may rely on any notice or data from Collateral Giver or Collateral Taker under this Agreement and is not liable to anyone for any Losses arising in connection with:
 - (A) unsigned notices, or the unauthorised signing or giving of written or oral notices by any person, or the unauthorised alteration of them or of any other instrument;
 - (B) the incorrectness or incompleteness of information (including, without limitation, in relation to the amount of any credit exposure under the Collateral Agreement) in any notice; or
 - (C) the incorrectness or incompleteness of data transmitted by computer tape or terminal or other computer facility, unless, and to the extent that, the Bank actually knows (x) that the notice or data was not sent by Collateral Giver or Collateral Taker; (y) of the lack of authority; or (z) that the information or data was incorrect.
- (ii) The Bank is not liable to anyone for any Losses arising in connection with:
 - (A) any notices sent otherwise than in accordance with Section 18(a) (Notices);
 - (B) its acting upon oral notice reasonably believed by it to be from a person acting on behalf of Collateral Giver or Collateral Taker, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication, even if subsequent written notices differ from such oral or data notices; or
 - (C) its acceptance of, and its acting, in its discretion, upon, notices from Collateral Giver or Collateral Taker received after the deadlines set out in the Timetable.

(e) AutoSelect Allocation

The Bank makes no representation that any allocations of securities or cash generated by AutoSelect in accordance with this Agreement will represent the optimal allocation of securities or cash among all AutoSelect Transactions or all counterparties of Collateral Giver. The Bank is not liable to anyone for any Losses arising in connection with securities not being optimally allocated.

(f) Price Data

The Bank is not liable to anyone for any Losses arising in connection with any error by, or any incorrect price received from, any pricing or other information source used by the Euroclear Operator in its ordinary course of business or the appropriateness or relative change of any price and need not determine volatility factors with respect to or the appropriateness of any price.

(g) Force Majeure

If the Bank acts or fails to act (including, without limitation, fails to receive or deliver, or cause to be received or delivered, Securities or fails to receive or make, or cause to be received or made, any payment) as a result of or in connection with Force Majeure, such action or failure is not a breach of this Agreement and the Bank is not liable to anyone for Losses arising in connection with such action or failure.

8. Indemnification

(a) Indemnitor's Instructions, Default or Breach

Subject to Section 8(e), Collateral Giver or Collateral Taker (in each case, the 'Indemnitor') will promptly upon demand by the Bank release, defend, indemnify and hold harmless each Indemnified Party for and against Losses or Claims suffered by that Indemnified Party arising in connection with:

- (i) the Bank's execution of instructions based on that Indemnitor's notices;
- (ii) the Bank's failure or delay, in whole or in part, to take any action to be taken under this Agreement or otherwise to fulfil any of its obligations under this Agreement, to the extent that such failure or delay arises in connection with the negligence or willful misconduct of that Indemnitor or any Related Party of that Indemnitor; or
- (iii) any breach by that Indemnitor or any Related Party of that Indemnitor of any provision of this Agreement or any law, decree, regulation or order of any government or governmental body (including any court or tribunal),

except, subject to Section 8(c)(i), Losses or Claims arising out of the negligence or willful misconduct of the Bank.

(b) Bank's Performance

Subject to Section 8(e), Collateral Giver and Collateral Taker will, promptly upon demand by the Bank, jointly and severally, release, defend, indemnify and hold harmless each Indemnified Party for and against Losses and Claims, other than Losses or Claims against which the Bank is indemnified under Section 8(a), suffered by such Indemnified Party arising in connection with:

- (i) any act or omission of the Bank in connection with this Agreement or the Terms and Conditions; or
- (ii) the performance of obligations under Belgian or other applicable law in connection with this Agreement or the Terms and Conditions,

except, subject to Section 8(c)(ii), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(c) Breach and Related Party Claims

- (i) The exception to Section 8(a) does not apply in respect of:
 - (A) Losses or Claims suffered by the Indemnified Party arising as a result of any breach as referred to in Section 8(a)(iii); or
 - (B) Losses caused or Claims made or brought by any Related Party of the Indemnitor.
- (ii) The exception to Section 8(b) does not, in relation to Collateral Giver or (as the case may be) Collateral Taker, apply in respect of Losses caused or Claims made or brought by any Related Party, respectively, of Collateral Giver or Collateral Taker.

(d) Burden of Proof

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) bears the burden of proving:

- the negligence or wilful misconduct of the Bank for the purposes of the exception to Section 8(a) or Section 8(b), respectively; or
- (ii) the application, if any, of Section 8(e).

(e) Limitations

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) is not liable in respect of:

- (i) Losses caused or Claims made or brought by:
 - (A) any third party (other than any Related Party of the party from whom the Bank is seeking such an indemnity); or
 - (B) the other party to this Agreement or any Related Party of that other party; or
- Losses caused by an event or circumstance constituting Force Majeure and which is beyond the reasonable control of the party from whom the Bank is seeking such an indemnity.

9. Effect of Certain Events and Disputes

(a) Withdrawal of Authorisation, Notice of Default under the Collateral Agreement or Insolvency

The Bank will, to the extent permitted by applicable law, cease entering any instructions into the Euroclear System pursuant to this Agreement as soon as reasonably practicable after the receipt by the Bank of:

- (i) any written notice of a withdrawal by Collateral Giver or Collateral Taker of its authorisation(s) under Section 5(a) (Authority of the Bank to Enter Instructions into the Euroclear System);
- (ii) any written notice of default with respect to Collateral Giver or Collateral Taker or one or more of their Clients, if applicable, under the Collateral Agreement sent by Collateral Giver or Collateral Taker to the Bank (unless and until Collateral Giver or Collateral Taker, as the case may be, withdraws such notice of default by notice to the Bank); or
- (iii) any written notice from Collateral Giver or Collateral Taker that it has filed for bankruptcy or declared that it is insolvent or bankrupt or that it has become the subject of any involuntary proceeding in respect of its insolvency or bankruptcy,

provided that, in each case, the Bank will enter instructions in accordance with (x) subsequent matching notices from Collateral Giver and Collateral Taker to the Bank or (y) a final order (whether or not subject to appeal) of a court of competent jurisdiction.

(b) Continuing Disputes

In the event of any other (x) dispute between or conflicting claims, demands, notices or instructions by Collateral Giver, Collateral Taker, a Client and/or any other person or (y) conflicting notices by Collateral Giver or Collateral Taker, with respect to any cash credited to any Collateral Taker's Account or to Collateral Giver's Account, any Securities, Collateral Giver's Account or any Collateral Taker's Account (other than withdrawals of authorisation, notices of default or filings for or declarations of insolvency or bankruptcy notified to the Bank pursuant to Section 9(a) the Bank may decline to comply with any and all claims, demands, notices or instructions or to take any action hereunder with respect to the cash, the Securities, Collateral Giver's Account or Collateral Taker's Account as long as that dispute or conflict is continuing. The Bank will not be liable for any Losses arising out of such failure to act or to comply with such claims, demands, notices or instructions.

The dispute or conflict will be deemed to continue and the Bank will be entitled to refuse to act or comply until either:

- the conflicting or adverse claims or demands have been determined in a court of competent jurisdiction or settled by agreement among the conflicting parties and/or such a court; or
- (ii) the Bank has received security or an indemnity satisfactory to it sufficient to hold it harmless from and against any and all Losses which it may incur by reason of taking any action directly or indirectly in connection with this Agreement.

The Bank may assume that no disputes or conflicting claims or notices exist unless it has received a copy of a written notice thereof sent by Collateral Giver to Collateral Taker or by Collateral Taker to Collateral Giver.

10. Termination

(a) Termination on Notice

Except as provided in Section 18(e) (Survival), this Agreement may be terminated by any party hereto on 30 Business Days' written notice to the other parties. In spite of any such notice of termination, this Agreement will remain applicable to any Transactions then outstanding.

(b) Immediate Termination

The Bank may terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions in the event that:

- (i) any representation made by Collateral Giver or Collateral Taker in this Agreement will have been incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated;
- (ii) Collateral Giver or Collateral Taker ceases to be a Participant in the Euroclear System; or
- (iii) the Collateral Agreement or the Pledged Account Agreement (if applicable) is terminated.

(c) Termination on Revocation of Representative's Authority

If a Representative's authority to take action hereunder for the benefit of a Client is revoked by such Client, such Representative may, by giving written notice (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement) to the Bank specifying the relevant outstanding Transactions, terminate this Agreement immediately with respect to such outstanding Transactions between Collateral Giver and Collateral Taker, and all such proposed transactions between Collateral Giver and Collateral Taker, in each case, as have been, or are proposed to be, entered into for the benefit of such Client. In addition, if the Bank receives written notice from a Representative or its Client that such Representative's authority as aforesaid has been revoked by such Client, the Bank may, in its discretion, by giving notice to Collateral Giver and Collateral Taker either:

- (i) terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions; o
- (ii) terminate this Agreement immediately with respect to such outstanding Transactions and all such proposed transactions, in each case, as have been, or are proposed to be, entered into for the benefit of such Client.

(d) Delivery after Termination

Upon the effectiveness of any termination of this Agreement as aforesaid, or as soon thereafter as is reasonably practicable, the Bank will, unless otherwise directed by Collateral Giver and Collateral Taker and subject to Section 9 (Effect of Certain Events and Disputes) of this Agreement and subject to Section 14(d) of the Terms and Conditions, cause to be delivered to Collateral Taker any amounts of Collateral Cash and Collateral Securities then credited to any Collateral Taker's Account and to Collateral Giver any amounts of cash and securities then credited to Collateral Giver's Account.

11. Confidentiality

The Bank represents to each of Collateral Giver and Collateral Taker that information which reveals or relates to, or which would permit the determination of the Euroclear securities positions of, or Transactions by, Collateral Giver and/or its Client and Collateral Taker and/or any of its Clients, respectively (including any future or planned securities positions or transactions), or the type and amount of any Collateral Securities, will only be used by the Bank in connection with the operation of the Euroclear System or the provision of banking services to Collateral Taker or Collateral Giver, as the case may be.

Notwithstanding the foregoing, the Bank may, where it is bound by the law of any territory or country or pursuant to any requirement of any regulatory body, disclose any information or produce any document in its possession or control. If the Bank discloses information concerning Collateral Giver and/ or its Client (if applicable) or Collateral Taker and/or any of its Clients (if applicable) to any such regulatory body, the Bank will inform Collateral Giver or Collateral Taker, as appropriate, unless the Bank may not do so or has been requested not to do so by such regulatory authority.

12. Amendments

(a) CSA Terms and Conditions

These CSA Terms and Conditions may only be amended or modified by a written agreement executed by the parties and the Annexes I and II may be amended or modified only by a written agreement, except as set forth in paragraphs (b), (c) and (d) below. Unconditional SWIFT Elections may only be amended or modified by:

- (i) establishing a new set of Unconditional SWIFT Elections, in place of the then current Unconditional SWIFT Elections, by repeating the procedure set out in Section 2(d) and (e); or
- (ii) complying with the procedures for unilateral amendment set out in paragraph (b) below.

An amendment under this Section 12(a) is effective when the Bank notifies Collateral Giver and Collateral Taker that it is effective.

(b) Unilateral Amendment

Collateral Taker may, upon notice to and with the consent of the Bank, amend Annexes I and II to include in Eligible Securities one or more types of security, identified by ISIN or Common Code, without the agreement of Collateral Giver.

Collateral Giver may, upon notice to and with the consent of the Bank, amend Annexes I and II to exclude from Eligible Securities, for a stated period or until a subsequent notice of Collateral Giver is given (with the consent of the Bank) to include such Eligible Securities again, one or more types of security, identified by ISIN or Common Code, without the agreement of Collateral Taker.

The Bank may, upon notice to Collateral Giver and Collateral Taker, amend Annexes I and II to exclude any security or securities from Eligible Securities or any currency or currencies from Eligible Cash without the agreement of Collateral Giver or Collateral Taker.

An amendment under this Section 12(b) must be in writing, which may include a facsimile or SWIFT message, and will be effective when the Bank notifies Collateral Giver and Collateral Taker that it is effective.

(c) Unilateral Amendment to Discontinue AutoSelect

Collateral Taker may at any time, by giving notice to the Bank before the deadline indicated in the Timetable for Allocation Mode Management (as defined in the CSA Operating Procedures), amend this Agreement to discontinue the use of AutoSelect, without the agreement of Collateral Giver or the Bank, for one or more Eligibility Sets or for all Eligibility Sets, effective as of the Business Day indicated in the Timetable.

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(d) CSA Operating Procedures

The Bank may amend the CSA Operating Procedures at any time by notice to Collateral Giver and Collateral Taker. Collateral Giver and Collateral Taker will be deemed to have agreed to and accepted any such amendment (i) effective immediately, if the amendment does not adversely affect Collateral Giver or Collateral Taker or (ii) effective 30 Business Days after the Bank sends it, for any other amendment.

(e) Pledged Account Agreement

Except as otherwise expressly provided in this Agreement and except for Sections 6 (Bank Fees), 7 (Duties and Liabilities of the Bank) and 8 (Indemnification) of this Agreement, no provision of this Agreement (including, without limitation, Section 18(f)(ii) (Headings and References) affects any right or obligation under the Pledged Account Agreement (if applicable). Collateral Taker agrees that the acknowledgements made in its capacity as Pledgee in Section 3(e) of the Pledged Account Agreement shall be deemed to be made by Collateral Taker as if set out in full and as if the reference to 'Section 5 of the Pledged Account Terms and Conditions' in such Section 3(e) were a reference to 'this Agreement'.

(f) No Waivers

No waiver, or acceptance of performance other than as provided in this Agreement, on the part of any party will be a waiver, or acceptance of such performance, in the future. The Bank's acceptance, in its discretion, of any notice or notices from Collateral Giver or Collateral Taker received after the relevant deadline set out in the Timetable does not oblige it to accept any such notice so received in the future.

13. Agreement of the Parties

If any provision of this Agreement is inconsistent or in conflict with any provision of the Collateral Agreement (including any provisions to the effect that such Collateral Agreement will prevail over any other agreement), this Agreement will prevail.

14. Applicable Law; Jurisdiction

This Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) will be governed by and construed in accordance with English law.

Each of Collateral Giver and Collateral Taker irrevocably agrees for the exclusive benefit of the Bank that the Courts of England are to have jurisdiction to settle any disputes or claims which may arise out of or in connection with this Agreement or its subject matter or formation (including noncontractual disputes or claims) and that, accordingly, any suit, action or proceeding arising out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) may be brought in such Courts. Nothing contained in this Section 14 will limit the right of the Bank to take any such suit, action or proceeding against each of Collateral Giver and Collateral Taker or both in any other court of competent jurisdiction nor will the taking of such suit, action or proceeding in one or more jurisdictions preclude the taking of any such suit, action or proceeding in any other jurisdiction by the Bank whether concurrently or not, to the extent permitted by the law of such other jurisdiction.

The Collateral Giver and Collateral Taker waive (and agree not to raise) any objection, on the ground of forum non conveniens or any other ground, to the taking of proceedings by the Bank in any court in accordance with this Section 14. The Collateral Giver and Collateral Taker also agree that a judgment against one or both of them in the Bank's favour in proceedings brought in any jurisdiction in accordance with this Section 14 shall be conclusive and binding upon them and may be enforced in any other jurisdiction.

15. Waiver of Immunity

Each of Collateral Giver and Collateral Taker waives, to the fullest extent permitted by applicable law, all immunity (on the basis of sovereignty or otherwise) from jurisdiction, attachment (both before and after judgment) and execution to which it might otherwise be entitled in any suit, action or proceeding in the Courts of England or of any other country or jurisdiction relating in any way to this Agreement and agrees that it will not raise, claim or cause to be pleaded any such immunity at or in respect of any such suit, action or proceeding.

16. Domicile

Each of Collateral Giver and Collateral Taker elects domicile in Belgium at the Bank for the purpose of any suit, action or proceeding in Belgium arising out of or relating to this Agreement and will appoint promptly on request from the Bank authorised agents in London for the purpose of receiving service of process in any such suit, action or proceeding in England.

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17. Service of Process

Each of Collateral Giver and Collateral Taker consents to the service of any and all process, notices or other documents which may be served in any such suit, action or proceeding either:

- (i) by mailing a copy thereof to its address referred to in Section 18(a) (Notices) by registered or certified mail;
- (ii) by serving a copy thereof at its domicile in Belgium or upon any agent for service appointed as provided in Section 16 (Domicile) (whether or not the election of domicile or the appointment of such agent for service of process will for any reason prove to be ineffective or such agent will fail to accept or acknowledge such service) and mailing a copy thereof to its address referred to in Section 18(a) (Notices) by registered or certified mail; or
- (iii) in any other manner permitted by applicable law.

Each of Collateral Giver and Collateral Taker waives all claims of error by reason of any service in accordance with this Section 17 and agrees that such service (x) will be deemed in every respect effective service of process upon it and (y) will be taken and held to be valid personal service upon and personal delivery to it.

18. Miscellaneous

(a) Notices

Unless otherwise specified herein, notices required by this Agreement must be in writing (which will include, without limitation, facsimile, EUCLID, EasyWay or SWIFT).

Collateral Giver and Collateral Taker agree that any notices given under this Agreement will be sent to the Bank to the attention of 'Collateral Management Administration' at the address set forth in Exhibit 1 or to the attention of such other contact at such other address as the Bank may from time to time designate to Collateral Giver and Collateral Taker in writing. The Bank is not required to comply with and is not deemed to have any notice or knowledge of any notice sent by any Client. Any notice to Collateral Giver or Collateral Taker authorised or required by this Agreement will be addressed to the persons indicated at the addresses set forth in Exhibit 1 or to such other person or persons as the receiving party may from time to time designate to the other parties in writing. Chapter 3 (Transaction Processing) of the CSA Operating Procedures contains the Timetable, setting out the deadlines by which the various notices must be received by the Bank for processing. The Bank may, in its sole discretion, attempt to process notices received or validated after the deadlines set forth in the Timetable. Notices will be effective from the time they are actually received by the intended recipient by telephone, facsimile, EUCLID, EasyWay or SWIFT or any other means designated by the Bank.

In any situation in which this Agreement requires written notice, the Bank may but is not required to act on oral notice reasonably believed by it to be notice of a person acting on behalf of Collateral Giver or Collateral Taker or, for the purposes of Section 10(c) (Termination on Revocation of Representative's Authority), a Client or a person purporting to be a Client, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication. Collateral Giver and Collateral Taker shall confirm in writing any oral or electronic data notice. Failure to confirm in writing or any conflict between subsequent written notices and oral or data notices will not affect the authority of any acts taken or omitted by the Bank pursuant to oral or electronic data notices. The Bank reserves the right to record telephone conversations with Collateral Giver or Collateral Taker and to refer to such recordings in the event of any dispute. Nothing in this paragraph permits oral amendments to this Agreement.

(b) Binding Agreement; Assignment and Novation

The provisions of this Agreement shall be binding upon and inure to the benefit of the Bank, Collateral Giver and Collateral Taker and their respective successors and assigns (including any trustee, conservators or other officers of the court in any bankruptcy or insolvency proceeding), subject to the next paragraph.

The rights and obligations of each party under this Agreement may not be assigned or novated without the written consent of the other parties and any assignment or novation without such consent will be null and void.

(c) Severability

Each provision and agreement in this Agreement will be separate from any other provision or agreement in this Agreement and will be enforceable, notwithstanding the unenforceability of any other provision or agreement.

(d) Representatives

Despite the fact that any Representative is acting for the benefit of any Client in connection with this Agreement:

- (i) that Representative will have and be entitled to assert any claim, counterclaim or defence in connection with this Agreement or the Bank's performance of services under this Agreement only to the extent that it has or is entitled to assert that claim, counterclaim or defence in its capacity as a principal party to this Agreement;
- (ii) that Representative shall be liable for the performance of all its obligations and for all its indemnities given under this Agreement, including but not limited to the indemnity contained in Section 8 (Indemnification), as a principal party to this Agreement;
- (iii) no Client is a party to this Agreement and no Client will have any rights under or in connection with this Agreement against the Bank; and
- (iv) the Bank will have obligations under or in connection with this Agreement only to Collateral Giver and Collateral Taker and will not be liable to any Client under or in connection with this Agreement in any manner whatsoever (including, without limitation, in contract or in tort).

(e) Survival

All releases, limitations of liability and indemnifications provided in this Agreement will survive the termination of this Agreement.

(f) Headings and References

- (i) The headings and captions in this Agreement are for reference only and will not affect the construction or interpretation of any of its provisions.
- (ii) Notwithstanding the use of expressions 'Collateral Giver', 'Collateral Giver's Account', 'Collateral Taker', 'Collateral Taker's Account' and 'collateralised', nothing in this Agreement shall create, or shall be construed to create, in favour of any party any mortgage, charge, lien, pledge, encumbrance or other security interest over or in any Collateral Cash or Collateral Securities.

19. Glossary

References in this Agreement to the singular include the plural, and vice versa.

The following words, as used in this Agreement, have the following meanings:

'Agreement' has the meaning set forth in the first sentence of this Agreement.

'AutoSelect' means an electronic processing module owned by the Bank designed to facilitate the selection of securities for Triparty Agreements.

'AutoSelect Methodology' means the method by which the AutoSelect processing module selects securities to be transferred between Collateral Giver's Account and counterparty accounts, as described in Chapter 6 (AutoSelect Processing Methodology) of the CSA Operating Procedures.

'AutoSelect Processing' means an option in Annexes I and II which determines whether or not Collateral Giver and Collateral Taker may use AutoSelect processing of Transactions in an Eligibility Set under this Agreement.

'AutoSelect Transaction' means a Transaction that is processed by the Bank using AutoSelect.

'Bank' means Euroclear Bank, and its successors and assigns, as collateral service agent under this Agreement.

'Business Day' means a day when the operation of the Euroclear System takes place.

'Cash' means Eligible Cash or Collateral Cash.

'Claims' means any claim, demand, action, investigation or administrative proceeding made or brought by an Indemnitor or any Related Party of that Indemnitor in connection with this Agreement.

'Client' means each person other than Collateral Giver or Collateral Taker:

- who has entered into, or who will enter into, the Collateral Agreement with Collateral Giver or Collateral Taker; or
- for whose benefit Collateral Giver or its Client (if applicable) or Collateral Taker or its Client (if applicable) has entered into, or will enter into, the Collateral Agreement,

and for whose benefit Collateral Giver or Collateral Taker has entered into the Pledged Account Agreement (if applicable) and has entered into, or will enter into, this Agreement.

'Collateral Agreement' has the meaning given in the preamble to the CSA Terms and Conditions.

'Collateral Cash' means, with respect to a Transaction:

- the Eligible Cash, if any, credited with respect to such Transaction to the relevant Collateral Taker's Account; or
- a sum of money equivalent to the proceeds from the redemption of any Collateral Security or proceeds received as consideration upon a takeover or similar event with respect to any Collateral Security,

increased or decreased by any cash credited or debited, as the case may be, to the relevant Collateral Taker's Account from time to time with respect to such Transaction pursuant to a substitution of Eligible Securities for Collateral Cash, a Transaction-size decrease pursuant to this Agreement or a closing pursuant to this Agreement.

'Collateral Giver' has the meaning set forth in the first sentence of this Agreement.

[•]Collateral Giver's Account' means a Securities Clearance Account in the Euroclear System in the name of Collateral Giver and the Cash Account in the Euroclear System in the name of Collateral Giver associated therewith, the number of which is indicated in the Annexes, which will be used for Securities and Cash, respectively, with respect to Transactions and which in each case will be designated a 'client account' if Collateral Giver has entered into this Agreement for the benefit of one Client.

'Collateral Securities' means, with respect to any Transaction:

- the Eligible Securities credited with respect to such Transaction to the relevant Collateral Taker's Account as of the relevant Initiation Date (as defined in the CSA Operating Procedures), increased or decreased by any Securities credited or debited, as the case may be, to of from that Collateral Taker's Account from time to time with respect to such Transaction pursuant to this Agreement; or
- Equivalent Securities thereto.

'Collateral Taker' has the meaning set forth in the first sentence of this Agreement.

'Collateral Taker's Account' means the Securities Clearance Account (or, in the case of Multiple Collateral Taker Accounts, one of such Securities Clearance Accounts) in the Euroclear System in the name of Collateral Taker and the Cash Account in the Euroclear System in the name of Collateral Taker associated therewith, the number of which is indicated in Annexes I and II, which will be used only for Securities and Cash, respectively, with respect to Transactions under this Agreement and which in each case shall be designated a 'client account' if Collateral Taker has entered into this Agreement for the benefit of one or more Clients. **'CSA Operating Procedures'** means the Collateral Service Agreement Operating Procedures, as amended from time to time, which, together with the CSA Terms and Conditions, form one contractual agreement.

'CSA Terms and Conditions' means these Collateral Service Agreement Terms and Conditions, which, together with the CSA Operating Procedures, form one contractual agreement.

[•]Eligibility Set' means the Eligible Securities and Eligible Cash identified in each set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and the options, amounts and percentages selected in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time.

'Eligible Cash' means on any date:

- any Settlement Currency which Collateral Giver and Collateral Taker have designated as the securities denomination currency of an Eligible Security in the applicable Eligibility Set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time; and
- if any such currency has been replaced by the euro, the euro; and
- with respect to a Transaction, the Transaction Currency of that Transaction.

[•]Eligible Securities' means on any date any of the Eurocleareligible securities of a type which Collateral Giver and Collateral Taker have agreed, with the consent of the Bank, will be eligible as of such date to become Collateral securities for a Transaction by their inclusion in the applicable set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and as may be limited by certain options in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time. **'Equivalent Securities'** means, with respect to any Transaction:

- securities of the same issuer, being of an identical type, nominal value, description and amount to the Collateral Securities with respect to such Transaction; or
- in relation to Collateral Securities which are partly paid or have been converted, subdivided, consolidated, made the subject of a takeover, capitalisation issue, rights issue, redenomination or event similar to any of the foregoing, the following:
 - in the case of conversion, subdivision or consolidation, securities equivalent to the securities into which the Collateral Securities have been converted, subdivided or consolidated;
 - in the case of takeover, securities equivalent to the consideration or alternative consideration received;
 - in the case of a call on partly paid securities, securities equivalent to the paid-up securities;
 - in the case of a capitalisation issue, securities equivalent to the Collateral Securities together with the securities allotted by way of bonus thereon;
 - in the case of a rights issue, securities equivalent to the Collateral Securities together with the securities allotted in respect thereof;
 - in the event that income in the form of securities, or a certificate which may at a future date be exchanged for securities or an entitlement to acquire securities is distributed, securities equivalent to the Collateral Securities together with securities or a certificate or an entitlement equivalent to those allotted;
 - in the case of a redenomination into euro (and a related renominalisation, if applicable), securities of the same issuer, being of an identical type, nominal value, description and amount to the redenominated (and renominalised, if applicable) Collateral Securities; and
 - in the case of any event similar to any of the foregoing, securities equivalent to the Collateral Securities together with or replaced by securities or other property equivalent to that received in respect of such Collateral Securities resulting from such event.

'Euroclear-eligible securities' means, at any time, any of the securities accepted at that time for deposit into the Euroclear System in accordance with the Operating Procedures.

'Euroclear Operator' means Euroclear Bank, and its successors and assigns, acting in the capacity of operator of the Euroclear System.

'Euroclear System' means the clearance system for internationally traded securities operated under contract by the Euroclear Operator.

'Euroclear Tariff' means the Euroclear Tariff folder (which includes a general fees brochure and specific tariff sheets) distributed to all Participants, as may be amended from time to time.

'Force Majeure' means any event or circumstance beyond the reasonable control of the Bank, including, without limitation, war, insurrection, riot, civil commotion, act of God, accident, fire, water damage, explosion, mechanical breakdown, computer or systems failure or other equipment failure, failure or malfunctioning of any communications media for whatever reason (whether or not such media are made available to Collateral Giver or Collateral Taker by the Bank), interruption (partial or total) of power supply or other utility or service, strike or other labour stoppage (partial or total) and any law, decree, regulation or order of any government or governmental body (including any court or tribunal).

'Indemnified Party' means each of the Bank, its officers, directors and employees.

'Indemnitor' means Collateral Giver, or Collateral Taker, as the case may be.

'Intended Transaction Amount' means, with respect to a Transaction, the amount indicated as such in the matching initiation notice:

- increased by the amount proposed to be transferred from Collateral Giver's Account to Collateral Taker's Account in one or more matching notices of Transaction-size increase; and
- decreased by the amount proposed to be transferred from Collateral Taker's Account to Collateral Giver's Account in one or more matching notices of Transaction-size decrease or pursuant to a closing.

'Internet Report' means the internet report made available at the website of the Euroclear System by the Bank as described in Chapter 5 (Reporting by the Bank) of the CSA Operating Procedures to recipients subscribing for the service in a separate subscription agreement.

'Losses' means, in relation to any person, any losses, liabilities, obligations, fines, penalties, damages, taxes (other than taxes on the overall income of such person), costs, expenses (to the extent reasonable and other than ordinary administrative expenses) or fees (including reasonable counsel's fees and accountant's fees) of any kind or nature whatsoever at any time.

'Manual Transaction' means a Transaction that is not an AutoSelect Transaction.

[•]**Multiple Collateral Taker Accounts'** means an option in Annexes I and II which determines whether or not Collateral Taker may open more than one Collateral Taker's Account. 'Net Paying Security' means any security with respect to which any interest, dividend or other distribution payable by the issuer to either Collateral Giver or Collateral Taker is required by law to be paid subject to withholding or deduction for or on account of taxes or duties of any nature imposed, levied, collected, withheld or assessed by any authority having power to tax.

'Operating Procedures' means the Operating Procedures of the Euroclear System established in accordance with Section 3 of the Terms and Conditions, as such Operating Procedures may be amended from time to time.

'Pledged Account Agreement' means the Acceptance Agreement to the Single Pledgor Pledged Account Terms and Conditions.

'Related Party' in respect of an Indemnitor means any agent (including employees of such agent), employee, client (including Clients) or any other person for whose benefit or on whose behalf that Indemnitor acts or who acts for the benefit of or on behalf of that Indemnitor.

'Representative' means either or each of Collateral Giver and Collateral Taker if it has entered into, or will enter into, this Agreement for the benefit of one or more Clients.'Securities' means Eligible Securities or Collateral Securities.

'Settlement Currency' at any time means any of the currencies accepted at that time in the Euroclear System as a Settlement Currency in accordance with the Operating Procedures.

'Terms and Conditions' means the Terms and Conditions Governing Use of Euroclear, as amended from time to time.

'**Timetable**' means the table of deadlines set forth in Chapter 3 (Transaction Processing) of the CSA Operating Procedures, as amended from time to time.

'Transaction' means any provision of collateral governed by the Collateral Agreement, the Pledged Account Agreement (if applicable) and this Agreement.

'Transaction Currency' means, with respect to a Transaction, the currency in which the Intended Transaction Amount is denominated.

'Triparty Agreement' means an agreement among two Participants and the Bank under which the Bank serves as service agent.

'Unconditional SWIFT Elections' has the meaning set forth in section 2(e) of this Agreement.

20. Effectiveness

- (A) This Agreement will become binding upon Collateral Giver, Collateral Taker and the Bank if:
 - (i) the Bank has executed this Agreement, previously signed by Collateral Giver and Collateral Taker; and
 - (ii) the Bank has received from Collateral Taker the duly authorised and executed documentation relating to the opening of Collateral Taker's Account (or, in the case of Multiple Collateral Taker Accounts, the opening of all such accounts); and
 - (iii) the Bank has notified Collateral Giver and Collateral Taker that the Agreement is effective.
- (B) Notwithstanding the provisions of paragraph (A) above, this Agreement will also become binding upon Collateral Giver, Collateral Taker and the Bank if:
 - (i) the Collateral Giver and the Bank have executed the Form of Agreement RG 810 specifying (a) the Collateral Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (ii) the Collateral Taker and the Bank have executed the Form of Agreement RG 810 specifying (a) the Collateral Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (iii) either Collateral Giver or Collateral Taker have duly executed Annexes I and II and the provisions of Sections 2(d), (e) and (f) of this Agreement are complied with in relation to such Annexes; and
 - (iv) the Bank has received from Collateral Taker the duly authorised and executed documentation relating to the opening of the Collateral Taker Account (or, in the case of Multiple Collateral Taker Accounts, the opening of all such accounts); and
 - (v) the Bank has notified Collateral Giver and Collateral Taker that the Agreement is effective.

21. Counterparts

This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, and all of which together will be one agreement.



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Exhibit P-5

EUROCLEAR BANK SA/NV



August 2015

Derivatives Service Agreement

Terms and Conditions



Derivatives Service Agreement

Terms and Conditions

(to be read in conjunction with the DSA Operating Procedures)

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Exhibit 1 – Addresses Annexes I and II (included in folder)

Derivatives Service Agreement

The triparty derivatives service agreement (the 'Agreement') comprises two parts, the DSA Terms and Conditions and the DSA Operating Procedures.

All references to 'the Agreement' or 'this Agreement' are to the DSA Terms and Conditions and the DSA Operating Procedures, both as amended from time to time, which are to be read and construed as, and which together form, one contractual agreement

DSA Terms and Conditions

Collateral Giver or one or more of its Clients (if applicable) and Collateral Taker or one or more of its Clients (if applicable) have entered into an ISDA Master Agreement, as supplemented by either the ISDA Credit Support Annex (subject to English law) or the ISDA Credit Support Annex (subject to New York law) or the ISDA Credit Support Deed (subject to English law) to the ISDA Master Agreement (collectively, as the same be amended from time to time, the 'Master Agreement'). If Collateral Giver and/or Collateral Taker is a Representative, it has agreed with each Client to enter into this Agreement for its benefit.

Pursuant to and in accordance with the terms of the Master Agreement, certain amounts may be due from time to time to Collateral Taker or its Client (if applicable) by Collateral Giver or its Client (if applicable). Collateral Taker or its Client (if applicable) and Collateral Giver or its Client (if applicable) have agreed that such amounts shall be collateralised by specified credit support provided by Collateral Giver or its Client (if applicable).

Collateral Giver and Collateral Taker have requested the Bank to perform certain service functions and procedures in connection with the credit support provided by Collateral Giver or its Client (if applicable). Therefore, in consideration of the mutual promises included in this Agreement and intending to be legally bound hereby, the parties agree to the following terms.

Capitalised words used in these DSA Terms and Conditions have the meanings assigned to them in Section 19 (*Glossary*). Capitalised words used only in the DSA Operating Procedures have the meanings assigned to them in Chapter 9 (*Glossary*) of the DSA Operating Procedures. If any capitalised word is defined in both these DSA Terms and Conditions and the DSA Operating Procedures, and the definitions assigned are inconsistent, the definition in these DSA Terms and Conditions will prevail. If capitalised terms are used but not defined, they have the meaning assigned to them in the Terms and Conditions and the Operating Procedures. The use of the term 'type' with respect to securities means securities with the same security code and description.

1. Appointment and Acceptance of the Bank

Each of Collateral Giver and Collateral Taker appoints the Bank as derivatives credit support service agent to carry out the duties described in this Agreement and to take any actions incidental to those duties. The Bank accepts such appointment and consents to act as derivatives credit support service agent to carry out only those duties.

2. Selections

(a) Eligible Securities and Eligible Cash

Collateral Giver and Collateral Taker, with the consent of the Bank, by executing Annexes I and II, have selected in Annexes I and II Eligible Securities and Eligible Cash, in one or more sets, to be used with respect to Transactions under this Agreement.

(b) Eligibility Set Profiles

Collateral Giver and Collateral Taker, with the consent of the Bank, by checking the relevant boxes or filling in the relevant lines in Annexes I and II and executing Annexes I and II, have selected certain options, amounts and percentages applicable to each set of Eligible Securities and Eligible Cash. If no selection is made with respect to a given option, amount or percentage, the default selection, as indicated in Annexes I and II, will apply.

(c) Annexes

Collateral Giver, Collateral Taker and the Bank agree to the selections made in Annexes I and II (as the same may be amended from time to time in accordance with Section 12 (Amendments)). Annexes I and II and any numbered Annexes to this Agreement form an integral part of this Agreement.

(d) Conditional SWIFT Elections

If only Collateral Giver or Collateral Taker executes Annexes I and II, the provisions of this paragraph (d) and Section 2(e) and (f) shall apply instead of Section 2(a) to (c).

Collateral Giver or Collateral Taker, with the consent of the Bank, having completed and executed Annexes I and II, sends such Annexes to the Bank, indicating the name of the Eligibility Set and set number (the 'Completed Annexes'). The Bank will upon receipt of the Completed Annexes, provide this documentation to the counterparty Collateral Giver or Collateral Taker, as indicated by Collateral Giver or Collateral Taker.

If Collateral Giver and Collateral Taker want to initiate Transactions on the basis of the Completed Annexes, Collateral Giver and Collateral Taker shall each send a SWIFT message to the Bank in a form specified by the Bank which refers to the (i) name of the Eligibility Set, (ii) set number, and (iii) account numbers of Collateral Giver and Collateral Taker.

The elections made in the Completed Annexes and confirmed by each of the Collateral Giver and Collateral Taker in a SWIFT message are together the 'Conditional SWIFT Elections'.

(e) Unconditional SWIFT Elections

Conditional SWIFT Elections will only become binding on the parties (i) if the Bank notifies Collateral Giver and Collateral Taker by SWIFT message that it consents to them and (ii) from the time specified by the Bank in any such notice.

Conditional SWIFT Elections that have become effective under this Section 2(e) or Section 12(a), together with the related consenting SWIFT message sent by the Bank, constitute the 'Unconditional SWIFT Elections'. Unconditional SWIFT Elections, as amended or modified from time to time, form an integral part of this Agreement. Collateral Giver, Collateral Taker and the Bank agree that the Unconditional SWIFT Elections may be amended or modified from time to time in accordance with Section 12 (*Amendments*).

(f) Parties' obligations in relation to SWIFT Elections

- (i) The Bank agrees to maintain a record of all Unconditional SWIFT Elections which have, from time to time, come into effect under this Agreement and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).
- (ii) The parties agree not to object to the admission as evidence in any legal proceedings of any Unconditional SWIFT Elections and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).

3. Euroclear System

Each of Collateral Giver and Collateral Taker acknowledges that securities and cash credited to Collateral Giver's Account or any Collateral Taker's Account are held in the Euroclear System pursuant to the Terms and Conditions and the Operating Procedures.

4. Representations

(a) Representations of Collateral Giver and Collateral Taker Collateral Giver and Collateral Taker each represents to the Bank and to each other, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of the jurisdiction of its organisation with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all requisite corporate action, and this Agreement is a legal, valid and binding obligation of it enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally;
- (iii) the execution, delivery and performance by it of this Agreement have been and will be duly authorised by all necessary governmental and other approvals, including exchange control approvals;

- (iv) the execution, delivery, and performance by it of this Agreement and the transactions contemplated under this Agreement do not and will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any statute, regulation, rule, order or judgment applicable to it (including any statute, regulation, rule, order or judgment relating to taxes);
- (v) it has (and if it is a Representative, it has been granted by each Client for whose benefit it has entered into the Master Agreement and, if any Client is a party to the Master Agreement as of such date, such Client has) the power and authority to enter into the Master Agreement and the transactions undertaken pursuant thereto;
- (vi) to the extent that the Master Agreement authorises rehypothecation or other disposal or use of any Collateral Security, it has carried out its own independent investigation as to, and agrees that it is solely responsible for, the validity under Belgian law of any rehypothecation or other disposal or use of any Collateral Security effected by Collateral Taker;
- (vii) it has the power and authority to deliver and transfer the securities and cash delivered or transferred and to take any other action hereunder and, if it is a Representative, each Client has authorised it to execute and deliver this Agreement and to take all such actions hereunder for such Client's benefit; and
- (viii) in the case of Collateral Giver, if it is a Representative and has selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, either:
 - (A) (x) it is not acting for the benefit of more than one Client under this Agreement and (y) it is not acting through Collateral Giver's Account for the benefit of any other client under another Triparty Agreement; or
 - (B) it has received from each such Client or client a specific authorisation to engage in transactions under Triparty Agreements for the benefit of other clients out of the same Collateral Giver's Account.

(b) Representations of the Bank

The Bank represents to each of Collateral Giver and Collateral Taker, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of Belgium with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all required corporate action, and this Agreement is a legal, valid and binding obligation of the Bank enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally; and
- (iii) the execution, delivery, and performance of this Agreement will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any Belgian statute, regulation, rule, order or judgment applicable to it.

5. Transactions

(a) Authority of the Bank to Enter Instructions into the Euroclear System

Each of Collateral Giver and Collateral Taker authorises the Bank to enter or cancel instructions on its behalf into the Euroclear System and to take all other actions in connection with such instructions in accordance with the terms of this Agreement. Without limiting the foregoing, Collateral Taker authorises the Bank to accept, subject to the satisfaction of any relevant conditions, the written notices of Collateral Giver identifying Securities and/or Cash to be transferred pursuant to the DSA Operating Procedures until receipt by the Bank of written notice of withdrawal of any such authorisation.

(b) Authority of the Bank to Use AutoSelect

If Collateral Giver and Collateral Taker have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Collateral Taker has not discontinued AutoSelect pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), each of Collateral Giver and Collateral Taker authorises the Bank to select Securities on its behalf and deliver them to the other in accordance with the AutoSelect Methodology, as described in Chapter 6 (*AutoSelect Processing Methodology*) of the DSA Operating Procedures, with respect to AutoSelect Transactions assigned to the corresponding Eligibility Set(s).

(c) Authority of Collateral Giver to Use AutoSelect and of Collateral Taker to Discontinue AutoSelect

If Collateral Giver and Collateral Taker have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Collateral Taker has not discontinued AutoSelect pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), Collateral Taker authorises the Bank to accept the written notice of Collateral Giver identifying or converting an AutoSelect Transaction or a Manual Transaction assigned to the corresponding Eligibility Set pursuant to the procedures set forth in the DSA Operating Procedures; provided, however, that:

- (i) if Collateral Taker gives the Bank a notice to convert an AutoSelect Transaction to a Manual Transaction prior to the relevant deadline indicated in the Timetable, the Bank will process the Transaction as a Manual Transaction beginning on the Business Day indicated in the Timetable, and
- (ii) if Collateral Taker has amended this Agreement to discontinue the use of AutoSelect for one or more Eligibility Sets or for all Eligibility Sets by providing a notice pursuant to Section 12(c) (*Unilateral Amendment* to Discontinue AutoSelect), the Bank will process all Transactions in those Eligibility Sets as Manual Transactions beginning at the time that amendment is effective.

Until the time, if any, that the Bank receives a notice from Collateral Taker stating that it is willing to resume AutoSelect processing of the Transaction (or of all the Transactions), the Bank will not process the Transaction(s) as an AutoSelect Transaction even if Collateral Giver gives the Bank a notice to convert the Transaction to an AutoSelect Transaction.

Collateral Taker will send to Collateral Giver a copy of any notice it gives to the Bank to convert an AutoSelect Transaction to a Manual Transaction or to discontinue AutoSelect for all Transactions in one or more Eligibility Sets or all Eligibility Sets, but the failure of Collateral Taker to do so will not affect the Bank's obligations under the previous two paragraphs. Collateral Giver will have no right to contest Collateral Taker's notice to the Bank. The Bank will send to Collateral Giver a copy of Collateral Taker's notice as soon as reasonably practicable.

(d) AutoSelect Acknowledgements

(i) Each of Collateral Giver and Collateral Taker acknowledges that instructions with respect to AutoSelect Transactions (if any) are being generated and entered by the Bank on behalf of Collateral Giver and Collateral Taker in accordance with the AutoSelect Methodology and such other procedures consistent therewith as agreed to from time to time by Collateral Giver and the Bank and that such instructions are generated and entered only to the extent Securities are, in accordance with such procedures, available for allocation and transfer. (ii) Each of Collateral Giver and Collateral Taker acknowledges that each of them may enter into other Triparty Agreements with the Bank under which AutoSelect processing is used for transactions.

(e) Access of Collateral Giver to Collateral Taker's Reports

Collateral Taker agrees to provide Collateral Giver access to information on future income payments and redemptions relating to Collateral Securities that the Euroclear Operator provides to Collateral Taker in accordance with the Operating Procedures through Euroclear Advance Notice of Income and Redemption (ANIR) reports, or any similar successor report.

Collateral Taker also agrees to provide Collateral Giver access to provisional and definitive details about upcoming option deadlines and corporate events affecting securities held in Collateral Taker's Account(s) through Euroclear DACE reports that the Euroclear Operator provides to Collateral Taker in accordance with the Operating Procedures, or any similar successor report.

(f) Authority for Internet Reporting

Each of Collateral Giver and Collateral Taker authorises the other to access, and the Bank to make available through the Internet, the Internet Reports.

6. Bank Fees

Unless otherwise agreed, Collateral Giver agrees to pay to the Bank all fees relating to Collateral Taker's Account(s) and all amounts (other than keying, query and communication fees, which will be payable by the user thereof) relating to this Agreement, in each case as such amounts are set forth in monthly billing statements sent by the Bank to Collateral Giver in accordance with the Euroclear Tariff, as in effect from time to time. Amounts payable by Collateral Giver will be debited from Collateral Giver's Account or such other Cash Account as Collateral Giver may specify by written notice to the Bank from time to time or, if no such Cash Account has been duly specified, any Cash Account of Collateral Giver. Amounts payable by Collateral Taker will be debited from Collateral Taker's Account or such other cash account as Collateral Taker may specify by written notice to the Bank from time to time or, if no such cash account has been duly specified, any cash account of Collateral Taker. No amount may be debited from any account which is subject to the Pledged Account Agreement, and a party with such an account must specify in writing another account for the purposes of debiting amounts under this Section 6.

7. Duties and Liabilities of the Bank

- (a) General
- (i) The Bank has no obligations except as expressly set out in this Agreement.
- (ii) The Bank is not liable to Collateral Giver or Collateral Taker for any Losses arising in connection with:
 - (A) any event or matter referred to in paragraphs (i), (ii) or (iii) of Section 8(a) (Indemnitor's Instructions, Default or Breach) or paragraphs (i) or (ii) of Section 8(b) (Bank's Performance) or Section 9 (Effect of Certain Events and Disputes) of this Agreement, or Section 12(c) of the Terms and Conditions; or
 - (B) any act or omission of the Bank in connection with this Agreement,

except in the case of its negligence or wilful misconduct.

- (iii) The Bank is not liable to anyone for unforeseeable Losses, Losses not flowing directly and naturally from a breach of this Agreement or Losses representing loss of profit, except in the case of its wilful misconduct and then only to Collateral Giver or Collateral Taker.
- (iv) In the event of any dispute, Collateral Giver or Collateral Taker, as the case may be, bears the burden of proving negligence or wilful misconduct by the Bank.
- (v) The Bank is not liable to anyone for any Losses arising in connection with this Agreement, the Master Agreement, the Pledged Account Agreement (if applicable) or any other related agreement except, but only to the extent specified in paragraphs (ii) and (iii) above, to Collateral Giver or Collateral Taker.
- (vi) Acceptance of securities into the Euroclear System is governed by the Operating Procedures and not this Agreement. Acceptance and setting up new securities for use in the services described in this Agreement is not part of the services which the Bank agrees to provide pursuant to this Agreement.
- (vi) All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from this Agreement.

(b) Collateral Giver's and Collateral Taker's Responsibilities The Bank makes no representation regarding, need not inquire into, does not guarantee and is not liable to anyone for any Losses arising in connection with the following, all of which are Collateral Giver's and/or Collateral Taker's sole responsibility:

- (i) the title, validity or genuineness of any Security;
- (ii) the legality of the delivery or transfer of any Cash or Security;

- (iii) the correctness of any financial or other information derived by the Bank, in connection with its duties under this Agreement, from any source nominated or approved by Collateral Giver and Collateral Taker;
- (iv) the due authorisation of any person to act on behalf of Collateral Giver or Collateral Taker in connection with Eligible Cash or Eligible Securities held in Collateral Giver's Account or Collateral Cash or Collateral Securities held in any Collateral Taker's Account;
- (v) the capacity and authority of a Representative to act for the benefit of any Client;
- (vi) the characterisation of any Security as a Net Paying Security or the eligibility of any Security as a Collateral Security under the Master Agreement;
- (vii) the validity or enforceability of, or any statement or representation made by Collateral Giver and/or Collateral Taker in connection with, this Agreement, the Master Agreement, the Pledged Account Agreement (if applicable) or any other related agreement;
- (viii)the performance of the obligations of Collateral Giver or Collateral Taker under this Agreement, the Master Agreement, the Pledged Account Agreement (if applicable) or any other related agreement or the performance of any Client (if applicable) under the Master Agreement or any other related agreement;
- (ix) an extension of credit in connection with any Transaction;
- (x) the settlement of instructions entered into the Euroclear System; or
- (xi) the value (or the sufficiency of the value) of any Securities delivered or transferred.

(c) Bank's Notice and Inquiry

Except as expressly set out in this Agreement, the Bank:

- (i) will be deemed to have no notice of, and need not inquire into, any transaction between Collateral Giver and Collateral Taker (or one or more of their respective Clients, if applicable) under the Master Agreement or otherwise or the performance or breach of this Agreement, the Master Agreement, the Pledged Account Agreement (if applicable) or any other related agreement; and
- (ii) need not give Collateral Giver or Collateral Taker notice of any breach by Collateral Giver or Collateral Taker of this Agreement or any breach by Collateral Giver or Collateral Taker (or one or more of their respective Clients, if applicable) of the Master Agreement, the Pledged Account Agreement (if applicable) or any other related agreement.

(d) Notices to Bank

- (i) The Bank may rely on any notice or data from Collateral Giver or Collateral Taker under this Agreement and is not liable to anyone for any Losses arising in connection with:
 - (A) unsigned notices, or the unauthorised signing or giving of written or oral notices by any person, or the unauthorised alteration of them or of any other instrument;
 - (B) the incorrectness or incompleteness of information (including, without limitation, in relation to the amount of any credit exposure under the Master Agreement) in any notice; or
 - (C) the incorrectness or incompleteness of data transmitted by computer tape or terminal or other computer facility,

unless, and to the extent that, the Bank actually knows (x) that the notice or data was not sent by Collateral Giver or Collateral Taker; (y) of the lack of authority; or (z) that the information or data was incorrect.

- (ii) The Bank is not liable to anyone for any Losses arising in connection with:
 - (A) any notices sent otherwise than in accordance with Section 18(a) (*Notices*);
 - (B) its acting upon oral notice reasonably believed by it to be from a person acting on behalf of Collateral Giver or Collateral Taker, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication, even if subsequent written notices differ from such oral or data notices; or
 - (C) its acceptance of, and its acting, in its discretion, upon, notices from Collateral Giver or Collateral Taker received after the deadlines set out in the Timetable.

(e) AutoSelect Allocation

The Bank makes no representation that any allocations of securities or cash generated by AutoSelect in accordance with this Agreement will represent the optimal allocation of securities or cash among all AutoSelect Transactions or all counterparties of Collateral Giver. The Bank is not liable to anyone for any Losses arising in connection with securities not being optimally allocated.

(f) Price Data

The Bank is not liable to anyone for any Losses arising in connection with any error by, or any incorrect price received from, any pricing or other information source used by the Euroclear Operator in its ordinary course of business or the appropriateness or relative change of any price and need not determine volatility factors with respect to or the appropriateness of any price.

(g) Force Majeure

If the Bank acts or fails to act (including, without limitation, fails to receive or deliver, or cause to be received or delivered, Securities or fails to receive or make, or cause to be received or made, any payment) as a result of or in connection with Force Majeure, such action or failure is not a breach of this Agreement and the Bank is not liable to anyone for Losses arising in connection with such action or failure.

8. Indemnification

(a) Indemnitor's Instructions, Default or Breach

Subject to Section 8(e), Collateral Giver or Collateral Taker (in each case, the 'Indemnitor') will promptly upon demand by the Bank release, defend, indemnify and hold harmless each Indemnified Party for and against Losses or Claims suffered by that Indemnified Party arising in connection with:

- (i) the Bank's execution of instructions based on that Indemnitor's notices;
- (ii) the Bank's failure or delay, in whole or in part, to take any action to be taken under this Agreement or otherwise to fulfil any of its obligations under this Agreement, to the extent that such failure or delay arises in connection with the negligence or wilful misconduct of that Indemnitor or any Related Party of that Indemnitor; or
- (iii) any breach by that Indemnitor or any Related Party of that Indemnitor of any provision of this Agreement or any law, decree, regulation or order of any government or governmental body (including any court or tribunal),

except, subject to Section 8(c)(i), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(b) Bank's Performance

Subject to Section 8(e), Collateral Giver and Collateral Taker will, promptly upon demand by the Bank, jointly and severally, release, defend, indemnify and hold harmless each Indemnified Party for and against Losses and Claims, other than Losses or Claims against which the Bank is indemnified under Section 8(a), suffered by such Indemnified Party arising in connection with:

- (i) any act or omission of the Bank in connection with this Agreement or the Terms and Conditions; or
- (ii) the performance of obligations under Belgian or other applicable law in connection with this Agreement or the Terms and Conditions,

except, subject to Section 8(c)(ii), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(c) Breach and Related Party Claims

- (i) The exception to Section 8(a) does not apply in respect of:
 - (A) Losses or Claims suffered by the Indemnified Party arising as a result of any breach as referred to in Section 8(a)(iii); or
 - (B) Losses caused or Claims made or brought by any Related Party of the Indemnitor.
- (ii) The exception to Section 8(b) does not, in relation to Collateral Giver or (as the case may be) Collateral Taker, apply in respect of Losses caused or Claims made or brought by any Related Party, respectively, of Collateral Giver or Collateral Taker.

(d) Burden of Proof

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) bears the burden of proving:

- the negligence or wilful misconduct of the Bank for the purposes of the exception to Section 8(a) or Section 8(b), respectively; or
- (ii) the application, if any, of Section 8(e).

(e) Limitations

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) is not liable in respect of:

- (i) Losses caused or Claims made or brought by:
 - (A) any third party (other than any Related Party of the party from whom the Bank is seeking such an indemnity); or
 - (B) the other party to this Agreement or any Related Party of that other party; or
- Losses caused by an event or circumstance constituting Force Majeure and which is beyond the reasonable control of the party from whom the Bank is seeking such an indemnity.

9. Effect of Certain Events and Disputes

(a) Withdrawal of Authorisation, Notice of Default under the Master Agreement or Insolvency

The Bank will, to the extent permitted by applicable law, cease entering any instructions into the Euroclear System pursuant to this Agreement as soon as reasonably practicable after the receipt by the Bank of:

- (i) any written notice of a withdrawal by Collateral Giver or Collateral Taker of its authorisation(s) under Section 5(a) (Authority of the Bank to Enter Instructions into the Euroclear System);
- (ii) any written notice of default with respect to Collateral Giver or Collateral Taker or one or more of their Clients, if applicable, under the Master Agreement sent by Collateral Giver or Collateral Taker to the Bank (unless and until Collateral Giver or Collateral Taker, as the case may be, withdraws such notice of default by notice to the Bank); or
- (iii) any written notice from Collateral Giver or Collateral Taker that it has filed for bankruptcy or declared that it is insolvent or bankrupt or that it has become the subject of any involuntary proceeding in respect of its insolvency or bankruptcy,

provided that, in each case, the Bank will enter instructions in accordance with (x) subsequent matching notices from Collateral Giver and Collateral Taker to the Bank or (y) a final order (whether or not subject to appeal) of a court of competent jurisdiction.

(b) Continuing Disputes

In the event of any other (x) dispute between or conflicting claims, demands, notices or instructions by Collateral Giver, Collateral Taker, a Client and/or any other person or (y) conflicting notices by Collateral Giver or Collateral Taker, with respect to any cash credited to any Collateral Taker's Account or to Collateral Giver's Account, any Securities, Collateral Giver's Account or any Collateral Taker's Account (other than withdrawals of authorisation, notices of default or filings for or declarations of insolvency or bankruptcy notified to the Bank pursuant to Section 9(a) the Bank may decline to comply with any and all claims, demands, notices or instructions or to take any action hereunder with respect to the cash, the Securities, Collateral Giver's Account or Collateral Taker's Account as long as that dispute or conflict is continuing. The Bank will not be liable for any Losses arising out of such failure to act or to comply with such claims, demands, notices or instructions.

The dispute or conflict will be deemed to continue and the Bank will be entitled to refuse to act or comply until either:

- the conflicting or adverse claims or demands have been determined in a court of competent jurisdiction or settled by agreement among the conflicting parties and/or such a court; or
- (ii) the Bank has received security or an indemnity satisfactory to it sufficient to hold it harmless from and against any and all Losses which it may incur by reason of taking any action directly or indirectly in connection with this Agreement.

The Bank may assume that no disputes or conflicting claims or notices exist unless it has received a copy of a written notice thereof sent by Collateral Giver to Collateral Taker or by Collateral Taker to Collateral Giver.

10. Termination

(a) Termination on Notice

Except as provided in Section 18(e) (*Survival*), this Agreement may be terminated by any party hereto on 30 Business Days' written notice to the other parties. In spite of any such notice of termination, this Agreement will remain applicable to any Transactions then outstanding.

(b) Immediate Termination

The Bank may terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions in the event that:

- (i) any representation made by Collateral Giver or Collateral Taker in this Agreement will have been incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated;
- (ii) Collateral Giver or Collateral Taker ceases to be a Participant in the Euroclear System; or
- (iii) the Master Agreement or the Pledged Account Agreement (if applicable) is terminated.

(c) Termination on Revocation of Representative's Authority If a Representative's authority to take action hereunder for the benefit of a Client is revoked by such Client, such Representative may, by giving written notice (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement) to the Bank specifying the relevant outstanding Transactions, terminate this Agreement immediately with respect to such outstanding Transactions between Collateral Giver and Collateral Taker, and all such proposed transactions between Collateral Giver and Collateral Taker, in each case, as have been, or are proposed to be, entered into for the benefit of such Client. In addition, if the Bank receives written notice from a Representative or its Client that such Representative's authority as aforesaid has been revoked by such Client, the Bank may, in its discretion, by giving notice to Collateral Giver and Collateral Taker either:

- (i) terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions; or
- (ii) terminate this Agreement immediately with respect to such outstanding Transactions and all such proposed transactions, in each case, as have been, or are proposed to be, entered into for the benefit of such Client.

(d) Delivery after Termination

Upon the effectiveness of any termination of this Agreement as aforesaid, or as soon thereafter as is reasonably practicable, the Bank will, unless otherwise directed by Collateral Giver and Collateral Taker and subject to Section 9 (*Effect of Certain Events and Disputes*) of this Agreement and subject to Section 14(d) of the Terms and Conditions, cause to be delivered to Collateral Taker any amounts of Collateral Cash and Collateral Securities then credited to any Collateral Taker's Account and to Collateral Giver any amounts of cash and securities then credited to Collateral Giver's Account.

11. Confidentiality

The Bank represents to each of Collateral Giver and Collateral Taker that information which reveals or relates to, or which would permit the determination of the Euroclear securities positions of, or Transactions by, Collateral Giver and/or its Client and Collateral Taker and/or any of its Clients, respectively (including any future or planned securities positions or transactions), or the type and amount of any Collateral Securities, will only be used by the Bank in connection with the operation of the Euroclear System or the provision of banking services to Collateral Taker or Collateral Giver, as the case may be.

Notwithstanding the foregoing, the Bank may, where it is bound by the law of any territory or country or pursuant to any requirement of any regulatory body, disclose any information or produce any document in its possession or control. If the Bank discloses information concerning Collateral Giver and/or its Client (if applicable) or Collateral Taker and/or any of its Clients (if applicable) to any such regulatory body, the Bank will inform Collateral Giver or Collateral Taker, as appropriate, unless the Bank may not do so or has been requested not to do so by such regulatory authority.

12. Amendments

(a) DSA Terms and Conditions

These DSA Terms and Conditions may only be amended or modified by a written agreement executed by the parties and the Annexes I and II may be amended or modified only by a written agreement, except as set forth in paragraphs (b), (c) and (d) below. Unconditional SWIFT Elections may only be amended or modified by:

- (i) establishing a new set of Unconditional SWIFT Elections, in place of the then current Unconditional SWIFT Elections, by repeating the procedure set out in Section 2(d) and (e); or
- (ii) complying with the procedures for unilateral amendment set out in paragraph (b) below.

An amendment under this Section 12(a) is effective when theBank notifies Borrower and Lender that it is effective.

(b) Unilateral Amendment

Collateral Taker may, upon notice to and with the consent of the Bank, amend Annexes I and II to include in Eligible Securities one or more types of security, identified by ISIN or Common Code, without the agreement of Collateral Giver.

Collateral Giver may, upon notice to and with the consent of the Bank, amend Annexes I and II to exclude from Eligible Securities, for a stated period or until a subsequent notice of Collateral Giver is given (with the consent of the Bank) to include such Eligible Securities again, one or more types of security, identified by ISIN or Common Code, without the agreement of Collateral Taker.

The Bank may, upon notice to Collateral Giver and Collateral Taker, amend Annexes I and II to exclude any security or securities from Eligible Securities or any currency or currencies from Eligible Cash without the agreement of Collateral Giver or Collateral Taker.

An amendment under this Section 12(b) must be in writing, which may include a facsimile or SWIFT message, and will be effective when the Bank notifies Collateral Giver and Collateral Taker that it is effective.

(c) Unilateral Amendment to Discontinue AutoSelect

Collateral Taker may at any time, by giving notice to the Bank before the deadline indicated in the Timetable for Allocation Mode Management (as defined in the DSA Operating Procedures), amend this Agreement to discontinue the use of AutoSelect, without the agreement of Collateral Giver or the Bank, for one or more Eligibility Sets or for all Eligibility Sets, effective as of the Business Day indicated in the Timetable.

(d) DSA Operating Procedures

The Bank may amend the DSA Operating Procedures at any time by notice to Collateral Giver and Collateral Taker. Collateral Giver and Collateral Taker will be deemed to have agreed to and accepted any such amendment (i) effective immediately, if the amendment does not adversely affect Collateral Giver or Collateral Taker or (ii) effective 30 Business Days after the Bank sends it, for any other amendment.

(e) Pledged Account Agreement

Except as otherwise expressly provided in this Agreement and except for Sections 6 (*Bank Fees*), 7 (*Duties and Liabilities of the Bank*) and 8 (*Indemnification*) of this Agreement, no provision of this Agreement (including, without limitation, Section 18(f)(ii) (*Headings and References*) affects any right or obligation under the Pledged Account Agreement (if applicable). Collateral Taker agrees that the acknowledgements made in its capacity as Pledgee in Section 3(e) of the Pledged Account Agreement shall be deemed to be made by Collateral Taker as if set out in full and as if the reference to 'Section 5 of the Pledged Account Terms and Conditions' in such Section 3(e) were a reference to 'this Agreement'.

(f) No Waivers

No waiver, or acceptance of performance other than as provided in this Agreement, on the part of any party will be a waiver, or acceptance of such performance, in the future. The Bank's acceptance, in its discretion, of any notice or notices from Collateral Giver or Collateral Taker received after the relevant deadline set out in the Timetable does not oblige it to accept any such notice so received in the future.

13. Agreement of the Parties

If any provision of this Agreement is inconsistent or in conflict with any provision of the Master Agreement (including any provisions to the effect that such Master Agreement will prevail over any other agreement), this Agreement will prevail.

14. Applicable Law; Jurisdiction

This Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) will be governed by and construed in accordance with English law.

Each of Collateral Giver and Collateral Taker irrevocably agrees for the exclusive benefit of the Bank that the Courts of England are to have jurisdiction to settle any disputes or claims which may arise out of or in connection with this Agreement or its subject matter or formation (including noncontractual disputes or claims) and that, accordingly, any suit, action or proceeding arising out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) may be brought in such Courts. Nothing contained in this Section 14 will limit the right of the Bank to take any such suit, action or proceeding against each of Collateral Giver and Collateral Taker or both in any other court of competent jurisdiction nor will the taking of such suit, action or proceeding in one or more jurisdictions preclude the taking of any such suit, action or proceeding in any other jurisdiction by the Bank whether concurrently or not, to the extent permitted by the law of such other jurisdiction.

The Collateral Giver and Collateral Taker waive (and agree not to raise) any objection, on the ground of forum non conveniens or any other ground, to the taking of proceedings by the Bank in any court in accordance with this Section 14. The Collateral Giver and Collateral Taker also agree that a judgment against one or both of them in the Bank's favour in proceedings brought in any jurisdiction in accordance with this Section 14 shall be conclusive and binding upon them and may be enforced in any other jurisdiction.

15. Waiver of Immunity

Each of Collateral Giver and Collateral Taker waives, to the fullest extent permitted by applicable law, all immunity (on the basis of sovereignty or otherwise) from jurisdiction, attachment (both before and after judgment) and execution to which it might otherwise be entitled in any suit, action or proceeding in the Courts of England or of any other country or jurisdiction relating in any way to this Agreement and agrees that it will not raise, claim or cause to be pleaded any such immunity at or in respect of any such suit, action or proceeding.

16. Domicile

Each of Collateral Giver and Collateral Taker elects domicile in Belgium at the Bank for the purpose of any suit, action or proceeding in Belgium arising out of or relating to this Agreement and will appoint promptly on request from the Bank authorised agents in London for the purpose of receiving service of process in any such suit, action or proceeding in England.

17. Service of Process

Each of Collateral Giver and Collateral Taker consents to the service of any and all process, notices or other documents which may be served in any such suit, action or proceeding either:

- (i) by mailing a copy thereof to its address referred to in Section 18(a) (*Notices*) by registered or certified mail;
- (ii) by serving a copy thereof at its domicile in Belgium or upon any agent for service appointed as provided in Section 16 (*Domicile*) (whether or not the election of domicile or the appointment of such agent for service of process will for any reason prove to be ineffective or such agent will fail to accept or acknowledge such service) and mailing a copy thereof to its address referred to in Section 18(a) (*Notices*) by registered or certified mail; or

(iii) in any other manner permitted by applicable law.

Each of Collateral Giver and Collateral Taker waives all claims of error by reason of any service in accordance with this Section 17 and agrees that such service (x) will be deemed in every respect effective service of process upon it and (y) will be taken and held to be valid personal service upon and personal delivery to it.

18. Miscellaneous

(a) Notices

Unless otherwise specified herein, notices required by this Agreement must be in writing (which will include, without limitation, facsimile, EUCLID, EasyWay or SWIFT).

Collateral Giver and Collateral Taker agree that any notices given under this Agreement will be sent to the Bank to the attention of 'Collateral Management Administration' at the address set forth in Exhibit 1 or to the attention of such other contact at such other address as the Bank may from time to time designate to Collateral Giver and Collateral Taker in writing. The Bank is not required to comply with and is not deemed to have any notice or knowledge of any notice sent by any Client. Any notice to Collateral Giver or Collateral Taker authorised or required by this Agreement will be addressed to the persons indicated at the addresses set forth in Exhibit 1 or to such other person or persons as the receiving party may from time to time designate to the other parties in writing. Chapter 3 (*Transaction Processing*) of the DSA Operating Procedures contains the Timetable, setting out the deadlines by which the various notices must be received by the Bank for processing. The Bank may, in its sole discretion, attempt to process notices received or validated after the deadlines set forth in the Timetable. Notices will be effective from the time they are actually received by the intended recipient by telephone, facsimile, EUCLID, EasyWay or SWIFT or any other means designated by the Bank.

In any situation in which this Agreement requires written notice, the Bank may but is not required to act on oral notice reasonably believed by it to be notice of a person acting on behalf of Collateral Giver or Collateral Taker or, for the purposes of Section 10(c) (Termination on Revocation of Representative's Authority), a Client or a person purporting to be a Client, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication. Collateral Giver and Collateral Taker shall confirm in writing any oral or electronic data notice. Failure to confirm in writing or any conflict between subsequent written notices and oral or data notices will not affect the authority of any acts taken or omitted by the Bank pursuant to oral or electronic data notices. The Bank reserves the right to record telephone conversations with Collateral Giver or Collateral Taker and to refer to such recordings in the event of any dispute. Nothing in this paragraph permits oral amendments to this Agreement.

(b) Binding Agreement; Assignment and Novation

The provisions of this Agreement shall be binding upon and inure to the benefit of the Bank, Collateral Giver and Collateral Taker and their respective successors and assigns (including any trustee, conservators or other officers of the court in any bankruptcy or insolvency proceeding), subject to the next paragraph.

The rights and obligations of each party under this Agreement may not be assigned or novated without the written consent of the other parties and any assignment or novation without such consent will be null and void.

(c) Severability

Each provision and agreement in this Agreement will be separate from any other provision or agreement in this Agreement and will be enforceable, notwithstanding the unenforceability of any other provision or agreement.

(d) Representatives

Despite the fact that any Representative is acting for the benefit of any Client in connection with this Agreement:

- (i) that Representative will have and be entitled to assert any claim, counterclaim or defence in connection with this Agreement or the Bank's performance of services under this Agreement only to the extent that it has or is entitled to assert that claim, counterclaim or defence in its capacity as a principal party to this Agreement;
- (ii) that Representative shall be liable for the performance of all its obligations and for all its indemnities given under this Agreement, including but not limited to the indemnity contained in Section 8 (*Indemnification*), as a principal party to this Agreement;
- (iii) no Client is a party to this Agreement and no Client will have any rights under or in connection with this Agreement against the Bank; and
- (iv) the Bank will have obligations under or in connection with this Agreement only to Collateral Giver and Collateral Taker and will not be liable to any Client under or in connection with this Agreement in any manner whatsoever (including, without limitation, in contract or in tort).

(e) Survival

All releases, limitations of liability and indemnifications provided in this Agreement will survive the termination of this Agreement.

(f) Headings and References

- The headings and captions in this Agreement are for reference only and will not affect the construction or interpretation of any of its provisions.
- (ii) Notwithstanding the use of expressions 'Collateral Giver', 'Collateral Giver's Account', 'Collateral Taker', 'Collateral Taker's Account' and 'collateralised', nothing in this Agreement shall create, or shall be construed to create, in favour of any party any mortgage, charge, lien, pledge, encumbrance or other security interest over or in any Collateral Cash or Collateral Securities.

19. Glossary

References in this Agreement to the singular include the plural, and vice versa.

The following words, as used in this Agreement, have the following meanings:

'Agreement' has the meaning set forth in the first sentence of this Agreement.

'AutoSelect' means an electronic processing module owned by the Bank designed to facilitate the selection of securities for Triparty Agreements.

'AutoSelect Methodology' means the method by which the AutoSelect processing module selects securities to be transferred between Collateral Giver's Account and counterparty accounts, as described in Chapter 6 (*AutoSelect Processing Methodology*) of the DSA Operating Procedures.

'AutoSelect Processing' means an option in Annexes I and II which determines whether or not Collateral Giver and Collateral Taker may use AutoSelect processing of Transactions in an Eligibility Set under this Agreement.

'AutoSelect Transaction' means a Transaction that is processed by the Bank using AutoSelect.

'Bank' means Euroclear Bank, and its successors and assigns, as derivatives credit support service agent under this Agreement.

'Business Day' means a day when the operation of the Euroclear System takes place.

'Cash' means Eligible Cash or Collateral Cash.

'Claims' means any claim, demand, action, investigation or administrative proceeding made or brought by an Indemnitor or any Related Party of that Indemnitor in connection with this Agreement.

'Client' means each person other than Collateral Giver or Collateral Taker:

- who has entered into, or who will enter into, the Master Agreement with Collateral Giver or Collateral Taker; or
- for whose benefit Collateral Giver or its Client (if applicable) or Collateral Taker or its Client (if applicable) has entered into, or will enter into, the Master Agreement,

and for whose benefit Collateral Giver or Collateral Taker has entered into the Pledged Account Agreement (if applicable) and has entered into, or will enter into, this Agreement. 'Collateral Cash' means, with respect to a Transaction:

- the Eligible Cash, if any, credited with respect to such Transaction to the relevant Collateral Taker's Account; or
- a sum of money equivalent to the proceeds from the redemption of any Collateral Security or proceeds received as consideration upon a takeover or similar event with respect to any Collateral Security increased or decreased by any cash credited or debited, as the case may be, to the relevant Collateral Taker's Account from time to time with respect to such Transaction pursuant to a substitution of Eligible Securities for Collateral Cash or a Transaction-size decrease pursuant to this Agreement.

'Collateral Giver' has the meaning set forth in the first sentence of this Agreement.

'Collateral Giver's Account' means a Securities Clearance Account in the Euroclear System in the name of Collateral Giver and the Cash Account in the Euroclear System in the name of Collateral Giver associated therewith, the number of which is indicated in the Annexes, which will be used for Securities and Cash, respectively, with respect to Transactions and which in each case will be designated a 'client account' if Collateral Giver has entered into this Agreement for the benefit of one Client.

'Collateral Securities' means, with respect to any Transaction:

- the Eligible Securities credited with respect to such Transaction to the relevant Collateral Taker's Account as of the relevant Initiation Date (as defined in the DSA Operating Procedures), increased or decreased by any Securities credited or debited, as the case may be, to of from that Collateral Taker's Account from time to time with respect to such Transaction pursuant to this Agreement; or
- Equivalent Securities thereto.

'Collateral Taker' has the meaning set forth in the first sentence of this Agreement.

[•]Collateral Taker's Account' means the Securities Clearance Account (or, in the case of Multiple Collateral Taker Accounts, one of such Securities Clearance Accounts) in the Euroclear System in the name of Collateral Taker and the Cash Account in the Euroclear System in the name of Collateral Taker associated therewith, the number of which is indicated in the Annexes I and II which will be used only for Securities and Cash, respectively, with respect to Transactions under this Agreement and which in each case shall be designated a 'client account' if Collateral Taker has entered into this Agreement for the benefit of one or more Clients. **'DSA Operating Procedures'** means the Derivatives Service Agreement Operating Procedures, as amended from time to time, which, together with the DSA Terms and Conditions, form one contractual agreement.

'DSA Terms and Conditions' means these Derivatives Service Agreement Terms and Conditions, which, together with the DSA Operating Procedures, form one contractual agreement.

'Eligibility Set' means the Eligible Securities and Eligible Cash identified in each set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and the options, amounts and percentages selected in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time.

'Eligible Cash' means on any date:

- any Settlement Currency which Collateral Giver and Collateral Taker have designated as the securities denomination currency of an Eligible Security in the applicable Eligibility Set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time; and
- if any such currency has been replaced by the euro, the euro; and
- with respect to a Transaction, the Transaction Currency of that Transaction.

[•]Eligible Securities' means on any date any of the Eurocleareligible securities of a type which Collateral Giver and Collateral Taker have agreed, with the consent of the Bank, will be eligible as of such date to become Collateral securities for a Transaction by their inclusion in the applicable set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and as may be limited by certain options in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time. 'Equivalent Securities' means, with respect to any Transaction:

- securities of the same issuer, being of an identical type, nominal value, description and amount to the Collateral Securities with respect to such Transaction; or
- in relation to Collateral Securities which are partly paid or have been converted, subdivided, consolidated, made the subject of a takeover, capitalisation issue, rights issue, redenomination or event similar to any of the foregoing, the following:
 - in the case of conversion, subdivision or consolidation, securities equivalent to the securities into which the Collateral Securities have been converted, subdivided or consolidated;
 - in the case of takeover, securities equivalent to the consideration or alternative consideration received;
 - in the case of a call on partly paid securities, securities equivalent to the paid-up securities;
 - in the case of a capitalisation issue, securities equivalent to the Collateral Securities together with the securities allotted by way of bonus thereon;
 - in the case of a rights issue, securities equivalent to the Collateral Securities together with the securities allotted in respect thereof;
 - in the event that income in the form of securities, or a certificate which may at a future date be exchanged for securities or an entitlement to acquire securities is distributed, securities equivalent to the Collateral Securities together with securities or a certificate or an entitlement equivalent to those allotted;
 - in the case of a redenomination into euro (and a related renominalisation, if applicable), securities of the same issuer, being of an identical type, nominal value, description and amount to the redenominated (and renominalised, if applicable) Collateral Securities; and
 - in the case of any event similar to any of the foregoing, securities equivalent to the Collateral Securities together with or replaced by securities or other property equivalent to that received in respect of such Collateral Securities resulting from such event.

'Euroclear-eligible securities' means, at any time, any of the securities accepted at that time for deposit into the Euroclear System in accordance with the Operating Procedures.

'Euroclear Operator' means Euroclear Bank, and its successors and assigns, acting in the capacity of operator of the Euroclear System.

'Euroclear System' means the clearance system for internationally traded securities operated under contract by the Euroclear Operator.

EUROCLEAR BANK SA/NV

'Euroclear Tariff' means the Euroclear Tariff folder (which includes a general fees brochure and specific tariff sheets) distributed to all Participants, as may be amended from time to time.

'Force Majeure' means any event or circumstance beyond the reasonable control of the Bank, including, without limitation, war, insurrection, riot, civil commotion, act of God, accident, fire, water damage, explosion, mechanical breakdown, computer or systems failure or other equipment failure, failure or malfunctioning of any communications media for whatever reason (whether or not such media are made available to Collateral Giver or Collateral Taker by the Bank), interruption (partial or total) of power supply or other utility or service, strike or other labour stoppage (partial or total) and any law, decree, regulation or order of any government or governmental body (including any court or tribunal).

'Indemnified Party' means each of the Bank, its officers, directors and employees.

'Indemnitor' means Collateral Giver, or Collateral Taker, as the case may be.

'Intended Transaction Amount' means, with respect to a Transaction, the amount of credit support indicated as such in the matching initiation notice:

- increased by the amount of credit support proposed to be transferred from Collateral Giver's Account to Collateral Taker's Account in one or more matching notices of Transaction-size increase; and
- decreased by the amount of credit support proposed to be transferred from Collateral Taker's Account to Collateral Giver's Account in one or more matching notices of Transaction-size decrease.

'Internet Report' means the internet report made available at the website of the Euroclear System by the Bank as described in Chapter 5 (*Reporting by the Bank*) of the DSA Operating Procedures to recipients subscribing for the service in a separate subscription agreement.

'Losses' means, in relation to any person, any losses, liabilities, obligations, fines, penalties, damages, taxes (other than taxes on the overall income of such person), costs, expenses (to the extent reasonable and other than ordinary administrative expenses) or fees (including reasonable counsel's fees and accountant's fees) of any kind or nature whatsoever at any time.

'Manual Transaction' means a Transaction that is not an AutoSelect Transaction.

'Master Agreement' has the meaning given in the preamble to the DSA Terms and Conditions.

'Multiple Collateral Taker Accounts' means an option in Annexes I and II which determines whether or not Collateral Taker may open more than one Collateral Taker's Account.

'Net Paying Security' means any security with respect to which any interest, dividend or other distribution payable by the issuer to either Collateral Giver or Collateral Taker is required by law to be paid subject to withholding or deduction for or on account of taxes or duties of any nature imposed, levied, collected, withheld or assessed by any authority having power to tax.

'Operating Procedures' means *The Operating Procedures of the Euroclear System* established in accordance with Section 3 of the Terms and Conditions, as such Operating Procedures may be amended from time to time.

'Pledged Account Agreement' means the Acceptance Agreement to the *Single Pledgor Pledged Account Terms and Conditions*.

'Related Party' in respect of an Indemnitor means any agent (including employees of such agent), employee, client (including Clients) or any other person for whose benefit or on whose behalf that Indemnitor acts or who acts for the benefit of or on behalf of that Indemnitor.

'Representative' means either or each of Collateral Giver and Collateral Taker if it has entered into, or will enter into, this Agreement for the benefit of one or more Clients.

'Securities' means Eligible Securities or Collateral Securities.

'Settlement Currency' at any time means any of the currencies accepted at that time in the Euroclear System as a Settlement Currency in accordance with the Operating Procedures.

'Terms and Conditions' means the *Terms and Conditions Governing Use of Euroclear*, as amended from time to time.

'Timetable' means the table of deadlines set forth in Chapter 3 (*Transaction Processing*) of the DSA Operating Procedures, as amended from time to time.

'Transaction' means any provision of credit support governed by the Master Agreement, the Pledged Account Agreement (if applicable) and this Agreement.

'Transaction Currency' means, with respect to a Transaction, the currency in which the Intended Transaction Amount is denominated.

'Triparty Agreement' means an agreement among two Participants and the Bank under which the Bank serves as service agent.

'Unconditional SWIFT Elections' has the meaning set forth in section 2(e) of this Agreement.

20. Effectiveness

- (A) This Agreement will become binding upon Collateral Giver, Collateral Taker and the Bank if:
 - the Bank has executed this Agreement, previously signed by Collateral Giver and Collateral Taker; and
 - (ii) the Bank has received from Collateral Taker the duly authorised and executed documentation relating to the opening of Collateral Taker's Account (or, in the case of Multiple Collateral Taker Accounts, the opening of all such accounts); and
 - (iii) the Bank has notified Collateral Giver and Collateral Taker that the Agreement is effective.
- (B) Notwithstanding the provisions of paragraph (A) above, this Agreement will also become binding upon Collateral Giver, Collateral Taker and the Bank if:
 - (i) the Collateral Giver and the Bank have executed the Form of Agreement RG 810 specifying (a) the Derivatives Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (ii) the Collateral Taker and the Bank have executed the Form of Agreement RG 810 specifying (a) the Derivatives Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (iii) either Collateral Giver or Collateral Taker have duly executed Annexes I and II and the provisions of Sections 2(d), (e) and (f) of this Agreement are complied with in relation to such Annexes; and
 - (iv) the Bank has received from Collateral Taker the duly authorised and executed documentation relating to the opening of the Collateral Taker Account (or, in the case of Multiple Collateral Taker Accounts, the opening of all such accounts); and
 - (v) the Bank has notified Collateral Giver and Collateral Taker that the Agreement is effective.

21. Counterparts

This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, and all of which together will be one agreement.



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LG030

Exhibit P-7

EUROCLEAR BANK SA/NV



August 2015

Repurchase Service Agreement

Terms and Conditions



Repurchase Service Agreement

Terms and Conditions

(to be read in conjunction with the RSA Operating Procedures)

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Exhibit 1 – Addresses Annexes I and II (included in folder)

Repurchase Service Agreement

The triparty repurchase service agreement (the 'Agreement') comprises two parts, the RSA Terms and Conditions and the RSA Operating Procedures.

All references to 'the Agreement' or 'this Agreement' are to the RSA Terms and Conditions and the RSA Operating Procedures, both as amended from time to time, which are to be read and construed as, and which together form, one contractual agreement.

RSA Terms and Conditions

Seller or its Client (if applicable) and Purchaser or one or more of its Clients (if applicable) have entered into a Master Repurchase Agreement which permits Seller or its Client (if applicable) and Purchaser or one or more of its Clients (if applicable) to enter into repurchase transactions from time to time. If Seller and/or Purchaser is a Representative, it has agreed with each Client to enter into this Agreement for its benefit.

Seller and Purchaser have requested the Bank to perform certain service functions to support those repurchase transactions. Therefore, in consideration of the mutual promises included in this Agreement and intending to be legally bound hereby, the parties agree to the following terms.

Capitalised words used in these RSA Terms and Conditions have the meanings assigned to them in Section 19 (Glossary). Capitalised words used only in the RSA Operating Procedures have the meanings assigned to them in Chapter 9 (Glossary) of the RSA Operating Procedures. If any capitalised word is defined in both these RSA Terms and Conditions and the RSA Operating Procedures, and the definitions assigned are inconsistent, the definition in these RSA Terms and Conditions will prevail.

If capitalised terms are used but not defined, they have the meaning assigned to them in the Terms and Conditions and the Operating Procedures. The use of the term 'type' with respect to securities means securities with the same security code and description.

1. Appointment and Acceptance of the Bank

Each of Seller and Purchaser appoints the Bank as repurchase service agent to carry out the duties described in this Agreement and to take any actions incidental to those duties. The Bank accepts such appointment and consents to act as repurchase service agent to carry out only those duties.

2. Selections

(a) Eligible Securities and Eligible Cash

Seller and Purchaser, with the consent of the Bank, by executing Annexes I and II, have selected in Annexes I and II Eligible Securities and Eligible Cash, in one or more sets, to be used with respect to Transactions under this Agreement.

(b) Eligibility Set Profiles

Seller and Purchaser, with the consent of the Bank, by checking the relevant boxes or filling in the relevant lines in Annexes I and II and executing Annexes I and II, have selected certain options, amounts and percentages applicable to each set of Eligible Securities and Eligible Cash. If no selection is made with respect to a given option, amount or percentage, the default selection, as indicated in Annexes I and II, will apply.

(c) Annexes

Seller, Purchaser and the Bank agree to the selections made in Annexes I and II (as the same may be amended from time to time in accordance with Section 12 (*Amendments*)). Annexes I and II and any other numbered Annexes to this Agreement form an integral part of this Agreement.

(d) Conditional SWIFT Elections

If only Seller or Purchaser executes Annexes I and II, the provisions of this paragraph (d) and Section 2(e) and (f) shall apply instead of Section 2(a) to (c).

Seller or Purchaser, with the consent of the Bank, having completed and executed Annexes I and II, sends such Annexes to the Bank, indicating the name of the Eligibility Set and set number (the 'Completed Annexes'). The Bank will upon receipt of the Completed Annexes, provide this documentation to the counterparty Seller or Purchaser, as indicated by Seller or Purchaser.

If Seller and Purchaser want to initiate Transactions on the basis of the Completed Annexes, Seller and Purchaser shall each send a SWIFT message to the Bank in a form specified by the Bank which refers to the (i) name of the Eligibility Set, (ii) set number, and (iii) account numbers of Seller and Purchaser.

The elections made in the Completed Annexes and confirmed by each of the Seller and Purchaser in a SWIFT message are together the 'Conditional SWIFT Elections'.

(e) Unconditional SWIFT Elections

Conditional SWIFT Elections will only become binding on the parties (i) if the Bank notifies Seller and Purchaser by SWIFT message that it consents to them and (ii) from the time specified by the Bank in any such notice.

Conditional SWIFT Elections that have become effective under this Section 2(e) or Section 12(a), together with the related consenting SWIFT message sent by the Bank, constitute the 'Unconditional SWIFT Elections'. Unconditional SWIFT Elections, as amended or modified from time to time, form an integral part of this Agreement. Seller, Purchaser and the Bank agree that the Unconditional SWIFT Elections may be amended or modified from time to time in accordance with Section 12 (*Amendments*).

(f) Parties' obligations in relation to SWIFT Elections

- (i) The Bank agrees to maintain a record of all Unconditional SWIFT Elections which have, from time to time, come into effect under this Agreement and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).
- (ii) The parties agree not to object to the admission as evidence in any legal proceedings of any Unconditional SWIFT Elections and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).

3. Euroclear System

Each of Seller and Purchaser acknowledges that securities and cash credited to Seller's Account or any Purchaser's Account are held in the Euroclear System pursuant to the Terms and Conditions and the Operating Procedures.

4. Representations

(a) Representations of Seller and Purchaser

Seller and Purchaser each represents to the Bank and to each other, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of the jurisdiction of its organisation with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all requisite corporate action, and this Agreement is a legal, valid and binding obligation of it enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally;
- (iii) the execution, delivery and performance by it of this Agreement have been and will be duly authorised by all necessary governmental and other approvals, including exchange control approvals;
- (iv) the execution, delivery, and performance by it of this Agreement and the transactions contemplated under this Agreement do not and will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any statute, regulation, rule, order or judgment applicable to it (including any statute, regulation, rule, order or judgment relating to taxes);
- (v) it has (and if it is a Representative, it has been granted by each Client for whose benefit it has entered into the Master Repurchase Agreement and, if any Client is a party to the Master Repurchase Agreement as of such date, such Client has) the power and authority to enter into the Master Repurchase Agreement and repurchase transactions pursuant thereto;

- (vi) it has the power and authority to deliver and transfer the securities and cash delivered or transferred and to take any other action hereunder and, if it is a Representative, each Client has authorised it to execute and deliver this Agreement and to take all such actions hereunder for such Client's benefit; and
- (vii) in the case of Seller, if it is a Representative and has selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, either:
 - (A) (x) it is not acting for the benefit of more than one Client under this Agreement and (y) it is not acting through the Seller's Account for the benefit of any other client under another Triparty Agreement; or
 - (B) it has received from each such Client or client a specific authorisation to engage in transactions under Triparty Agreements for the benefit of other clients out of the same Seller's Account.

(b) Representations of the Bank

The Bank represents to each of Seller and Purchaser, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of Belgium with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all required corporate action, and this Agreement is a legal, valid and binding obligation of the Bank enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally; and
- (iii) the execution, delivery, and performance of this Agreement will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any Belgian statute, regulation, rule, order or judgment applicable to it.

5. Transactions

(a) Authority of the Bank to Enter Instructions into the Euroclear System

Each of Seller and Purchaser authorises the Bank to enter or cancel instructions on its behalf into the Euroclear System and to take all other actions in connection with such instructions in accordance with the terms of this Agreement. Without limiting the foregoing, Purchaser authorises the Bank to accept, subject to the satisfaction of any relevant conditions, the written notices of Seller identifying Securities and/or Cash to be transferred pursuant to the RSA Operating Procedures until receipt by the Bank of written notice of withdrawal of any such authorisation.

(b) Authority of the Bank to Use AutoSelect

If Seller and Purchaser have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Purchaser has not discontinued AutoSelect pursuant to Section 12(c) (Unilateral Amendment to Discontinue AutoSelect), each of Seller and Purchaser authorises the Bank to select Securities on its behalf and deliver them to the other in accordance with the AutoSelect Methodology, as described in Chapter 6 (AutoSelect Processing Methodology) of the RSA Operating Procedures, with respect to AutoSelect Transactions assigned to the corresponding Eligibility Set(s).

(c) Authority of Seller to Use AutoSelect and of Purchaser to Discontinue AutoSelect

If Seller and Purchaser have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Purchaser has not discontinued AutoSelect pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), Purchaser authorises the Bank to accept the written notice of Seller identifying or converting an AutoSelect Transaction or a Manual Transaction assigned to the corresponding Eligibility Set pursuant to the procedures set forth in the RSA Operating Procedures; provided, however, that:

- (i) if Purchaser gives the Bank a notice to convert an AutoSelect Transaction to a Manual Transaction prior to the relevant deadline indicated in the Timetable, the Bank will process the Transaction as a Manual Transaction beginning on the Business Day indicated in the Timetable; and
- (ii) if Purchaser has amended this Agreement to discontinue the use of AutoSelect for one or more Eligibility Sets or for all Eligibility Sets by providing a notice pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), the Bank will process all Transactions in those Eligibility Sets as Manual Transactions beginning at the time that amendment is effective.

Until the time, if any, that the Bank receives a notice from Purchaser stating that it is willing to resume AutoSelect processing of the Transaction (or of all the Transactions), the Bank will not process the Transaction(s) as an AutoSelect Transaction even if Seller gives the Bank a notice to convert the Transaction to an AutoSelect Transaction.

Purchaser will send to Seller a copy of any notice it gives to the Bank to convert an AutoSelect Transaction to a Manual Transaction or to discontinue AutoSelect for all Transactions in one or more Eligibility Sets or all Eligibility Sets, but the failure of Purchaser to do so will not affect the Bank's obligations under the previous two paragraphs. Seller will have no right to contest Purchaser's notice to the Bank. The Bank will send to Seller a copy of Purchaser's notice as soon as reasonably practicable.

(d) AutoSelect Acknowledgements

- (i) Each of Seller and Purchaser acknowledges that instructions with respect to AutoSelect Transactions (if any) are being generated and entered by the Bank on behalf of Seller and Purchaser in accordance with the AutoSelect Methodology and such other procedures consistent therewith as agreed to from time to time by Seller and the Bank and that such instructions are generated and entered only to the extent Securities are, in accordance with such procedures, available for allocation and transfer.
- (ii) Each of Seller and Purchaser acknowledges that each of them may enter into other Triparty Agreements with the Bank under which AutoSelect processing is used for transactions.

(e) Purchased Securities

Nothing contained in this Agreement will restrict the ability of Purchaser to transfer Purchased Securities or cash from Purchaser's Account(s).

(f) Access of Seller to Purchaser's Reports

Purchaser agrees to provide Seller access to information on future income payments and redemptions relating to Purchased Securities that the Euroclear Operator provides to Purchaser in accordance with the Operating Procedures through Euroclear Advance Notice of Income and Redemption (ANIR) reports, or any similar successor report.

Purchaser also agrees to provide Seller access to provisional and definitive details about upcoming option deadlines and corporate events affecting securities held in Purchaser's Account(s) through Euroclear DACE reports that the Euroclear Operator provides to Purchaser in accordance with the Operating Procedures, or any similar successor report.

(g) Authority for Internet Reporting

Each of Seller and Purchaser authorises the other to access, and the Bank to make available through the Internet, the Internet Reports.

6. Bank Fees

Unless otherwise agreed, Seller agrees to pay to the Bank all fees relating to Purchaser's Account(s) and all amounts (other than keying, query and communications fees, which will be payable by the user thereof) relating to this Agreement, in each case as such amounts are set forth in monthly billing statements sent by the Bank to Seller in accordance with the Euroclear Tariff, as in effect from time to time. Amounts payable by Seller will be debited from Seller's Account or such other Cash Account as Seller may specify by written notice to the Bank from time to time or, if no such Cash Account has been duly specified, any Cash Account of Seller. Amounts payable by Purchaser will be debited from Purchaser's Account or such other cash account as Purchaser may specify by written notice to the Bank from time to time or, if no such cash account has been duly specified, any cash account of Purchaser.

7. Duties and Liabilities of the Bank

(a) General

- (i) The Bank has no obligations except as expressly set out in this Agreement.
- (ii) The Bank is not liable to Seller or Purchaser for any Losses arising in connection with:
 - (A) any event or matter referred to in paragraphs (i), (ii) or (iii) of Section 8(a) (*Indemnitor's Instructions, Default or Breach*) or paragraphs (i) or (ii) of Section 8(b) (*Bank's Performance*) or Section 9 (*Effect of Certain Events and Disputes*) of this Agreement, or Section 12(c) of the Terms and Conditions; or
 - (B) any act or omission of the Bank in connection with this Agreement,

except in the case of its negligence or wilful misconduct.

- (iii) The Bank is not liable to anyone for unforeseeable Losses, Losses not flowing directly and naturally from a breach of this Agreement or Losses representing loss of profit, except in the case of its wilful misconduct and then only to Seller or Purchaser.
- (iv) In the event of any dispute, Seller or Purchaser, as the case may be, bears the burden of proving negligence or wilful misconduct by the Bank.
- (v) The Bank is not liable to anyone for any Losses arising in connection with this Agreement, the Master Repurchase Agreement or any other related agreement except, but only to the extent specified in paragraphs (ii) and (iii) above, to Seller or Purchaser.
- (vi) Acceptance of securities into the Euroclear System is governed by the Operating Procedures and not this Agreement. Acceptance and setting up new securities for use in the services described in this Agreement is not part of the services which the Bank agrees to provide pursuant to this Agreement.

(vii) All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from this Agreement.

(b) Seller's and Purchaser's Responsibilities

The Bank makes no representation regarding, need not inquire into, does not guarantee and is not liable to anyone for any Losses arising in connection with the following, all of which are Seller's and/or Purchaser's sole responsibility:

- (i) the title, validity or genuineness of any Security;
- (ii) the legality of the sale, purchase, delivery or transfer of any Cash or Security;
- (iii) the due authorisation of any person to act on behalf of Seller or Purchaser in connection with Eligible Cash or Eligible Securities held in Seller's Account or Cash Margin or Purchased Securities held in any Purchaser's Account;
- (iv) the capacity and authority of a Representative to act for the benefit of any Client;
- (v) the characterisation of any Security as a Net Paying Security or the eligibility of any Security as a Purchased Security under the Master Repurchase Agreement;
- (vi) the validity or enforceability of, or any statement or representation made by Seller and/or Purchaser in connection with, this Agreement, the Master Repurchase Agreement or any other related agreement;
- (vii)the performance of the obligations of Seller or Purchaser under this Agreement, the Master Repurchase Agreement or any other related agreement or the performance of any Client (if applicable) under the Master Repurchase Agreement or any other related agreement;
- (viii)an extension of credit in connection with any Transaction;
- (ix) the settlement of instructions entered into the Euroclear System; or
- (x) the price (or the sufficiency of the price) at which any Securities are purchased or sold.

(c) Bank's Notice and Inquiry

- Except as expressly set out in this Agreement, the Bank:
- (i) will be deemed to have no notice of, and need not inquire into, any transaction between Seller and Purchaser (or one or more of their respective Clients, if applicable) under the Master Repurchase Agreement or otherwise or the performance or breach of this Agreement, the Master Repurchase Agreement or any other related agreement; and

(ii) need not give Seller or Purchaser notice of any breach by Seller or Purchaser of this Agreement or any breach by Seller or Purchaser (or one or more of their respective Clients, if applicable) of the Master Repurchase Agreement or any other related agreement.

(d) Notices to Bank

- (i) The Bank may rely on any notice or data from Seller or Purchaser under this Agreement and is not liable to anyone for any Losses arising in connection with:
 - (A) unsigned notices, or the unauthorised signing or giving of written or oral notices by any person, or the unauthorised alteration of them or of any other instrument;
 - (B) the incorrectness or incompleteness of information in any notice; or
 - (C) the incorrectness or incompleteness of data transmitted by computer tape or terminal or other computer facility, unless the Bank actually knows(x) that the notice or data was not sent by Seller or Purchaser; (y) of the lack of authority; or (z) that the information or data was incorrect.
- (ii) The Bank is not liable to anyone for any Losses arising in connection with:
 - (A) any notices sent otherwise than in accordance with Section 18(a) (*Notices*);
 - (B) its acting upon oral notice reasonably believed by it to be from a person acting on behalf of Seller or Purchaser, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication, even if subsequent written notices differ from such oral or data notices; or
 - (C) its acceptance of, and its acting, in its discretion, upon, notices from Seller or Purchaser received after the deadlines set out in the Timetable.

(e) AutoSelect Allocation

The Bank makes no representation that any allocations of securities or cash generated by AutoSelect in accordance with this Agreement will represent the optimal allocation of securities or cash among all AutoSelect Transactions or all counterparties of Seller. The Bank is not liable to anyone for any Losses arising in connection with securities not being optimally allocated.

(f) Price Data

The Bank is not liable to anyone for any Losses arising in connection with any error by, or any incorrect price received from, any pricing or other information source used by the Euroclear Operator in its ordinary course of business or the appropriateness or relative change of any price and need not determine volatility factors with respect to or the appropriateness of any price.

(g) Force Majeure

If the Bank acts or fails to act (including, without limitation, fails to receive or deliver, or cause to be received or delivered, Securities or fails to receive or make, or cause to be received or made, any payment) as a result of or in connection with Force Majeure, such action or failure is not a breach of this Agreement and the Bank is not liable to anyone for Losses arising in connection with such action or failure.

8. Indemnification

(a) Indemnitor's Instructions, Default or Breach

Subject to Section 8(e), Seller or Purchaser (in each case, the 'Indemnitor') will promptly upon demand by the Bank release, defend, indemnify and hold harmless each Indemnified Party for and against Losses or Claims suffered by that Indemnified Party arising in connection with:

- (i) the Bank's execution of instructions based on that Indemnitor's notices;
- (ii) the Bank's failure or delay, in whole or in part, to take any action to be taken under this Agreement or otherwise to fulfil any of its obligations under this Agreement, to the extent that such failure or delay arises in connection with the negligence or wilful misconduct of that Indemnitor or any Related Party of that Indemnitor; or
- (iii) any breach by that Indemnitor or any Related Party of that Indemnitor of any provision of this Agreement or any law, decree, regulation or order of any government or governmental body (including any court or tribunal),

except, subject to Section 8(c)(i), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(b) Bank's Performance

Subject to Section 8(e), Seller and Purchaser will, promptly upon demand by the Bank, jointly and severally, release, defend, indemnify and hold harmless each Indemnified Party for and against Losses and Claims, other than Losses or Claims against which the Bank is indemnified under Section 8(a), suffered by such Indemnified Party arising in connection with:

- (i) any act or omission of the Bank in connection with this Agreement or the Terms and Conditions; or
- (ii) the performance of obligations under Belgian or other applicable law in connection with this Agreement or the Terms and Conditions,

except, subject to Section 8(c)(ii), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(c) Breach and Related Party Claims

- (i) The exception to Section 8(a) does not apply in respect of:
 - (A) Losses or Claims suffered by the Indemnified Party arising as a result of any breach as referred to in Section 8(a)(iii); or
 - (B) Losses caused or Claims made or brought by any Related Party of the Indemnitor.
- (ii) The exception to Section 8(b) does not, in relation to Seller or (as the case may be) Purchaser, apply in respect of Losses caused or Claims made or brought by any Related Party, respectively, of Seller or Purchaser.

(d) Burden of Proof

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) bears the burden of proving:

- (i) the negligence or wilful misconduct of the Bank for the purposes of the exception to Section 8(a) or Section 8(b), respectively; or
- (ii) the application, if any, of Section 8(e).

(e) Limitations

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) is not liable in respect of:

- (i) Losses caused or Claims made or brought by:
 - (A) any third party (other than any Related Party of the party from whom the Bank is seeking such an indemnity); or
 - (B) the other party to this Agreement or any Related Party of that other party; or
- (ii) Losses caused by an event or circumstance constituting Force Majeure and which is beyond the reasonable control of the party from whom the Bank is seeking such an indemnity.

9. Effect of Certain Events and Disputes

(a) Withdrawal of Authorisation, Notice of Default under the Master Repurchase Agreement or Insolvency

The Bank will, to the extent permitted by applicable law, cease entering any instructions into the Euroclear System pursuant to this Agreement as soon as reasonably practicable after the receipt by the Bank of:

- (i) any written notice of a withdrawal by Seller or Purchaser of its authorisation(s) under Section 5(a) (*Authority of the Bank to Enter Instructions into the Euroclear System*);
- (ii) any written notice of default with respect to Seller or Purchaser or one or more of their Clients, if applicable, under the Master Repurchase Agreement sent by Seller or Purchaser to the Bank (unless and until Seller or Purchaser, as the case may be, withdraws such notice of default by notice to the Bank); or
- (iii) any written notice from Seller or Purchaser that it has filed for bankruptcy or declared that it is insolvent or bankrupt or that it has become the subject of any involuntary proceeding in respect of its insolvency or bankruptcy,

provided that, in each case, the Bank will enter instructions in accordance with (x) subsequent matching notices from Seller and Purchaser to the Bank or (y) a final order (whether or not subject to appeal) of a court of competent jurisdiction.

(b) Continuing Disputes

In the event of any other (x) dispute between or conflicting claims, demands, notices or instructions by Seller, Purchaser, a Client and/or any other person or (y) conflicting notices by Seller or Purchaser, with respect to any cash credited to any Purchaser's Account or to Seller's Account, any Securities, Seller's Account or any Purchaser's Account (other than withdrawals of authorisation, notices of default or filings for or declarations of insolvency or bankruptcy notified to the Bank pursuant to Section 9(a), the Bank may decline to comply with any and all claims, demands, notices or instructions or to take any action hereunder with respect to the cash, the Securities, Seller's Account or the Purchaser's Account as long as that dispute or conflict is continuing. The Bank will not be liable for any Losses arising out of such failure to act or to comply with such claims, demands, notices or instructions.

The dispute or conflict will be deemed to continue and the Bank will be entitled to refuse to act or comply until either:

- (i) the conflicting or adverse claims or demands have been determined in a court of competent jurisdiction or settled by agreement among the conflicting parties and/or such a court; or
- (ii) the Bank has received security or an indemnity satisfactory to it sufficient to hold it harmless from and against any and all Losses which it may incur by reason of taking any action directly or indirectly in connection with this Agreement.

The Bank may assume that no disputes or conflicting claims or notices exist unless it has received a copy of a written notice thereof sent by Seller to Purchaser or by Purchaser to Seller.

10. Termination

(a) Termination on Notice

Except as provided in Section 18(e) (*Survival*), this Agreement may be terminated by any party hereto on 30 Business Days' written notice to the other parties. In spite of any such notice of termination, this Agreement will remain applicable to any Transactions then outstanding.

(b) Immediate Termination

The Bank may terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions in the event that:

- (i) any representation made by Seller or Purchaser in this Agreement will have been incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated;
- (ii) Seller or Purchaser ceases to be a Participant in the Euroclear System; or

(iii) the Master Repurchase Agreement is terminated.

(c) Termination on Revocation of Representative's Authority If a Representative's authority to take action hereunder for the benefit of a Client is revoked by such Client, such Representative may, by giving written notice (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement) to the Bank specifying the relevant outstanding Transactions and the date at which such revocation came or will come into effect, terminate this Agreement with respect to such outstanding Transactions between Seller and Purchaser, and all such proposed transactions between Seller and Purchaser, in each case, as have been, or are proposed to be, entered into for the benefit of such Client.

In addition, if the Bank receives written notice from a Representative or its Client that such Representative's authority as aforesaid has been revoked by such Client and specifying the relevant outstanding Transactions and the date at which such revocation came or will come into effect (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement), the Bank may, in its discretion, by giving notice to Seller and Purchaser either:

- (i) terminate this Agreement with respect to all outstanding Transactions and all proposed transactions; or
- (ii) terminate this Agreement with respect to such outstanding Transactions and all such proposed transactions, in each case, as have been, or are proposed to be, entered into for the benefit of such Client.

Termination of this Agreement pursuant to this Section 10(c) will take place either immediately, if according to the relevant notice the revocation of the Representative's authority already came into effect, or as from the date at which the relevant notice states that such revocation will come into effect.

(d) Delivery after Termination

Upon the effectiveness of any termination of this Agreement as aforesaid, or as soon thereafter as is reasonably practicable, the Bank will, unless otherwise directed by Seller and Purchaser and subject to Section 9 (*Effect of Certain Events and Disputes*) of this Agreement and subject to Section 14(d) of the Terms and Conditions, cause to be delivered to Purchaser any amounts of Cash Margin and Purchased Securities then credited to any Purchaser's Account and to Seller any amounts of cash and securities then credited to Seller's Account.

11. Confidentiality

The Bank represents to each of Seller and Purchaser that information which reveals or relates to, or which would permit the determination of the Euroclear securities positions of, or Transactions by, Seller and/or its Client and Purchaser and/or any of its Clients, respectively (including any future or planned securities positions or transactions), or the type and amount of any Purchased Securities, will only be used by the Bank in connection with the operation of the Euroclear System or the provision of banking services to Purchaser or Seller, as the case may be.

Notwithstanding the foregoing, the Bank may, where it is bound by the law of any territory or country or pursuant to any requirement of any regulatory body, disclose any information or produce any document in its possession or control. If the Bank discloses information concerning Seller and/or its Client (if applicable) or Purchaser and/or any of its Clients (if applicable) to any such regulatory body, the Bank will inform Seller or Purchaser, as appropriate, unless the Bank may not do so or has been requested not to do so by such regulatory authority.

12. Amendments

(a) RSA Terms and Conditions

These RSA Terms and Conditions may only be amended or modified by a written agreement executed by the parties and the Annexes I and II may be amended or modified only by a written agreement, except as set forth in paragraphs (b), (c) and (d) below. Unconditional SWIFT Elections may only be amended or modified by:

- (i) establishing a new set of Unconditional SWIFT Elections, in place of the then current Unconditional SWIFT Elections, by repeating the procedure set out in Section 2(d) and (e); or
- (ii) complying with the procedures for unilateral amendment set out in paragraph (b) below.

An amendment under this Section 12(a) is effective when the Bank notifies Seller and Purchaser that it is effective.

(b) Unilateral Amendment

Purchaser may, upon notice to and with the consent of the Bank, amend Annexes I and II to include in Eligible Securities one or more types of security, identified by ISIN or Common Code, without the agreement of Seller.

Seller may, upon notice to and with the consent of the Bank, amend Annexes I and II to exclude from Eligible Securities, for a stated period or until a subsequent notice of Seller is given (with the consent of the Bank) to include such Eligible Securities again, one or more types of security, identified by ISIN or Common Code, without the agreement of Purchaser.

The Bank may, upon notice to Seller and Purchaser, amend Annexes I and II to exclude any security or securities from Eligible Securities or any currency or currencies from Eligible Cash without the agreement of Seller or Purchaser.

An amendment under this Section 12(b) must be in writing, which may include a facsimile or SWIFT message, and will be effective when the Bank notifies Seller and Purchaser that it is effective.

(c) Unilateral Amendment to Discontinue AutoSelect

Purchaser may at any time, by giving notice to the Bank before the deadline indicated in the Timetable for Allocation Mode Management (as defined in the RSA Operating Procedures), amend this Agreement to discontinue the use of AutoSelect, without the agreement of Seller or the Bank, for one or more Eligibility Sets or for all Eligibility Sets, effective as of the Business Day indicated in the Timetable.

(d) RSA Operating Procedures

The Bank may amend the RSA Operating Procedures at any time by notice to Seller and Purchaser. Seller and Purchaser will be deemed to have agreed to and accepted any such amendment (i) effective immediately, if the amendment does not adversely affect Seller or Purchaser or (ii) effective 30 Business Days after the Bank sends it, for any other amendment.

(e) No Waivers

No waiver, or acceptance of performance other than as provided in this Agreement, on the part of any party will be a waiver, or acceptance of such performance, in the future. The Bank's acceptance, in its discretion, of any notice or notices from Seller or Purchaser received after the relevant deadline set out in the Timetable does not oblige it to accept any such notice so received in the future.

13. Agreement of the Parties

If any provision of this Agreement is inconsistent or in conflict with any provision of the Master Repurchase Agreement (including any provisions to the effect that such Master Repurchase Agreement will prevail over any other agreement), this Agreement will prevail.

14. Applicable Law; Jurisdiction

This Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) will be governed by and construed in accordance with English law.

Each of Seller and Purchaser irrevocably agrees for the exclusive benefit of the Bank that the Courts of England are to have jurisdiction to settle any disputes or claims which may arise out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) and that, accordingly, any suit, action or proceeding arising out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) may be brought in such Courts. Nothing contained in this Section 14 will limit the right of the Bank to take any such suit, action or proceeding against each of Seller and Purchaser or both in any other court of competent jurisdiction nor will the taking of such suit, action or proceeding in one or more jurisdictions preclude the taking of any such suit, action or proceeding in any other jurisdiction by the Bank whether concurrently or not, to the extent permitted by the law of such other jurisdiction.

The Seller and Purchaser waive (and agree not to raise) any objection, on the ground of forum non conveniens or any other ground, to the taking of proceedings by the Bank in any court in accordance with this Section 14. The Seller and Purchaser also agree that a judgment against one or both of them in the Bank's favour in proceedings brought in any jurisdiction in accordance with this Section 14 shall be conclusive and binding upon them and may be enforced in any other jurisdiction.

15. Waiver of Immunity

Each of Seller and Purchaser waives, to the fullest extent permitted by applicable law, all immunity (on the basis of sovereignty or otherwise) from jurisdiction, attachment (both before and after judgment) and execution to which it might otherwise be entitled in any suit, action or proceeding in the Courts of England or of any other country or jurisdiction relating in any way to this Agreement and agrees that it will not raise, claim or cause to be pleaded any such immunity at or in respect of any such suit, action or proceeding.

16. Domicile

Each of Seller and Purchaser elects domicile in Belgium at the Bank for the purpose of any suit, action or proceeding in Belgium arising out of or relating to this Agreement and will appoint promptly on request from the Bank authorised agents in London for the purpose of receiving service of process in any such suit, action or proceeding in England.

17. Service of Process

Each of Seller and Purchaser consents to the service of any and all process, notices or other documents which may be served in any such suit, action or proceeding either:

- (i) by mailing a copy thereof to its address referred to in Section 18(a) (*Notices*) by registered or certified mail;
- (ii) by serving a copy thereof at its domicile in Belgium or upon any agent for service appointed as provided in Section 16 (*Domicile*) (whether or not the election of domicile or the appointment of such agent for service of process will for any reason prove to be ineffective or such agent will fail to accept or acknowledge such service) and mailing a copy thereof to its address referred to in Section 18(a) (*Notices*) by registered or certified mail; or

(iii) in any other manner permitted by applicable law.

Each of Seller and Purchaser waives all claims of error by reason of any service in accordance with this Section 17 and agrees that such service (x) will be deemed in every respect effective service of process upon it and (y) will be taken and held to be valid personal service upon and personal delivery to it.

18. Miscellaneous

(a) Notices

Unless otherwise specified herein, notices required by this Unless otherwise specified herein, notices required by this Agreement must be in writing (which will include, without limitation, facsimile, EUCLID, EasyWay or SWIFT).

Seller and Purchaser agree that any notices given under this Agreement will be sent to the Bank to the attention of 'Collateral Management Administration' at the address set forth in Exhibit 1 or to the attention of such other contact at such other address as the Bank may from time to time designate to Seller and Purchaser in writing. The Bank is not required to comply with and is not deemed to have any notice or knowledge of any notice sent by any Client. Any notice to Seller or Purchaser authorised or required by this Agreement will be addressed to the persons indicated at the addresses set forth in Exhibit 1 or to such other person or persons as the receiving party may from time to time designate to the other parties in writing.

Chapter 3 (*Transaction Processing*) of the RSA Operating Procedures contains the Timetable, setting out the deadlines by which the various notices must be received by the Bank for processing. The Bank may, in its sole discretion, attempt to process notices received or validated after the deadlines set forth in the Timetable. Notices will be effective from the time they are actually received by the intended recipient by telephone, facsimile, EUCLID, EasyWay or SWIFT or any other means designated by the Bank.

In any situation in which this Agreement requires written notice, the Bank may but is not required to act on oral notice reasonably believed by it to be notice of a person acting on behalf of Seller or Purchaser or, for the purposes of Section 10(c) (Termination on Revocation of Representative's Authority), a Client or a person purporting to be a Client, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication. Seller and Purchaser shall confirm in writing any oral or electronic data notice. Failure to confirm in writing or any conflict between subsequent written notices and oral or data notices will not affect the authority of any acts taken or omitted by the Bank pursuant to oral or electronic data notices. The Bank reserves the right to record telephone conversations with Seller or Purchaser and to refer to such recordings in the event of any dispute. Nothing in this paragraph permits oral amendments to this Agreement.

(b) Binding Agreement; Assignment and Novation

The provisions of this Agreement shall be binding upon and inure to the benefit of the Bank, Seller and Purchaser and their respective successors and assigns (including any trustee, conservator or other officer of the court in any bankruptcy or insolvency proceeding), subject to the next paragraph.

The rights and obligations of each party under this Agreement may not be assigned or novated without the written consent of the other parties and any assignment or novation without such consent will be null and void.

(c) Severability

Each provision and agreement in this Agreement will be separate from any other provision or agreement in this Agreement and will be enforceable, notwithstanding the unenforceability of any other provision or agreement.

(d) Representatives

Despite the fact that any Representative is acting for the benefit of any Client in connection with this Agreement:

- (i) that Representative will have and be entitled to assert any claim, counterclaim or defence in connection with this Agreement or the Bank's performance of services under this Agreement only to the extent that it has or is entitled to assert that claim, counterclaim or defence in its capacity as a principal party to this Agreement;
- (ii) that Representative shall be liable for the performance of all its obligations and for all its indemnities given under this Agreement, including but not limited to the indemnity contained in Section 8 (*Indemnification*), as a principal party to this Agreement;
- (iii) no Client is a party to this Agreement and no Client will have any rights under or in connection with this Agreement against the Bank; and
- (iv) the Bank will have obligations under or in connection with this Agreement only to Seller and Purchaser and will not be liable to any Client under or in connection with this Agreement in any manner whatsoever (including, without limitation, in contract or in tort).

(e) Survival

All releases, limitations of liability and indemnifications provided in this Agreement will survive the termination of this Agreement.

(f) Headings and References

The headings and captions in this Agreement are for reference only and will not affect the construction or interpretation of any of its provisions.

19. Glossary

References in this Agreement to the singular include the plural, and vice versa.

The following words, as used in this Agreement, have the following meanings:

'Agreement' has the meaning set forth in the first sentence of this Agreement.

'AutoSelect' means an electronic processing module owned by the Bank designed to facilitate the selection of securities for Triparty Agreements.

'AutoSelect Methodology' means the method by which the AutoSelect processing module selects securities to be transferred between Seller's Account and counterparty accounts, as described in Chapter 6 (*AutoSelect Processing Methodology*) of the RSA Operating Procedures.

'AutoSelect Processing' means an option in Annexes I and II which determines whether or not Seller and Purchaser may use AutoSelect processing of Transactions in an Eligibility Set under this Agreement.

'AutoSelect Transaction' means a Transaction that is processed by the Bank using AutoSelect.

'Bank' means Euroclear Bank and its successors and assigns, as repurchase service agent under this Agreement.

'Business Day' means a day when the operation of the Euroclear System takes place.

'Cash' means Eligible Cash or Cash Margin.

'Cash Margin' means, with respect to a Transaction:

- the Eligible Cash, if any, credited with respect to such Transaction to the relevant Purchaser's Account pursuant to a margin deficit adjustment; or
- a sum of money equivalent to the proceeds from the redemption of any Purchased Security or proceeds received as consideration upon a takeover or similar event with respect to any Purchased Security,

increased or decreased by any cash credited or debited, as the case may be, to the relevant Purchaser's Account from time to time with respect to such Transaction pursuant to a margin adjustment, a substitution of Eligible Securities for Cash Margin, a Transaction-size decrease or a closing pursuant to this Agreement.

'Claims' means any claim, demand, action, investigation or administrative proceeding made or brought by an Indemnitor or any Related Party of that Indemnitor in connection with this Agreement. 'Client' means each person other than Seller or Purchaser:

- who has entered into, or who will enter into, the Master Repurchase Agreement with Seller or Purchaser; or
- for whose benefit Seller or Purchaser has entered into, or will enter into, the Master Repurchase Agreement,

and for whose benefit Seller or Purchaser has entered into, or will enter into, this Agreement.

'Eligibility Set' means the Eligible Securities and Eligible Cash identified in each set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and the options, amounts and percentages selected in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time.

'Eligible Cash' means on any date:

- any Settlement Currency which Seller and Purchaser have designated as the securities denomination currency of an Eligible Security in the applicable Eligibility Set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time; and
- if any such currency has been replaced by the euro, the euro; and
- with respect to a Transaction, the Transaction Currency of that Transaction.

'Eligible Securities' means on any date any of the Eurocleareligible securities of a type which Seller and Purchaser have agreed, with the consent of the Bank, will be eligible as of such date to become Collateral securities for a Transaction by their inclusion in the applicable set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and as may be limited by certain options in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time. 'Equivalent Securities' means, with respect to any Transaction:

- securities of the same issuer, being of an identical type, nominal value, description and amount to the Purchased Securities with respect to such Transaction; or
- in relation to Purchased Securities which are partly paid or have been converted, subdivided, consolidated, made the subject of a takeover, capitalisation issue, rights issue, redenomination or event similar to any of the foregoing, the following:
 - in the case of conversion, subdivision or consolidation, securities equivalent to the securities into which the Purchased Securities have been converted, subdivided or consolidated;
 - in the case of takeover, securities equivalent to the consideration or alternative consideration received;
 - in the case of a call on partly paid securities, securities equivalent to the paid-up securities;
 - in the case of a capitalisation issue, securities equivalent to the Purchased Securities together with the securities allotted by way of bonus thereon;
 - in the case of a rights issue, securities equivalent to the Purchased Securities together with the securities allotted in respect thereof;
 - in the event that income in the form of securities, or a certificate which may at a future date be exchanged for securities or an entitlement to acquire securities is distributed, securities equivalent to the Purchased Securities together with securities or a certificate or an entitlement equivalent to those allotted;
 - in the case of a redenomination into euro (and a related renominalisation, if applicable), securities of the same issuer, being of an identical type, nominal value, description and amount to the redenominated (and renominalised, if applicable) Purchased Securities; and
 - in the case of any event similar to any of the foregoing, securities equivalent to the Purchased Securities together with or replaced by securities or other property equivalent to that received in respect of such Purchased Securities resulting from such event.

'Euroclear Operator' means Euroclear Bank, and its successors and assigns, acting in its capacity as operator of the Euroclear System.

'Euroclear System' means the clearance system for internationally traded securities operated under contract by the Euroclear Operator.

'Euroclear Tariff' means the Euroclear Tariff folder (which includes a general fees brochure and specific tariff sheets) distributed to all Participants, as may be amended from time to time.

'Euroclear-eligible securities' means, at any time, any of the securities accepted at that time for deposit into the Euroclear System in accordance with the Operating Procedures.

'Force Majeure' means any event or circumstance beyond the reasonable control of the Bank, including, without limitation, war, insurrection, riot, civil commotion, act of God, accident, fire, water damage, explosion, mechanical breakdown, computer or systems failure or other equipment failure, failure or malfunctioning of any communications media for whatever reason (whether or not such media are made available to Seller or Purchaser by the Bank), interruption (partial or total) of power supply or other utility or service, strike or other labour stoppage (partial or total) and any law, decree, regulation or order of any government or governmental body (including any court or tribunal).

'Indemnified Party' means each of the Bank, its officers, directors and employees.

'Indemnitor' means Seller or Purchaser, as the case may be.

'Intended Purchase Price' means, with respect to a Transaction, the amount indicated as such in the matching initiation notice, increased by amounts of cash proposed to be transferred from Purchaser's Account to Seller's Account in a matching notice of Transaction-size increase and decreased by amounts of cash proposed to be transferred from Seller's Account to Purchaser's Account in a matching notice of Transaction-size decrease or pursuant to a closing.

'Internet Report' means the internet report made available at the website of the Euroclear System by the Bank as described in Chapter 5 (*Reporting by the Bank*) of the RSA Operating Procedures to recipients subscribing for the service in a separate subscription agreement.

'Losses' means, in relation to any person, any losses, liabilities, obligations, fines, penalties, damages, taxes (other than taxes on the overall income of such person), costs, expenses (to the extent reasonable and other than ordinary administrative expenses) or fees (including reasonable counsel's fees and accountant's fees) of any kind or nature whatsoever at any time.

'Manual Transaction' means a Transaction that is not an AutoSelect Transaction.

'Master Repurchase Agreement' means one or more master agreement(s) between applicable Seller and Purchaser and/or one or more of their respective Clients under which Seller and Purchaser and/or one or more of their respective Clients may enter into repurchase transactions from time to time. **'Multiple Purchaser Accounts'** means an option in Annexes I and II which determines whether or not Purchaser may open more than one Purchaser's Account.

'Net Paying Security' means any security with respect to which any interest, dividend or other distribution payable by the issuer to either Seller or Purchaser is required by law to be paid subject to withholding or deduction for or on account of taxes or duties of any nature imposed, levied, collected, withheld or assessed by any authority having power to tax.

'Operating Procedures' means *The Operating Procedures of the Euroclear System* established in accordance with Section 3 of the Terms and Conditions, as such Operating Procedures may be amended from time to time.

'Purchaser' has the meaning set forth in the first sentence of this Agreement.

'Purchaser's Account' means the Securities Clearance Account (or, in the case of Multiple Purchaser Accounts, one of such Securities Clearance Accounts) in the Euroclear System in the name of Purchaser and the Cash Account in the Euroclear System in the name of Purchaser associated therewith, the number of which is indicated in Annexes I and II, which will be used only for Securities and Cash, respectively, with respect to Transactions under this Agreement and which in each case shall be designated a 'client account' if Purchaser has entered into this Agreement for the benefit of one or more Clients.

'Purchased Securities' means, with respect to any Transaction:

- the Eligible Securities credited with respect to such Transaction to the relevant Purchaser's Account as of the relevant Purchase Date (as defined in the RSA Operating Procedures), increased or decreased by any Securities credited or debited, as the case may be, to that Purchaser's Account from time to time with respect to such Transaction pursuant to this Agreement; or
- Equivalent Securities thereto.

'Related Party' in respect of an Indemnitor means any agent (including employees of such agent), employee, client (including Clients) or any other person for whose benefit or on whose behalf that Indemnitor acts or who acts for the benefit of or on behalf of that Indemnitor.

'Representative' means either or each of Seller and Purchaser if it has entered into, or will enter into, this Agreement for the benefit of one or more Clients. **'RSA Operating Procedures'** means the Repurchase Service Agreement Operating Procedures, as amended from time to time, which, together with the RSA Terms and Conditions, form one contractual agreement.

'RSA Terms and Conditions' means these Repurchase Service Agreement Terms and Conditions, which, together with the RSA Operating Procedures, form one contractual agreement.

'Securities' means Eligible Securities or Purchased Securities.

'Seller' has the meaning set forth in the first sentence of this Agreement.

'Seller's Account' ' means a Securities Clearance Account in the Euroclear System in the name of Seller and the Cash Account in the Euroclear System in the name of Seller associated therewith, the number of which is indicated in the Annexes, which will be used for Securities and Cash, respectively, with respect to Transactions and which in each case will be designated a 'client account' if Seller has entered into this Agreement for the benefit of one Client.

'Settlement Currency' at any time means any of the currencies accepted at that time in the Euroclear System as a Settlement Currency in accordance with the Operating Procedures.

'Terms and Conditions' means the *Terms and Conditions Governing Use of Euroclear*, as amended from time to time.

'Timetable' means the table of deadlines set forth in Chapter 3 (*Transaction Processing*) of the RSA Operating Procedures, as amended from time to time.

'Transaction' means any repurchase transaction governed by the Master Repurchase Agreement and this Agreement.

'Transaction Currency' means, with respect to a Transaction, the currency in which the Intended Purchase Price is denominated.

'Triparty Agreement' means an agreement among two Participants and the Bank under which the Bank serves as service agent.

'Unconditional SWIFT Elections' has the meaning set forth in section 2(e) of this Agreement.

20. Effectiveness

- (A) This Agreement will become binding upon Seller, Purchaser and the Bank if:
 - (i) the Bank has executed this Agreement, previously signed by Seller and Purchaser; and
 - (ii) the Bank has received from Purchaser the duly authorised and executed documentation relating to the opening of the Purchaser's Account (or, in the case of Multiple Purchaser Accounts, the opening of all such accounts); and
 - (iii) the Bank has notified Seller and Purchaser that the Agreement is effective.
- (B) Notwithstanding the provisions of paragraph (A) above, this Agreement will also become binding upon Seller, Purchaser and the Bank if:
 - (i) the Seller and the Bank have executed the Form of Agreement RG 810 specifying (a) the Repurchase Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (ii) the Purchaser and the Bank have executed the Form of Agreement RG 810 specifying (a) the Repurchase Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (iii) either Seller or Purchaser have duly executed Annexes I and II and the provisions of Sections 2(d),(e) and (f) of this Agreement are complied with in relation to such Annexes; and
 - (iv) the Bank has received from Purchaser the duly authorised and executed documentation relating to the opening of the Purchaser Account (or, in the case of Multiple Purchaser Accounts, the opening of all such accounts); and
 - (v) the Bank has notified Seller and Purchaser that the Agreement is effective.

21. Counterparts

This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, and all of which together will be one agreement.



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Exhibit P-9



August 2015

Securities Lending Service Agreement

Terms and Conditions



Securities Lending Service Agreement

Terms and Conditions

(to be read in conjunction with the SLSA Operating Procedures)

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Exhibit 1 – Addresses Annexes I and II (included in folder)

Securities Lending Service Agreement

The triparty securities lending service agreement (the 'Agreement') comprises two parts, the SLSA Terms and Conditions and the SLSA Operating Procedures.

All references to 'the Agreement' or 'this Agreement' are to the SLSA Terms and Conditions and the SLSA Operating Procedures, both as amended from time to time, which are to be read and construed as, and which together form, one contractual agreement.

SLSA Terms and Conditions

Borrower or one or more of its Clients (if applicable) and Lender or one or more of its Clients (if applicable) have entered into a Securities Lending Agreement under which Borrower or one or more of its Clients (if applicable) may borrow securities from Lender or one or more of its Clients (if applicable) from time to time subject to the provision by Borrower or one or more of its Clients (if applicable) of security for such loan(s). If Borrower and/or Lender is a Representative, it has agreed with each Client to enter into this Agreement for its benefit.

Borrower and Lender have requested the Bank to perform certain service functions to support those secured loans. Therefore, in consideration of the mutual promises included in this Agreement and intending to be legally bound hereby, the parties agree to the following terms.

Capitalised words used in these SLSA Terms and Conditions have the meanings assigned to them in Section 19 (Glossary). Capitalised words used only in the SLSA Operating Procedures have the meanings assigned to them in Chapter 9 (Glossary) of the SLSA Operating Procedures. If any capitalised word is defined in both these SLSA Terms and Conditions and the SLSA Operating Procedures, and the definitions assigned are inconsistent, the definition in these SLSA Terms and Conditions will prevail. If capitalised terms are used but not defined, they have the meaning assigned to them in the Terms and Conditions and the Operating Procedures. The use of the term 'type' with respect to securities means securities with the same security code and description.

1. Appointment and Acceptance of the Bank

Each of Borrower and Lender appoints the Bank as securities lending service agent to carry out the duties described in this Agreement and to take any actions incidental to those duties. The Bank accepts such appointment and consents to act as securities lending service agent to carry out only those duties.

2. Selections

(a) Eligible Securities and Eligible Cash

Borrower and Lender, with the consent of the Bank, by executing Annexes I and II, have selected in Annexes I and II Eligible Securities and Eligible Cash, in one or more sets, to be used with respect to Transactions under this Agreement.

(b) Eligibility Set Profiles

Borrower and Lender, with the consent of the Bank, by checking the relevant boxes or filling in the relevant lines in Annexes I and II and executing Annexes I and II, have selected certain options, amounts and percentages applicable to each set of Eligible Securities and Eligible Cash. If no selection is made with respect to a given option, amount or percentage, the default selection, as indicated in Annexes I and II, will apply.

(c) Annexes

Borrower, Lender and the Bank agree to the selections made in Annexes I and II (as the same may be amended from time to time in accordance with Section 12 (*Amendments*)). Annexes I and II and any other numbered Annexes to this Agreement form an integral part of this Agreement.

(d) Conditional SWIFT Elections

If only Borrower or Lender executes Annexes I and II, the provisions of this paragraph (d) and Section 2(e) and (f) shall apply instead of Section 2(a) to (c).

Borrower or Lender, with the consent of the Bank, having completed and executed Annexes I and II, sends such Annexes to the Bank, indicating the name of the Eligibility Set and set number (the 'Completed Annexes'). The Bank will upon receipt of the Completed Annexes, provide this documentation to the counterparty Borrower or Lender, as indicated by Borrower or Lender.

If Borrower and Lender want to initiate Transactions on the basis of the Completed Annexes, Borrower and Lender shall each send a SWIFT message to the Bank in a form specified by the Bank which refers to the (i) name of the Eligibility Set, (ii) set number, and (iii) account numbers of Borrower and Lender.

The elections made in the Completed Annexes and confirmed by each of the Borrower and Lender in a SWIFT message are together the 'Conditional SWIFT Elections'.

(e) Unconditional SWIFT Elections

Conditional SWIFT Elections will only become binding on the parties (i) if the Bank notifies Borrower and Lender by SWIFT message that it consents to them and (ii) from the time specified by the Bank in any such notice.

Conditional SWIFT Elections that have become effective under this Section 2(e) or Section 12(a), together with the related consenting SWIFT message sent by the Bank, constitute the 'Unconditional SWIFT Elections'. Unconditional SWIFT Elections, as amended or modified from time to time, form an integral part of this Agreement. Borrower, Lender and the Bank agree that the Unconditional SWIFT Elections may be amended or modified from time to time in accordance with Section 12 (*Amendments*).

(f) Parties' obligations in relation to SWIFT Elections

- (i) The Bank agrees to maintain a record of all Unconditional SWIFT Elections which have, from time to time, come into effect under this Agreement and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).
- (ii) The parties agree not to object to the admission as evidence in any legal proceedings of any Unconditional SWIFT Elections and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).

3. Euroclear System

Each of Borrower and Lender acknowledges that securities and cash credited to Borrower's Account or any Lender's Collateral Account or Lender's Account are held in the Euroclear System pursuant to the Terms and Conditions and the Operating Procedures.

4. Representations

(a) Representations of Borrower and Lender

Borrower and Lender each represents to the Bank and to each other, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of the jurisdiction of its organisation with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all requisite corporate action, and this Agreement is a legal, valid and binding obligation of it enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally;
- (iii) the execution, delivery and performance by it of this Agreement have been and will be duly authorised by all necessary governmental and other approvals, including exchange control approvals;
- (iv) the execution, delivery, and performance by it of this Agreement and the transactions contemplated under this Agreement do not and will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any statute, regulation, rule, order or judgment applicable to it (including any statute, regulation, rule, order or judgment relating to taxes);
- (v) it has (and if it is a Representative, it has been granted by each Client for whose benefit it has entered into the Securities Lending Agreement and, if any Client is a party to the Securities Lending Agreement as of such date, such Client has) the power and authority to enter into the Securities Lending Agreement and the secured loans made pursuant thereto;

- (vi) it has the power and authority to deliver and transfer the securities and cash delivered or transferred and to take any other action hereunder and, if it is a Representative, each Client has authorised it to execute and deliver this Agreement and to take all such actions hereunder for such Client's benefit; and
- (vii) in the case of Borrower, if it is a Representative and has selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, either:
 - (A) (x) it is not acting for the benefit of more than one Client under this Agreement and (y) it is not acting through Borrower's Account for the benefit of any other client under another Triparty Agreement; or
 - (B) it has received from each such Client or client a specific authorisation to engage in transactions under Triparty Agreements for the benefit of other clients out of the same Borrower's Account.

(b) Representations of the Bank

The Bank represents to each of Borrower and Lender, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of Belgium with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all required corporate action, and this Agreement is a legal, valid and binding obligation of the Bank enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally; and
- (iii) the execution, delivery, and performance of this Agreement will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any Belgian statute, regulation, rule, order or judgment applicable to it.

5. Transactions

(a) Authority of the Bank to Enter Instructions into the Euroclear System

Each of Borrower and Lender authorises the Bank to enter or cancel instructions on its behalf into the Euroclear System and to take all other actions in connection with such instructions in accordance with the terms of this Agreement. Without limiting the foregoing, Lender authorises the Bank to accept, subject to the satisfaction of any relevant conditions, the written notices of Borrower identifying Securities and/or Cash to be transferred pursuant to the SLSA Operating Procedures until receipt by the Bank of written notice of withdrawal of any such authorisation.

(b) Authority of the Bank to Use AutoSelect

If Borrower and Lender have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Lender has not discontinued AutoSelect pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), each of Borrower and Lender authorises the Bank to select Securities on its behalf and deliver them to the other in accordance with the AutoSelect Methodology, as described in Chapter 6 (*AutoSelect Processing Methodology*) of the SLSA Operating Procedures, with respect to AutoSelect Transactions assigned to the corresponding Eligibility Set(s).

(c) Authority of Borrower to Use AutoSelect and of Lender to Discontinue AutoSelect

If Borrower and Lender have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Lender has not discontinued AutoSelect pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), Lender authorises the Bank to accept the written notice of Borrower identifying or converting an AutoSelect Transaction or a Manual Transaction assigned to the corresponding Eligibility Set pursuant to the procedures set forth in the SLSA Operating Procedures; provided, however, that:

- (i) if Lender gives the Bank a notice to convert an AutoSelect Transaction to a Manual Transaction prior to the relevant deadline indicated in the Timetable, the Bank will process the Transaction as a Manual Transaction beginning on the Business Day indicated in the Timetable, and
- (ii) if Lender has amended this Agreement to discontinue the use of AutoSelect for one or more Eligibility Sets or for all Eligibility Sets by providing a notice pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), the Bank will process all Transactions in those Eligibility Sets as Manual Transactions beginning at the time that amendment is effective.

Until the time, if any, that the Bank receives a notice from Lender stating that it is willing to resume AutoSelect processing of the Transaction (or of all the Transactions), the Bank will not process the Transaction(s) as an AutoSelect Transaction even if Borrower gives the Bank a notice to convert the Transaction to an AutoSelect Transaction.

Lender will send to Borrower a copy of any notice it gives to the Bank to convert an AutoSelect Transaction to a Manual Transaction or to discontinue AutoSelect for all Transactions in one or more Eligibility Sets or all Eligibility Sets, but the failure of Lender to do so will not affect the Bank's obligations under the previous two paragraphs. Borrower will have no right to contest Lender's notice to the Bank. The Bank will send to Borrower a copy of Lender's notice as soon as reasonably practicable.

(d) AutoSelect Acknowledgements

- (i) Each of Borrower and Lender acknowledges that instructions with respect to AutoSelect Transactions (if any) are being generated and entered by the Bank on behalf of Borrower and Lender in accordance with the AutoSelect Methodology and such other procedures consistent therewith as agreed to from time to time by Borrower and the Bank and that such instructions are generated and entered only to the extent Securities are, in accordance with such procedures, available for allocation and transfer.
- (ii) Each of Borrower and Lender acknowledges that each of them may enter into other Triparty Agreements with the Bank under which AutoSelect processing is used for transactions.

(e) Access of Borrower to Lender's Reports

Lender agrees to provide Borrower access to information on future income payments and redemptions relating to Collateral Securities that the Euroclear Operator provides to Lender in accordance with the Operating Procedures through Euroclear Advance Notice of Income and Redemption (ANIR) reports, or any similar successor report.

Lender also agrees to provide Borrower access to provisional and definitive details about upcoming option deadlines and corporate events affecting securities held in Lender's Collateral Account(s) through Euroclear DACE reports that the Euroclear Operator provides to Lender in accordance with the Operating Procedures, or any similar successor report.

(f) Authority for Internet Reporting

Each of Borrower and Lender authorises the other to access, and the Bank to make available through the Internet, the Internet Reports.

6. Bank Fees

Unless otherwise agreed, Borrower agrees to pay to the Bank all fees relating to Lender's Collateral Account(s) and all amounts (other than keying, query and communications fees, which will be payable by the user thereof) relating to this Agreement, in each case as such amounts are set forth in monthly billing statements sent by the Bank to Borrower in accordance with the Euroclear Tariff, as in effect from time to time. Amounts payable by Borrower will be debited from Borrower's Account or such other Cash Account as Borrower may specify by written notice to the Bank from time to time or, if no such Cash Account has been duly specified, any Cash Account of Borrower. Amounts payable by Lender will be debited from Lender's Collateral Account or such other cash account as Lender may specify by written notice to the Bank from time to time or, if no such cash account has been duly specified, any cash account of Lender. No amount may be debited from any account which is subject to the Pledged Account Agreement, and a party with such an account must specify in writing another account for the purposes of debiting amounts under this Section 6.

7. Duties and Liabilities of the Bank

(a) General

- (i) The Bank has no obligations except as expressly set out in this Agreement.
- (ii) The Bank is not liable to Borrower or Lender for any Losses arising in connection with:
 - (A) any event or matter referred to in paragraphs (i), (ii) or (iii) of Section 8(a) (*Indemnitor's Instructions*, *Default or Breach*) or paragraphs (i) or (ii) of Section 8(b) (*Bank's Performance*) or Section 9 (*Effect of Certain Events and Disputes*) of this Agreement, or Section 12(c) of the Terms and Conditions; or
 - (B) any act or omission of the Bank in connection with this Agreement,

except in the case of its negligence or wilful misconduct.

- (iii) The Bank is not liable to anyone for unforeseeable Losses, Losses not flowing directly and naturally from a breach of this Agreement or Losses representing loss of profit, except in the case of its wilful misconduct and then only to Borrower or Lender.
- (iv) In the event of any dispute, Borrower or Lender, as the case may be, bears the burden of proving negligence or wilful misconduct by the Bank.

- (v) The Bank is not liable to anyone for any Losses arising in connection with this Agreement, the Securities Lending Agreement, the Pledged Account Agreement (if applicable) or any other related agreement except, but only to the extent specified in paragraphs (ii) and (iii) above, to Borrower or Lender.
- (vi) Acceptance of securities into the Euroclear System is governed by the Operating Procedures and not this Agreement. Acceptance and setting up new securities for use in the services described in this Agreement is not part of the services which the Bank agrees to provide pursuant to this Agreement.
- (vii) All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from this Agreement.

(b) Borrower's and Lender's Responsibilities

The Bank makes no representation regarding, need not inquire into, does not guarantee and is not liable to anyone for any Losses arising in connection with the following, all of which are Borrower's and/or Lender's sole responsibility:

- (i) the title, validity or genuineness of any Security;
- (ii) the legality of the loan, delivery or transfer of any Cash or Security;
- (iii) the due authorisation of any person to act on behalf of Borrower or Lender in connection with Eligible Cash or Eligible Securities held in Borrower's Account or Collateral Cash or Collateral Securities held in any Lender's Collateral Account or Lender's Account;
- (iv) the capacity and authority of a Representative to act for the benefit of any Client;
- (v) the characterisation of any Security as a Net Paying Security or the eligibility of any Security as a Collateral Security under the Securities Lending Agreement;
- (vi) the validity or enforceability of, or any statement or representation made by Borrower and/or Lender in connection with, this Agreement, the Securities Lending Agreement, the Pledged Account Agreement (if applicable) or any other related agreement;
- (vii) the performance of the obligations of Borrower or Lender under this Agreement, the Securities Lending Agreement, the Pledged Account Agreement (if applicable) or any other related agreement or the performance of any Client (if applicable) under the Securities Lending Agreement or any other related agreement;
- (viii) an extension of credit in connection with any Transaction;
- (ix) the settlement of instructions entered into the Euroclear System; or

(x) the value (or the sufficiency of the value) of any Securities delivered or transferred.

(c) Bank's Notice and Inquiry

Except as expressly set out in this Agreement, the Bank:

- (i) will be deemed to have no notice of, and need not inquire into, any transaction between Borrower and Lender (or one or more of their respective Clients, if applicable) under the Securities Lending Agreement or otherwise or the performance or breach of this Agreement, the Securities Lending Agreement, the Pledged Account Agreement (if applicable) or any other related agreement; and
- (ii) need not give Borrower or Lender notice of any breach by Borrower or Lender of this Agreement or any breach by Borrower or Lender (or one or more of their respective Clients, if applicable) of the Securities Lending Agreement, the Pledged Account Agreement (if applicable) or any other related agreement.

(d) Notices to Bank

- (i) The Bank may rely on any notice or data from Borrower or Lender under this Agreement and is not liable to anyone for any Losses arising in connection with:
 - (A) unsigned notices, or the unauthorised signing or giving of written or oral notices by any person, or the unauthorised alteration of them or of any other instrument;
 - (B) the incorrectness or incompleteness of information in any notice; or
 - (C) the incorrectness or incompleteness of data transmitted by computer tape or terminal or other computer facility,

unless the Bank actually knows (x) that the notice or data was not sent by Borrower or Lender; (y) of the lack of authority; or (z) that the information or data was incorrect.

- (ii) The Bank is not liable to anyone for any Losses arising in connection with:
 - (A) any notices sent otherwise than in accordance with Section 18(a) (*Notices*);
 - (B) its acting upon oral notice reasonably believed by it to be from a person acting on behalf of Borrower or Lender, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication, even if subsequent written notices differ from such oral or data notices; or
 - (C) its acceptance of, and its acting, in its discretion, upon, notices from Borrower or Lender received after the deadlines set out in the Timetable.

(e) AutoSelect Allocation

The Bank makes no representation that any allocations of securities or cash generated by AutoSelect in accordance with this Agreement will represent the optimal allocation of securities or cash among all AutoSelect Transactions or all counterparties of Borrower. The Bank is not liable to anyone for any Losses arising in connection with securities not being optimally allocated.

(f) Price Data

The Bank is not liable to anyone for any Losses arising in connection with any error by, or any incorrect price received from, any pricing or other information source used by the Euroclear Operator in its ordinary course of business or the appropriateness or relative change of any price and need not determine volatility factors with respect to or the appropriateness of any price.

(g) Force Majeure

If the Bank acts or fails to act (including, without limitation, fails to receive or deliver, or cause to be received or delivered, Securities or fails to receive or make, or cause to be received or made, any payment) as a result of or in connection with Force Majeure, such action or failure is not a breach of this Agreement and the Bank is not liable to anyone for Losses arising in connection with such action or failure.

8. Indemnification

(a) Indemnitor's Instructions, Default or Breach

Subject to Section 8(e), Borrower or Lender (in each case, the 'Indemnitor') will promptly upon demand by the Bank release, defend, indemnify and hold harmless each Indemnified Party for and against Losses or Claims suffered by that Indemnified Party arising in connection with:

- (i) the Bank's execution of instructions based on that Indemnitor's notices;
- (ii) the Bank's failure or delay, in whole or in part, to take any action to be taken under this Agreement or otherwise to fulfil any of its obligations under this Agreement, to the extent that such failure or delay arises in connection with the negligence or wilful misconduct of that Indemnitor or any Related Party of that Indemnitor; or
- (iii) any breach by that Indemnitor or any Related Party of that Indemnitor of any provision of this Agreement or any law, decree, regulation or order of any government or governmental body (including any court or tribunal),

except, subject to Section 8(c)(i), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(b) Bank's Performance

Subject to Section 8(e), Borrower and Lender will, promptly upon demand by the Bank, jointly and severally, release, defend, indemnify and hold harmless each Indemnified Party for and against Losses and Claims, other than Losses or Claims against which the Bank is indemnified under Section 8(a), suffered by such Indemnified Party arising in connection with:

- (i) any act or omission of the Bank in connection with this Agreement or the Terms and Conditions; or
- (ii) the performance of obligations under Belgian or other applicable law in connection with this Agreement or the Terms and Conditions,

except, subject to Section 8(c)(ii), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(c) Breach and Related Party Claims

- (i) The exception to Section 8(a) does not apply in respect of:
 - (A) Losses or Claims suffered by the Indemnified Party arising as a result of any breach as referred to in Section 8(a)(iii); or
 - (B) Losses caused or Claims made or brought by any Related Party of the Indemnitor.
- (ii) The exception to Section 8(b) does not, in relation to Borrower or (as the case may be) Lender, apply in respect of Losses caused or Claims made or brought by any Related Party, respectively, of Borrower or Lender.

(d) Burden of Proof

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) bears the burden of proving:

- the negligence or wilful misconduct of the Bank for the purposes of the exception to Section 8(a) or Section 8(b), respectively; or
- (ii) the application, if any, of Section 8(e).

(e) Limitations

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) is not liable in respect of:

- (i) Losses caused or Claims made or brought by:
 - (A) any third party (other than any Related Party of the party from whom the Bank is seeking such an indemnity); or
 - (B) the other party to this Agreement or any Related Party of that other party; or

 Losses caused by an event or circumstance constituting Force Majeure and which is beyond the reasonable control of the party from whom the Bank is seeking such an indemnity.

9. Effect of Certain Events and Disputes

(a) Withdrawal of Authorisation, Notice of Default under the Securities Lending Agreement or Insolvency

The Bank will, to the extent permitted by applicable law, cease entering any instructions into the Euroclear System pursuant to this Agreement as soon as reasonably practicable after the receipt by the Bank of:

- (i) any written notice of a withdrawal by Borrower or Lender of its authorisation(s) under Section 5(a)
 (Authority of the Bank to Enter Instructions into the Euroclear System);
- (ii) any written notice of default with respect to Borrower or Lender or one or more of their Clients, if applicable, under the Securities Lending Agreement and sent by Borrower or Lender to the Bank (unless and until Borrower or Lender, as the case may be, withdraws such notice of default by notice to the Bank); or
- (iii) any written notice from Borrower or Lender that it has filed for bankruptcy or declared that it is insolvent or bankrupt or that it has become the subject of any involuntary proceeding in respect of its insolvency or bankruptcy,

provided that, in each case, the Bank will enter instructions in accordance with (x) subsequent matching notices from Borrower and Lender to the Bank or (y) a final order (whether or not subject to appeal) of a court of competent jurisdiction.

(b) Continuing Disputes

In the event of any other (x) dispute between or conflicting claims, demands, notices or instructions by Borrower, Lender, a Client and/or any other person or (y) conflicting notices by Borrower or Lender, with respect to any cash credited to any Lender's Account or Lender's Collateral Account or to Borrower's Account, any Securities, Borrower's Account or any Lender's Collateral Account or Lender's Account (other than withdrawals of authorisation, notices of default or filings for or declarations of insolvency or bankruptcy notified to the Bank pursuant to Section 9(a) the Bank may decline to comply with any and all claims, demands, notices or instructions or to take any action hereunder with respect to the cash, the Securities, Borrower's Account or Lender's Collateral Account or Lender's Account as long as that dispute or conflict is continuing. The Bank will not be liable for any Losses arising out of such failure to act or to comply with such claims, demands, notices or instructions.

The dispute or conflict will be deemed to continue and the Bank will be entitled to refuse to act or comply until either:

- the conflicting or adverse claims or demands have been determined in a court of competent jurisdiction or settled by agreement among the conflicting parties and/or such a court; or
- (ii) the Bank has received security or an indemnity satisfactory to it sufficient to hold it harmless from and against any and all Losses which it may incur by reason of taking any action directly or indirectly in connection with this Agreement.

The Bank may assume that no disputes or conflicting claims or notices exist unless it has received a copy of a written notice thereof sent by Borrower to Lender or by Lender to Borrower.

10. Termination

(a) Termination on Notice

Except as provided in Section 18(e) (*Survival*), this Agreement may be terminated by any party hereto on 30 Business Days' written notice to the other parties. In spite of any such notice of termination, this Agreement will remain applicable to any Transactions then outstanding.

(b) Immediate Termination

The Bank may terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions in the event that:

- (i) any representation made by Borrower or Lender in this Agreement will have been incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated;
- (ii) Borrower or Lender ceases to be a Participant in the Euroclear System; or
- (iii) the Securities Lending Agreement or the Pledged Account Agreement (if applicable) is terminated.

(c) Termination on Revocation of Representative's Authority If a Representative's authority to take action hereunder for the benefit of a Client is revoked by such Client, such Representative may, by giving written notice (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement) to the Bank specifying the relevant outstanding Transactions, and the date at which such revocation came or will come into effect, terminate this Agreement with respect to such outstanding Transactions between Borrower and Lender, and all such proposed transactions between Borrower and Lender, in each case, as have been, or are proposed to be, entered into for the benefit of such Client. In addition, if the Bank receives written notice from a Representative or its Client that such Representative's authority as aforesaid has been revoked by such Client and specifying the relevant outstanding Transactions and the date at which such revocation came or will come into effect (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement), the Bank may, in its discretion, by giving notice to Borrower and Lender either:

- (i) terminate this Agreement with respect to all outstanding Transactions and all proposed transactions; or
- (ii) terminate this Agreement with respect to such outstanding Transactions and all such proposed transactions, in each case, as have been, or are proposed to be, entered into for the benefit of such Client.

Termination of this Agreement pursuant to this Section 10(c) will take place either immediately, if according to the relevant notice the revocation of the Representative's authority already came into effect, or as from the date at which the relevant notice states that such revocation will come into effect.

(d) Delivery after Termination

Upon the effectiveness of any termination of this Agreement as aforesaid, or as soon thereafter as is reasonably practicable, the Bank will, unless otherwise directed by Borrower and Lender and subject to Section 9 (*Effect of Certain Events and Disputes*) of this Agreement and subject to Section 14(d) of the Terms and Conditions, cause to be delivered to Lender any amounts of Collateral Cash and Collateral Securities then credited to any Lender's Collateral Account or Lender's Account, when applicable, and to Borrower any amounts of cash and securities then credited to Borrower's Account.

11. Confidentiality

The Bank represents to each of Borrower and Lender that information which reveals or relates to, or which would permit the determination of the Euroclear securities positions of, or Transactions by, Borrower and/or its Client and Lender and/or any of its Clients, respectively (including any future or planned securities positions or transactions), or the type and amount of any Collateral Securities, will only be used by the Bank in connection with the operation of the Euroclear System or the provision of banking services to Lender or Borrower, as the case may be.

Notwithstanding the foregoing, the Bank may, where it is bound by the law of any territory or country or pursuant to any requirement of any regulatory body, disclose any information or produce any document in its possession or control. If the Bank discloses information concerning Borrower and/or its Client (if applicable) or Lender and/or any of its Clients (if applicable) to any such regulatory body, the Bank will inform Borrower or Lender, as appropriate, unless the Bank may not do so or has been requested not to do so by such regulatory authority.

12. Amendments

(a) SLSA Terms and Conditions

These SLSA Terms and Conditions may only be amended or modified by a written agreement executed by the parties and the Annexes I and II may be amended or modified only by a written agreement, except as set forth in paragraphs (b), (c) and (d) below. Unconditional SWIFT Elections may only be amended or modified by:

- (i) establishing a new set of Unconditional SWIFT Elections, in place of the then current Unconditional SWIFT Elections, by repeating the procedure set out in Section 2(d) and (e); or
- (ii) complying with the procedures for unilateral amendment set out in paragraph (b) below.

An amendment under this Section 12(a) is effective when the Bank notifies Borrower and Lender that it is effective.

(b) Unilateral Amendment

Lender may, upon notice to and with the consent of the Bank, amend Annexes I and II to include in Eligible Securities one or more types of security, identified by ISIN or Common Code, without the agreement of Borrower.

Borrower may, upon notice to and with the consent of the Bank, amend Annexes I and II to exclude from Eligible Securities, for a stated period or until a subsequent notice of Borrower is given (with the consent of the Bank) to include such Eligible Securities again, one or more types of security, identified by ISIN or Common Code, without the agreement of Lender.

The Bank may, upon notice to Borrower and Lender, amend Annexes I and II to exclude any security or securities from Eligible Securities or any currency or currencies from Eligible Cash without the agreement of Borrower or Lender.

An amendment under this Section 12(b) must be in writing, which may include a facsimile or SWIFT message, and will be effective when the Bank notifies Borrower and Lender that it is effective.

(c) Unilateral Amendment to Discontinue AutoSelect

Lender may at any time, by giving notice to the Bank before the deadline indicated in the Timetable for Allocation Mode Management (as defined in the SLSA Operating Procedures), amend this Agreement to discontinue the use of AutoSelect, without the agreement of Borrower or the Bank, for one or more Eligibility Sets or for all Eligibility Sets, effective as of the Business Day indicated in the Timetable.

(d) SLSA Operating Procedures

The Bank may amend the SLSA Operating Procedures at any time by notice to Borrower and Lender. Borrower and Lender will be deemed to have agreed to and accepted any such amendment (i) effective immediately, if the amendment does not adversely affect Borrower or Lender or (ii) effective 30 Business Days after the Bank sends it, for any other amendment.

(e) No Waivers

No waiver, or acceptance of performance other than as provided in this Agreement, on the part of any party will be a waiver, or acceptance of such performance, in the future. The Bank's acceptance, in its discretion, of any notice or notices from Borrower or Lender received after the relevant deadline set out in the Timetable does not oblige it to accept any such notice so received in the future.

13. Agreement of the Parties

If any provision of this Agreement is inconsistent or in conflict with any provision of the Securities Lending Agreement (including any provisions to the effect that such Securities Lending Agreement will prevail over any other agreement), this Agreement will prevail. Except as expressly provided in this Agreement, no provision of this Agreement shall modify or abrogate any right or obligation under the Pledged Account Agreement (if applicable).

14. Applicable Law; Jurisdiction

This Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) will be governed by and construed in accordance with English law.

Each of Borrower and Lender irrevocably agrees for the exclusive benefit of the Bank that the Courts of England are to have jurisdiction to settle any disputes or claims which may arise out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) and that, accordingly, any suit, action or proceeding arising out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) may be brought in such Courts. Nothing contained in this Section 14 will limit the right of the Bank to take any such suit, action or proceeding against each of Borrower and Lender or both in any other court of competent jurisdiction nor will the taking of such suit, action or proceeding in one or more jurisdictions preclude the taking of any such suit, action or proceeding in any other jurisdiction by the Bank whether concurrently or not, to the extent permitted by the law of such other jurisdiction.

The Borrower and Lender waive (and agree not to raise) any objection, on the ground of forum non conveniens or any other ground, to the taking of proceedings by the Bank in any court in accordance with this Section 14. The Borrower and Lender also agree that a judgment against one or both of them in the Bank's favour in proceedings brought in any jurisdiction in accordance with this Section 14 shall be conclusive and binding upon them and may be enforced in any other jurisdiction.

15. Waiver of Immunity

Each of Borrower and Lender waives, to the fullest extent permitted by applicable law, all immunity (on the basis of sovereignty or otherwise) from jurisdiction, attachment (both before and after judgment) and execution to which it might otherwise be entitled in any suit, action or proceeding in the Courts of England or of any other country or jurisdiction relating in any way to this Agreement and agrees that it will not raise, claim or cause to be pleaded any such immunity at or in respect of any such suit, action or proceeding.

16. Domicile

Each of Borrower and Lender elects domicile in Belgium at the Bank for the purpose of any suit, action or proceeding in Belgium arising out of or relating to this Agreement and will appoint promptly on request from the Bank authorised agents in London for the purpose of receiving service of process in any such suit, action or proceeding in England.

17. Service of Process

Each of Borrower and Lender consents to the service of any and all process, notices or other documents which may be served in any such suit, action or proceeding either:

- by mailing a copy thereof to its address referred to in Section 18(a) (*Notices*) by registered or certified mail;
- (ii) by serving a copy thereof at its domicile in Belgium or upon any agent for service appointed as provided in Section 16 (*Domicile*) (whether or not the election of domicile or the appointment of such agent for service of process will for any reason prove to be ineffective or such agent will fail to accept or acknowledge such service) and mailing a copy thereof to its address referred to in Section 18(a) (*Notices*) by registered or certified mail; or
- (iii) in any other manner permitted by applicable law.

Each of Borrower and Lender waives all claims of error by reason of any service in accordance with this Section 17 and agrees that such service (x) will be deemed in every respect effective service of process upon it and (y) will be taken and held to be valid personal service upon and personal delivery to it.

18. Miscellaneous

(a) Notices

Unless otherwise specified herein, notices required by this Agreement must be in writing (which will include, without limitation, facsimile, EUCLID, EasyWay or SWIFT).

Borrower and Lender agree that any notices given under this Agreement will be sent to the Bank to the attention of 'Collateral Management Administration' at the address set forth in Exhibit 1 or to the attention of such other contact at such other address as the Bank may from time to time designate to Borrower and Lender in writing. The Bank is not required to comply with and is not deemed to have any notice or knowledge of any notice sent by any Client. Any notice to Borrower or Lender authorised or required by this Agreement will be addressed to the persons indicated at the addresses set forth in Exhibit 1 or to such other person or persons as the receiving party may from time to time designate to the other parties in writing.

Chapter 3 (Transaction Processing) of the SLSA Operating Procedures contains the Timetable, setting out the deadlines by which the various notices must be received by the Bank for processing. The Bank may, in its sole discretion, attempt to process notices received or validated after the deadlines set forth in the Timetable. Notices will be effective from the time they are actually received by the intended recipient by telephone, facsimile, EUCLID, EasyWay or SWIFTor any other means designated by the Bank.

In any situation in which this Agreement requires written notice, the Bank may but is not required to act on oral notice reasonably believed by it to be notice of a person acting on behalf of Borrower or Lender or, for the purposes of Section 10(c) (Termination on revocation of Representative's Authority), a Client or a person purporting to be a Client, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication. Borrower and Lender shall confirm in writing any oral or electronic data notice. Failure to confirm in writing or any conflict between subsequent written notices and oral or data notices will not affect the authority of any acts taken or omitted by the Bank pursuant to oral or electronic data notices. The Bank reserves the right to record telephone conversations with Borrower or Lender and to refer to such recordings in the event of any dispute. Nothing in this paragraph permits oral amendments to this Agreement.

(b) Binding Agreement; Assignment and Novation

The provisions of this Agreement shall be binding upon and inure to the benefit of the Bank, Borrower and Lender and their respective successors and assigns (including any trustee, conservators or other officers of the court in any bankruptcy or insolvency proceeding), subject to the next paragraph. The rights and obligation of each party under this Agreement may not be assigned or novated without the written consent of the other parties and any assignment or novation without such consent will be null and void.

(c) Severability

Each provision and agreement in this Agreement will be separate from any other provision or agreement in this Agreement and will be enforceable, notwithstanding the unenforceability of any other provision or agreement.

(d) Representatives

Despite the fact that any Representative is acting for the benefit of any Client in connection with this Agreement:

- (i) that Representative will have and be entitled to assert any claim, counterclaim or defence in connection with this Agreement or the Bank's performance of services under this Agreement only to the extent that it has or is entitled to assert that claim, counterclaim or defence in its capacity as a principal party to this Agreement;
- (ii) that Representative shall be liable for the performance of all its obligations and for all its indemnities given under this Agreement, including but not limited to the indemnity contained in Section 8 (*Indemnification*), as a principal party to this Agreement;
- (iii) no Client is a party to this Agreement and no Client will have any rights under or in connection with this Agreement against the Bank; and
- (iv) the Bank will have obligations under or in connection with this Agreement only to Borrower and Lender and will not be liable to any Client under or in connection with this Agreement in any manner whatsoever (including, without limitation, in contract or in tort).

(e) Survival

All releases, limitations of liability and indemnifications provided in this Agreement will survive the termination of this Agreement.

(f) Headings and References

The headings and captions in this Agreement are for reference only and will not affect the construction or interpretation of any of its provisions.

19. Glossary

References in this Agreement to the singular include the plural, and vice versa.

The following words, as used in this Agreement, have the following meanings:

'Agreement' has the meaning set forth in the first sentence of this Agreement.

'AutoSelect' means an electronic processing module owned by the Bank designed to facilitate the selection of securities for Triparty Agreements.

'AutoSelect Methodology' means the method by which the AutoSelect processing module selects securities to be transferred between Borrower's Account and counterparty accounts, as described in Chapter 6 (*AutoSelect Processing Methodology*) of the SLSA Operating Procedures.

'AutoSelect Processing' means an option in Annexes I and II which determines whether or not Borrower and Lender may use AutoSelect processing of Transactions in an Eligibility Set under this Agreement.

'AutoSelect Transaction' means a Transaction that is processed by the Bank using AutoSelect.

'Bank' means Euroclear Bank and its successors and assigns, as securities lending service agent under this Agreement.

'Borrower' has the meaning set forth in the first sentence of this Agreement.

'Borrower's Account' means a Securities Clearance Account in the Euroclear System in the name of Borrower and the Cash Account in the Euroclear System in the name of Borrower associated therewith, the number of which is indicated in the Annexes, which will be used for Securities and Cash, respectively, with respect to Transactions and which in each case will be designated a 'client account' if Borrower has entered into this Agreement for the benefit of one Client.

'Business Day' means a day when the operation of the Euroclear System takes place.

'Cash' means Eligible Cash or Collateral Cash.

'Claims' means any claim, demand, action, investigation or administrative proceeding made or brought by an Indemnitor or any Related Party of that Indemnitor in connection with this Agreement. 'Client' means each person other than Borrower or Lender:

- who has entered into, or who will enter into, the Securities Lending Agreement with Borrower or Lender; or
- for whose benefit Borrower or its Client (if applicable) or Lender or its Client (if applicable) has entered into, or will enter into, the Securities Lending Agreement,

and for whose benefit Borrower or Lender has entered into the Pledged Account Agreement (if applicable) and has entered into, or will enter into, this Agreement.

'Collateral Cash' has the meaning set out in the SLSA Operating Procedures.

'Collateral Securities' has the meaning set out in the SLSA Operating Procedures.

'Eligibility Set' means the Eligible Securities and Eligible Cash identified in each set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and the options, amounts and percentages selected in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time.

'Eligible Cash' means on any date:

- any Settlement Currency which Borrower and Lender have designated as the securities denomination currency of an Eligible Security in the applicable Eligibility Set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time; and
- if any such currency has been replaced by the euro, the euro; and
- with respect to a Transaction, the Transaction Currency of that Transaction.

'Eligible Securities' means on any date any of the Eurocleareligible securities of a type which Borrower and Lender have agreed, with the consent of the Bank, will be eligible as of such date to become Collateral securities for a Transaction by their inclusion in the applicable set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and as may be limited by certain options in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time. 'Equivalent Securities' has the meaning set out in the SLSA Operating Procedures.

'Euroclear-eligible securities' means, at any time, any of the securities accepted at that time for deposit into the Euroclear System in accordance with the Operating Procedures.

'Euroclear Operator' means Euroclear Bank, and its successors and assigns, acting in the capacity of operator of the Euroclear System.

'Euroclear System' means the clearance system for internationally traded securities operated under contract by the Euroclear Operator.

'Euroclear Tariff means the Euroclear Tariff folder (which includes a general fees brochure and specific tariff sheets) distributed to all Participants, as may be amended from time to time.

'Force Majeure' means any event or circumstance beyond the reasonable control of the Bank, including, without limitation, war, insurrection, riot, civil commotion, act of God, accident, fire, water damage, explosion, mechanical breakdown, computer or systems failure or other equipment failure, failure or malfunctioning of any communications media for whatever reason (whether or not such media are made available to Borrower or Lender by the Bank), interruption (partial or total) of power supply or other utility or service, strike or other labour stoppage (partial or total) and any law, decree, regulation or order of any government or governmental body (including any court or tribunal).

'Indemnified Party' means each of the Bank, its officers, directors and employees.

'Indemnitor' means Borrower, or Lender, as the case may be.

'Internet Report' means the internet report made available at the website of the Euroclear System by the Bank as described in Chapter 5 (*Reporting by the Bank*) of the SLSA Operating Procedures to recipients subscribing for the service in a separate subscription agreement.

'Lender' has the meaning set forth in the first sentence of this Agreement.

EUROCLEAR BANK SA/NV

'Lender's Account' means the Securities Clearance Account (or, in the case of Multiple Lender Accounts, one of such Securities Clearance Accounts) in the Euroclear System in the name of Lender and the Cash Account in the Euroclear System in the name of Lender associated therewith, the number of which is indicated in the Annexes I and II, which will be used only for Securities and Cash, respectively, with respect to Transactions under this Agreement and which in each case shall be designated a 'client account' if Lender has entered into this Agreement for the benefit of one or more Clients.

'Lender's Collateral Account' means a Securities Clearance Account (or, in the case of Multiple Lender Accounts, one of such Securities Clearance Accounts) in the Euroclear System in the name of Lender and the Cash Account in the Euroclear System in the name of Lender associated therewith, the number of which is indicated in the Annexes I and II in each case which shall be designated a collateral account and shall be used only for Securities and Cash, respectively, with respect to Transactions and which in each case will be designated a 'client account' if Lender has entered into this Agreement for the benefit of one or more Clients.

'Loan' means, in respect of a Transaction, the loan to which the Transaction relates in this Agreement (such loan being of cash only if it is to be settled in the Euroclear System).

'Losses' means, in relation to any person, any losses, liabilities, obligations, fines, penalties, damages, taxes (other than taxes on the overall income of such person), costs, expenses (to the extent reasonable and other than ordinary administrative expenses) or fees (including reasonable counsel's fees and accountant's fees) of any kind or nature whatsoever at any time.

'Manual Processing' means the manual processing of Transactions in an Eligibility Set under this Agreement.

'Manual Transaction' means a Transaction that is not an AutoSelect Transaction.

'Multiple Lender Accounts' means an option in Annexes I and II which determines whether or not Lender may open more than one Lender's Collateral Account or use more than one Lender's Account.

'Net Paying Security' means any security with respect to which any interest, dividend or other distribution payable by the issuer to either Borrower or Lender is required by law to be paid subject to withholding or deduction for or on account of taxes or duties of any nature imposed, levied, collected, withheld or assessed by any authority having power to tax. 'Operating Procedures' means *The Operating Procedures of the Euroclear System* established in accordance with Section 3 of the Terms and Conditions, as such Operating Procedures may be amended from time to time.

'Pledged Account Agreement' means the Acceptance Agreement to the *Single Pledgor Pledged Account Terms and Conditions*.

'Related Party' in respect of an Indemnitor means any agent (including employees of such agent), employee, client (including Clients) or any other person for whose benefit or on whose behalf that Indemnitor acts or who acts for the benefit of or on behalf of that Indemnitor.

'Representative' means either or each of Borrower and Lender if it has entered into, or will enter into, this Agreement for the benefit of one or more Clients.

'Securities' means Eligible Securities, Collateral Securities, Loaned Securities or securities which are proposed to become Loaned Securities.

'Security Agreement' means one or more agreement(s) between Borrower and Lender and/or one or more of their respective Clients under which Borrower or one or more of its Client (if applicable) provides security (whether by conferring a security interest over property or by transferring title to property outright) for the loan made to it under the Securities Lending Agreement from time to time, to Lender or one or more of its Clients (if applicable).

'Securities Lending Agreement' means one or more agreement(s) between Borrower and Lender and/or one or more of their respective Clients under which Borrower or one or more of its Client(s) (if applicable) may borrow securities from Lender or one or more of its Clients (if applicable) and includes any related Security Agreement.

'Settlement Currency' at any time means any of the currencies accepted at that time in the Euroclear System as a Settlement Currency in accordance with the Operating Procedures.

'SLSA Operating Procedures' means the Securities Lending Service Agreement Operating Procedures, as amended from time to time, which, together with the SLSA Terms and Conditions, form one contractual agreement.

'SLSA Terms and Conditions' means these Securities Lending Service Agreement Terms and Conditions, which, together with the SLSA Operating Procedures, form one contractual agreement.

'Terms and Conditions' means the *Terms and Conditions Governing Use of Euroclear*, as amended from time to time. 'Timetable' means the table of deadlines set forth in Chapter 3 (*Transaction Processing*) of the SLSA Operating Procedures, as amended from time to time.

'Transaction' means any secured loan governed by the Securities Lending Agreement, the Pledged Account Agreement (if applicable) and this Agreement.

'Transaction Currency' means, with respect to a Transaction, the Settlement Currency specified in the initiation notice with respect to such Transaction.

'Triparty Agreement' means an agreement among two Participants and the Bank under which the Bank serves as service agent.

'Unconditional SWIFT Elections' has the meaning set forth in section 2(e) of this Agreement.

20. Effectiveness

- (A) This Agreement will become binding upon Borrower, Lender and the Bank if:
 - (i) the Bank has executed this Agreement, previously signed by Borrower and Lender; and
 - (ii) the Bank has received from Lender the duly authorised and executed documentation relating to the opening of Lender's Collateral Account (or, in the case of Multiple Lender Accounts, the opening of all such accounts); and
 - (iii) the Bank has notified Borrower and Lender that the Agreement is effective.
- (B) Notwithstanding the provisions of paragraph (A) above, this Agreement will also become binding Borrower, Lender and the Bank if:
 - (i) the Borrower and the Bank have executed the Form of Agreement RG 810 specifying (a) the Securities Lending Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (ii) the Lender and the Bank have executed the Form of Agreement RG 810 specifying (a) the Securities Lending Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (iii) either Borrower or Lender have duly executed Annexes I and II and the provisions of Sections 2(d),(e) and (f) of this Agreement are complied with in relation to such Annexes; and
 - (iv) the Bank has received from Lender the duly authorised and executed documentation relating to the opening of the Lender's Collateral Account (or, in the case of Multiple Lender Accounts, the opening of all such accounts); and
 - (v) the Bank has notified Borrower and Lender that the Agreement is effective.

21. Counterparts

This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, and all of which together will be one agreement.



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LG032

Exhibit P-11

EUROCLEAR BANK SA/NV



August 2015

Loan Service Agreement

Terms and Conditions

Loan Service Agreement

Terms and Conditions

(to be read in conjunction with the LSA Operating Procedures)

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Exhibit 1 – Addresses Annexes I and II (included in folder)

Loan Service Agreement

The triparty loan service agreement (the 'Agreement') comprises two parts, the LSA Terms and Conditions and the LSA Operating Procedures.

All references to 'the Agreement' or 'this Agreement' are to the LSA Terms and Conditions and the LSA Operating Procedures, both as amended from time to time, which are to be read and construed as, and which together form, one contractual agreement.

LSA Terms and Conditions

Borrower or its Client (if applicable) and Lender or one or more of its Clients (if applicable) have entered into a Loan Agreement which permits Borrower or its Client (if applicable) to borrow money or a commodity from Lender or one or more of its Clients (if applicable) from time to time subject to the provision by the Borrower or its Client (if applicable) of security for such loan(s) pursuant to a Security Agreement between the same parties as are party to the Loan Agreement. If Borrower and/or Lender is a Representative, it has agreed with each Client to enter into this Agreement for its benefit.

Borrower and Lender have requested the Bank to perform certain service functions to support those secured loans. Therefore, in consideration of the mutual promises included in this Agreement and intending to be legally bound hereby, the parties agree to the following terms.

Capitalised words used in these LSA Terms and Conditions have the meanings assigned to them in Section 19 (*Glossary*). Capitalised words used only in the LSA Operating Procedures have the meanings assigned to them in Chapter 19 (*Glossary*) of the LSA Operating Procedures. If any capitalised word is defined in both these LSA Terms and Conditions and the LSA Operating Procedures, and the definitions assigned are inconsistent, the definition in these LSA Terms and Conditions will prevail.

If capitalised terms are used but not defined, they have the meaning assigned to them in the Terms and Conditions and the Operating Procedures. The use of the term 'type' with respect to securities means securities with the same security code and description.

1. Appointment and Acceptance of the Bank

Each of Borrower and Lender appoints the Bank as secured loan service agent to carry out the duties described in this Agreement and to take any actions incidental to those duties. The Bank accepts such appointment and consents to act as secured loan service agent to carry out only those duties.

2. Selections

(a) Eligible Securities and Eligible Cash

Borrower and Lender, with the consent of the Bank, by executing Annexes I and II, have selected in Annexes I and II Eligible Securities and Eligible Cash, in one or more sets, to be used with respect to Transactions under this Agreement.

(b) Eligibility Set Profiles

Borrower and Lender, with the consent of the Bank, by checking the relevant boxes or filling in the relevant lines in Annexes I and II and executing Annexes I and II, have selected certain options, amounts and percentages applicable to each set of Eligible Securities and Eligible Cash. If no selection is made with respect to a given option, amount or percentage, the default selection, as indicated in Annexes I and II, will apply.

(c) Annexes

Borrower, Lender and the Bank agree to the selections made in Annexes I and II (as the same may be amended from time to time in accordance with Section 12 (*Amendments*)). Annexes I and II and any other numbered Annexes to this Agreement form an integral part of this Agreement.

(d) Conditional SWIFT Elections

If only Borrower or Lender executes Annexes I and II, the provisions of this paragraph (d) and Section 2(e) and (f) shall apply instead of Section 2(a) to (c).

Borrower or Lender, with the consent of the Bank, having completed and executed Annexes I and II, sends such Annexes to the Bank, indicating the name of the Eligibility Set and set number (the 'Completed Annexes'). The Bank will upon receipt of the Completed Annexes, provide this documentation to the counterparty Borrower or Lender, as indicated by Borrower or Lender.

If Borrower and Lender want to initiate Transactions on the basis of the Completed Annexes, Borrower and Lender shall each send a SWIFT message to the Bank in a form specified by the Bank which refers to the (i) name of the Eligibility Set, (ii) set number, and (iii) account numbers of Borrower and Lender.

The elections made in the Completed Annexes and confirmed by each of the Borrower and Lender in a SWIFT message are together the 'Conditional SWIFT Elections'.

(e) Unconditional SWIFT Elections

Conditional SWIFT Elections will only become binding on the parties (i) if the Bank notifies Borrower and Lender by SWIFT message that it consents to them and (ii) from the time specified by the Bank in any such notice.

Conditional SWIFT Elections that have become effective under this Section 2(e) or Section 12(a), together with the related consenting SWIFT message sent by the Bank, constitute the 'Unconditional SWIFT Elections'. Unconditional SWIFT Elections, as amended or modified from time to time, form an integral part of this Agreement. Borrower, Lender and the Bank agree that the Unconditional SWIFT Elections may be amended or modified from time to time in accordance with Section 12 (*Amendments*).

(f) Parties' obligations in relation to SWIFT Elections

- (i) The Bank agrees to maintain a record of all Unconditional SWIFT Elections which have, from time to time, come into effect under this Agreement and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).
- (ii) The parties agree not to object to the admission as evidence in any legal proceedings of any Unconditional SWIFT Elections and any unilateral amendments or modifications to such Unconditional SWIFT Elections made under Section 12(b).

3. Euroclear System

Each of Borrower and Lender acknowledges that securities and cash credited to Borrower's Account or any Lender's Account are held in the Euroclear System pursuant to the Terms and Conditions and the Operating Procedures.

4. Representations

(a) Representations of Borrower and Lender

Borrower and Lender each represents to the Bank and to each other, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of the jurisdiction of its organisation with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all requisite corporate action, and this Agreement is a legal, valid and binding obligation of it enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally;
- (iii) the execution, delivery and performance by it of this Agreement have been and will be duly authorised by all necessary governmental and other approvals, including exchange control approvals;
- (iv) the execution, delivery, and performance by it of this Agreement and the transactions contemplated under this Agreement do not and will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any statute, regulation, rule, order or judgment applicable to it (including any statute, regulation, rule, order or judgment relating to taxes);
- (v) it has (and if it is a Representative, it has been granted by each Client for whose benefit it has entered into the Loan Agreement and the Security Agreement and, if any Client is a party to the Loan Agreement and the Security Agreement as of such date, such Client has) the power and authority to enter into the Loan Agreement and the Security Agreement and the secured loans made pursuant thereto;

- (vi) it has the power and authority to deliver and transfer the securities and cash delivered or transferred and to take any other action hereunder and, if it is a Representative, each Client has authorised it to execute and deliver this Agreement and to take all such actions hereunder for such Client's benefit; and
- (vii)in the case of Borrower, if it is a Representative and has selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, either:
 - (A) (x) it is not acting for the benefit of more than one Client under this Agreement and (y) it is not acting through the Borrower's Account for the benefit of any other client under another Triparty Agreement; or
 - (B) it has received from each such Client or client a specific authorisation to engage in transactions under Triparty Agreements for the benefit of other clients out of the same Borrower's Account.

(b) Representations of Borrower

Borrower represents to the Bank, as of the date of this Agreement and as of each date on which a Transaction is outstanding, with respect to each outstanding Transaction, that the Beneficial Tax Owner (as defined below) is not resident for tax purposes in Belgium.

For the purposes of this Section 4(b), a 'Beneficial Tax Owner' will mean the person as defined under the relevant tax rules ultimately entitled to receive the Intended Transaction Amount on the Initiation Date and for whose benefit the Closing Amount is required to be remitted to Lender on the Closing Date. Such term will not include any agent or intermediary transacting with the Bank for the benefit of any other party.

(c) Representations of Lender

Lender represents to the Bank, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that the Beneficial Owner (as defined below) is resident for tax purposes in a country that has entered into a double taxation agreement with Belgium.

For the purposes of this Section 4(c), a 'Beneficial Owner' will mean the person as defined under the Belgian tax rules ultimately entitled to receive the Price Differential. Such term will not include any agent or intermediary transacting with the Bank for the benefit of any other party.

(d) Representations of the Bank

The Bank represents to each of Borrower and Lender, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of Belgium with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all required corporate action, and this Agreement is a legal, valid and binding obligation of the Bank enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally; and
- (iii) the execution, delivery, and performance of this Agreement will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any Belgian statute, regulation, rule, order or judgment applicable to it.

5. Transactions

(a) Authority of the Bank to Enter Instructions into the Euroclear System

Each of Borrower and Lender authorises the Bank to enter or cancel instructions on its behalf into the Euroclear System and to take all other actions in connection with such instructions in accordance with the terms of this Agreement. Without limiting the foregoing, Lender authorises the Bank to accept, subject to the satisfaction of any relevant conditions, the written notices of Borrower identifying Securities and/or Cash to be transferred pursuant to the LSA Operating Procedures until receipt by the Bank of written notice of withdrawal of any such authorisation.

(b) Authority of the Bank to Use AutoSelect

If Borrower and Lender have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Lender has not discontinued AutoSelect pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), each of Borrower and Lender authorises the Bank to select Securities on its behalf and deliver them to the other in accordance with the AutoSelect Methodology, as described in Chapter 6 (*AutoSelect Processing Methodology*) of the LSA Operating Procedures, with respect to AutoSelect Transactions assigned to the corresponding Eligibility Set(s).

(c) Authority of Borrower to Use AutoSelect and of Lender to Discontinue AutoSelect

[•]If Borrower and Lender have selected the AutoSelect Processing option in one or more sets of Annexes I and II or by way of the Unconditional SWIFT Elections, and Lender has not discontinued AutoSelect pursuant to Section 12(c) (*Unilateral Amendment to Discontinue AutoSelect*), Lender authorises the Bank to accept the written notice of Borrower identifying or converting an AutoSelect Transaction or a Manual Transaction assigned to the corresponding Eligibility Set pursuant to the procedures set forth in the LSA Operating Procedures; provided, however, that:

- (i) if Lender gives the Bank a notice to convert an AutoSelect Transaction to a Manual Transaction prior to the relevant deadline indicated in the Timetable, the Bank will process the Transaction as a Manual Transaction beginning on the Business Day indicated in the Timetable; and
- (ii) if Lender has amended this Agreement to discontinue the use of AutoSelect for one or more Eligibility Sets or for all Eligibility Sets by providing a notice pursuant to Section 12(c) (Unilateral Amendment to Discontinue AutoSelect), the Bank will process all Transactions in those Eligibility Sets as Manual Transactions beginning at the time that amendment is effective.

Until the time, if any, that the Bank receives a notice from Lender stating that it is willing to resume AutoSelect processing of the Transaction (or of all the Transactions), the Bank will not process the Transaction(s) as an AutoSelect Transaction even if Borrower gives the Bank a notice to convert the Transaction to an AutoSelect Transaction.

Lender will send to Borrower a copy of any notice it gives to the Bank to convert an AutoSelect Transaction to a Manual Transaction or to discontinue AutoSelect for all Transactions in one or more Eligibility Sets or all Eligibility Sets, but the failure of Lender to do so will not affect the Bank's obligations under the previous two paragraphs. Borrower will have no right to contest Lender's notice to the Bank. The Bank will send to Borrower a copy of Lender's notice as soon as reasonably practicable.

(d) AutoSelect Acknowledgements

(i) Each of Borrower and Lender acknowledges that instructions with respect to AutoSelect Transactions (if any) are being generated and entered by the Bank on behalf of Borrower and Lender in accordance with the AutoSelect Methodology and such other procedures consistent therewith as agreed to from time to time by Borrower and the Bank and that such instructions are generated and entered only to the extent Securities are, in accordance with such procedures, available for allocation and transfer. (ii) Each of Borrower and Lender acknowledges that each of them may enter into other Triparty Agreements with the Bank under which AutoSelect processing is used for transactions.

(e) Access of Borrower to Lender's Reports

Lender agrees to provide Borrower access to information on future income payments and redemptions relating to Collateral Securities that the Euroclear Operator provides to Lender in accordance with the Operating Procedures through Euroclear Advance Notice of Income and Redemption (ANIR) reports, or any similar successor report.

Lender also agrees to provide Borrower access to provisional and definitive details about upcoming option deadlines and corporate events affecting securities held in Lender's Account(s) through Euroclear DACE reports that the Euroclear Operator provides to Lender in accordance with the Operating Procedures, or any similar successor report.

(f) Authority for Internet Reporting

Each of Borrower and Lender authorises the other to access, and the Bank to make available through the Internet, the Internet Reports.

6. Bank Fees

Unless otherwise agreed, Borrower agrees to pay to the Bank all fees relating to Lender's Account(s) and all amounts (other than keying, query and communications fees, which will be payable by the user thereof) relating to this Agreement, in each case as such amounts are set forth in monthly billing statements sent by the Bank to Borrower in accordance with the Euroclear Tariff, as in effect from time to time. Amounts payable by Borrower will be debited from Borrower's Account or such other Cash Account as Borrower may specify by written notice to the Bank from time to time or, if no such Cash Account has been duly specified, any Cash Account of Borrower. Amounts payable by Lender will be debited from Lender's Account or such other cash account as Lender may specify by written notice to the Bank from time to time or, if no such cash account has been duly specified, any cash account of Lender. No amount may be debited from any account which is subject to the Pledged Account Agreement, and a party with such an account must specify in writing another account for the purposes of debiting amounts under this Section 6.

7. Duties and Liabilities of the Bank

- (a) General
- (i) The Bank has no obligations except as expressly set out in this Agreement.
- (ii) The Bank is not liable to Borrower or Lender for any Losses arising in connection with:
 - (A) any event or matter referred to in paragraphs (i), (ii) or (iii) of Section 8(a) (Indemnitor's Instructions, Default or Breach) or paragraphs (i) or (ii) of Section 8(b) (Bank's Performance) or Section 9 (Effect of Certain Events and Disputes) of this Agreement, or Section 12(c) of the Terms and Conditions; or
 - (B) any act or omission of the Bank in connection with this Agreement,

except in the case of its negligence or wilful misconduct.

- (iii) The Bank is not liable to anyone for unforeseeable Losses, Losses not flowing directly and naturally from a breach of this Agreement or Losses representing loss of profit, except in the case of its wilful misconduct and then only to Borrower or Lender.
- (iv) In the event of any dispute, Borrower or Lender, as the case may be, bears the burden of proving negligence or wilful misconduct by the Bank.
- (v) The Bank is not liable to anyone for any Losses arising in connection with this Agreement, the Loan Agreement, the Security Agreement, the Pledged Account Agreement (if applicable) or any other related agreement except, but only to the extent specified in paragraphs (ii) and (iii) above, to Borrower or Lender.
- (vi) Acceptance of securities into the Euroclear System is governed by the Operating Procedures and not this Agreement. Acceptance and setting up new securities for use in the services described in this Agreement is not part of the services which the Bank agrees to provide pursuant to this Agreement.
- (vii) All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from this Agreement.

(b) Borrower's and Lender's Responsibilities

The Bank makes no representation regarding, need not inquire into, does not guarantee and is not liable to anyone for any Losses arising in connection with the following, all of which are Borrower's and/or Lender's sole responsibility:

- (i) the title, validity or genuineness of any Security;
- (ii) the legality of the loan, delivery or transfer of any Cash or Security;

- (iii) the due authorisation of any person to act on behalf of Borrower or Lender in connection with Eligible Cash or Eligible Securities held in Borrower's Account or Collateral Cash or Collateral Securities held in any Lender's Account;
- (iv) the capacity and authority of a Representative to act for the benefit of any Client;
- (v) the characterisation of any Security as a Net Paying Security or the eligibility of any Security as a Collateral Security under the Loan Agreement and the Security Agreement;
- (vi) the validity or enforceability of, or any statement or representation made by Borrower and/or Lender in connection with, this Agreement, the Loan Agreement, the Security Agreement, the Pledged Account Agreement (if applicable) or any other related agreement;
- (vii) the performance of the obligations of Borrower or Lender under this Agreement, the Loan Agreement, the Security Agreement, the Pledged Account Agreement (if applicable) or any other related agreement or the performance of any Client (if applicable) under the Loan Agreement, the Security Agreement or any other related agreement;
- (viii)an extension of credit in connection with any Transaction;
- (ix) the settlement of instructions entered into the Euroclear System; or
- (x) the value (or the sufficiency of the value) of any Securities delivered or transferred.

(c) Bank's Notice and Inquiry

Except as expressly set out in this Agreement, the Bank:

- (i) will be deemed to have no notice of, and need not inquire into, any transaction between Borrower and Lender (or one or more of their respective Clients, if applicable) under the Loan Agreement and the Security Agreement or otherwise or the performance or breach of this Agreement, the Loan Agreement, the Security Agreement, the Pledged Account Agreement (if applicable) or any other related agreement; and
- (ii) need not give Borrower or Lender notice of any breach by Borrower or Lender of this Agreement or any breach by Borrower or Lender (or one or more of their respective Clients, if applicable) of the Loan Agreement, the Security Agreement, the Pledged Account Agreement (if applicable) or any other related agreement.

(d) Notices to Bank

- (i) The Bank may rely on any notice or data from Borrower or Lender under this Agreement and is not liable to anyone for any Losses arising in connection with:
 - (A) unsigned notices, or the unauthorised signing or giving of written or oral notices by any person, or the unauthorised alteration of them or of any other instrument;
 - (B) the incorrectness or incompleteness of information in any notice; or
 - (C) the incorrectness or incompleteness of data transmitted by computer tape or terminal or other computer facility,

unless the Bank actually knows (x) that the notice or data was not sent by Borrower or Lender; (y) of the lack of authority; or (z) that the information or data was incorrect.

- (ii) The Bank is not liable to anyone for any Losses arising in connection with:
 - (A) any notices sent otherwise than in accordance with Section 18(a) (*Notices*);
 - (B) its acting upon oral notice reasonably believed by it to be from a person acting on behalf of Borrower or Lender, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication, even if subsequent written notices differ from such oral or data notices; or
 - (C) its acceptance of, and its acting, in its discretion, upon, notices from Borrower or Lender received after the deadlines set out in the Timetable.

(e) AutoSelect Allocation

The Bank makes no representation that any allocations of securities or cash generated by AutoSelect in accordance with this Agreement will represent the optimal allocation of securities or cash among all AutoSelect Transactions or all counterparties of Borrower. The Bank is not liable to anyone for any Losses arising in connection with securities not being optimally allocated.

(f) Price Data

The Bank is not liable to anyone for any Losses arising in connection with any error by, or any incorrect price received from, any pricing or other information source used by the Euroclear Operator in its ordinary course of business or the appropriateness or relative change of any price and need not determine volatility factors with respect to or the appropriateness of any price.

(g) Force Majeure

If the Bank acts or fails to act (including, without limitation, fails to receive or deliver, or cause to be received or delivered, Securities or fails to receive or make, or cause to be received or made, any payment) as a result of or in connection with Force Majeure, such action or failure is not a breach of this Agreement and the Bank is not liable to anyone for Losses arising in connection with such action or failure.

8. Indemnification

(a) Indemnitor's Instructions, Default or Breach

Subject to Section 8(e), Borrower or Lender (in each case, the 'Indemnitor') will promptly upon demand by the Bank release, defend, indemnify and hold harmless each Indemnified Party for and against Losses or Claims suffered by that Indemnified Party arising in connection with:

- the Bank's execution of instructions based on that Indemnitor's notices;
- (ii) the Bank's failure or delay, in whole or in part, to take any action to be taken under this Agreement or otherwise to fulfil any of its obligations under this Agreement, to the extent that such failure or delay arises in connection with the negligence or wilful misconduct of that Indemnitor or any Related Party of that Indemnitor; or
- (iii) any breach by that Indemnitor or any Related Party of that Indemnitor of any provision of this Agreement or any law, decree, regulation or order of any government or governmental body (including any court or tribunal), except, subject to Section 8(c)(i), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(b) Bank's Performance

Subject to Section 8(e), Borrower and Lender will, promptly upon demand by the Bank, jointly and severally, release, defend, indemnify and hold harmless each Indemnified Party for and against Losses and Claims, other than Losses or Claims against which the Bank is indemnified under Section 8(a), suffered by such Indemnified Party arising in connection with:

- (i) any act or omission of the Bank in connection with this Agreement or the Terms and Conditions; or
- (ii) the performance of obligations under Belgian or other applicable law in connection with this Agreement or the Terms and Conditions,

except, subject to Section 8(c)(ii), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(c) Breach and Related Party Claims

- (i) The exception to Section 8(a) does not apply in respect of
 - (A) Losses or Claims suffered by the Indemnified Party arising as a result of any breach as referred to in Section 8(a)(iii); or
 - (B) Losses caused or Claims made or brought by any Related Party of the Indemnitor.
- (ii) The exception to Section 8(b) does not, in relation to Borrower or (as the case may be) Lender, apply in respect of Losses caused or Claims made or brought by any Related Party, respectively, of Borrower or Lender.

(d) Burden of Proof

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) bears the burden of proving:

- the negligence or wilful misconduct of the Bank for the purposes of the exception to Section 8(a) or Section 8(b), respectively; or
- (ii) the application, if any, of Section 8(e).

(e) Limitations

The party from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) is not liable in respect of:

- (i) Losses caused or Claims made or brought by:
 - (A) any third party (other than any Related Party of the party from whom the Bank is seeking such an indemnity); or
 - (B) the other party to this Agreement or any Related Party of that other party; or
- Losses caused by an event or circumstance constituting Force Majeure and which is beyond the reasonable control of the party from whom the Bank is seeking such an indemnity.

9. Effect of Certain Events and Disputes

(a) Withdrawal of Authorisation, Notice of Default under the Loan Agreement or the Security Agreement or Insolvency

The Bank will, to the extent permitted by applicable law, cease entering any instructions into the Euroclear System pursuant to this Agreement as soon as reasonably practicable after the receipt by the Bank of:

- (i) any written notice of a withdrawal by Borrower or Lender of its authorisation(s) under Section 5(a)
 (Authority of the Bank to Enter Instructions into the Euroclear System);
- (ii) any written notice of default with respect to Borrower or Lender or one or more of their Clients, if applicable, under the Loan Agreement and or the Security Agreement sent by Borrower or Lender to the Bank (unless and until Borrower or Lender, as the case may be, withdraws such notice of default by notice to the Bank); or
- (iii) any written notice from Borrower or Lender that it has filed for bankruptcy or declared that it is insolvent or bankrupt or that it has become the subject of any involuntary proceeding in respect of its insolvency or bankruptcy,

provided that, in each case, the Bank will enter instructions in accordance with (x) subsequent matching notices from Borrower and Lender to the Bank or (y) a final order (whether or not subject to appeal) of a court of competent jurisdiction.

(b) Continuing Disputes

In the event of any other (x) dispute between or conflicting claims, demands, notices or instructions by Borrower, Lender, a Client and/or any other person or (y) conflicting notices by Borrower or Lender, with respect to any cash credited to any Lender's Account or to Borrower's Account, any Securities, Borrower's Account or any Lender's Account (other than withdrawals of authorisation, notices of default or filings for or declarations of insolvency or bankruptcy notified to the Bank pursuant to Section 9(a), the Bank may decline to comply with any and all claims, demands, notices or instructions or to take any action hereunder with respect to the cash, the Securities, Borrower's Account or the Lender's Account as long as that dispute or conflict is continuing. The Bank will not be liable for any Losses arising out of such failure to act or to comply with such claims, demands, notices or instructions.

The dispute or conflict will be deemed to continue and the Bank will be entitled to refuse to act or comply until either:

- the conflicting or adverse claims or demands have been determined in a court of competent jurisdiction or settled by agreement among the conflicting parties and/or such a court; or
- (ii) the Bank has received security or an indemnity satisfactory to it sufficient to hold it harmless from and against any and all Losses which it may incur by reason of taking any action directly or indirectly in connection with this Agreement.

The Bank may assume that no disputes or conflicting claims or notices exist unless it has received a copy of a written notice thereof sent by Borrower to Lender or by Lender to Borrower.

10. Termination

(a) Termination on Notice

Except as provided in Section 18(e) (*Survival*), this Agreement may be terminated by any party hereto on 30 Business Days' written notice to the other parties. In spite of any such notice of termination, this Agreement will remain applicable to any Transactions then outstanding.

(b) Immediate Termination

The Bank may terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions in the event that:

- (i) any representation made by Borrower or Lender in this Agreement will have been incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated;
- Borrower or Lender ceases to be a Participant in the Euroclear System; or
- (iii) the Loan Agreement or the Security Agreement or the Pledged Account Agreement (if applicable) is terminated.

(c) Termination on Revocation of Representative's Authority If a Representative's authority to take action hereunder for the benefit of a Client is revoked by such Client, such Representative may, by giving written notice (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement) to the Bank specifying the relevant outstanding Transactions and the date at which such revocation came or will come into effect, terminate this Agreement with respect to such outstanding Transactions between Borrower and Lender, and all such proposed transactions between Borrower and Lender, in each case, as have been, or are proposed to be, entered into for the benefit of such Client.

In addition, if the Bank receives written notice from a Representative or its Client that such Representative's authority as aforesaid has been revoked by such Client and specifying the relevant outstanding Transactions and the date at which such revocation came or will come into effect (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement), the Bank may, in its discretion, by giving notice to Borrower and Lender either:

- (i) terminate this Agreement with respect to all outstanding Transactions and all proposed transactions; or
- (ii) terminate this Agreement with respect to such outstanding Transactions and all such proposed transactions, in each case, as have been, or are proposed to be, entered into for the benefit of such Client.

Termination of this Agreement pursuant to this Section 10(c) will take place either immediately, if according to the relevant notice the revocation of the Representative's authority already came into effect, or as from the date at which the relevant notice states that such revocation will come into effect.

(d) Delivery after Termination

Upon the effectiveness of any termination of this Agreement as aforesaid, or as soon thereafter as is reasonably practicable, the Bank will, unless otherwise directed by Borrower and Lender and subject to Section 9 (*Effect of Certain Events and Disputes*) of this Agreement and subject to Section 14(d) of the Terms and Conditions, cause to be delivered to Lender any amounts of Collateral Cash and Collateral Securities then credited to any Lender's Account and to Borrower any amounts of cash and securities then credited to Borrower's Account.

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11. Confidentiality

The Bank represents to each of Borrower and Lender that information which reveals or relates to, or which would permit the determination of the Euroclear securities positions of, or Transactions by, Borrower and/or its Client and Lender and/or any of its Clients, respectively (including any future or planned securities positions or transactions), or the type and amount of any Collateral Securities, will only be used by the Bank in connection with the operation of the Euroclear System or the provision of banking services to Lender or Borrower, as the case may be.

Notwithstanding the foregoing, the Bank may, where it is bound by the law of any territory or country or pursuant to any requirement of any regulatory body, disclose any information or produce any document in its possession or control. If the Bank discloses information concerning Borrower and/or its Client (if applicable) or Lender and/or any of its Clients (if applicable) to any such regulatory body, the Bank will inform Borrower or Lender, as appropriate, unless the Bank may not do so or has been requested not to do so by such regulatory authority.

12. Amendments

(a) LSA Terms and Conditions

These LSA Terms and Conditions may only be amended or modified by a written agreement executed by the parties and the Annexes I and II may be amended or modified only by a written agreement, except as set forth in paragraphs (b), (c) and (d) below. Unconditional SWIFT Elections may only be amended or modified by:

- (i) establishing a new set of Unconditional SWIFT Elections, in place of the then current Unconditional SWIFT Elections, by repeating the procedure set out in Section 2(d) and (e); or
- (ii) complying with the procedures for unilateral amendment set out in paragraph (b) below.

An amendment under this Section 12(a) is effective when the Bank notifies Borrower and Lender that it is effective.

(b) Unilateral Amendment

Lender may, upon notice to and with the consent of the Bank, amend Annexes I and II to include in Eligible Securities one or more types of security, identified by ISIN or Common Code, without the agreement of Borrower. Borrower may, upon notice to and with the consent of the Bank, amend Annexes I and II to exclude from Eligible Securities, for a stated period or until a subsequent notice of Borrower is given (with the consent of the Bank) to include such Eligible Securities again, one or more types of security, identified by ISIN or Common Code, without the agreement of Lender.

The Bank may, upon notice to Borrower and Lender, amend Annexes I and II to exclude any security or securities from Eligible Securities or any currency or currencies from Eligible Cash without the agreement of Borrower or Lender.

An amendment under this Section 12(b) must be in writing, which may include a facsimile or SWIFT message, and will be effective when the Bank notifies Borrower and Lender that it is effective.

(c) Unilateral Amendment to Discontinue AutoSelect

Lender may at any time, by giving notice to the Bank before the deadline indicated in the Timetable for Allocation Mode Management (as defined in the LSA Operating Procedures), amend this Agreement to discontinue the use of AutoSelect, without the agreement of Borrower or the Bank, for one or more Eligibility Sets or for all Eligibility Sets, effective as of the Business Day indicated in the Timetable.

(d) LSA Operating Procedures

The Bank may amend the LSA Operating Procedures at any time by notice to Borrower and Lender. Borrower and Lender will be deemed to have agreed to and accepted any such amendment (i) effective immediately, if the amendment does not adversely affect Borrower or Lender or (ii) effective 30 Business Days after the Bank sends it, for any other amendment.

(e) No Waivers

No waiver, or acceptance of performance other than as provided in this Agreement, on the part of any party will be a waiver, or acceptance of such performance, in the future. The Bank's acceptance, in its discretion, of any notice or notices from Borrower or Lender received after the relevant deadline set out in the Timetable does not oblige it to accept any such notice so received in the future.

13. Agreement of the Parties

If any provision of this Agreement is inconsistent or in conflict with any provision of the Loan Agreement or the Security Agreement (including any provisions to the effect that such Loan Agreement or Security Agreement will prevail over any other agreement), this Agreement will prevail. Except as expressly provided in this Agreement, no provision of this Agreement shall modify or abrogate any right or obligation under the Pledged Account Agreement (if applicable).

14. Applicable Law; Jurisdiction

This Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) will be governed by and construed in accordance with English law.

Each of Borrower and Lender irrevocably agrees for the exclusive benefit of the Bank that the Courts of England are to have jurisdiction to settle any disputes or claims which may arise out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) and that, accordingly, any suit, action or proceeding arising out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) may be brought in such Courts. Nothing contained in this Section 14 will limit the right of the Bank to take any such suit, action or proceeding against each of Borrower and Lender or both in any other court of competent jurisdiction nor will the taking of such suit, action or proceeding in one or more jurisdictions preclude the taking of any such suit, action or proceeding in any other jurisdiction by the Bank whether concurrently or not, to the extent permitted by the law of such other jurisdiction.

The Borrower and Lender waive (and agree not to raise) any objection, on the ground of forum non conveniens or any other ground, to the taking of proceedings by the Bank in any court in accordance with this Section 14. The Borrower and Lender also agree that a judgment against one or both of them in the Bank's favour in proceedings brought in any jurisdiction in accordance with this Section 14 shall be conclusive and binding upon them and may be enforced in any other jurisdiction.

15. Waiver of Immunity

Each of Borrower and Lender waives, to the fullest extent permitted by applicable law, all immunity (on the basis of sovereignty or otherwise) from jurisdiction, attachment (both before and after judgment) and execution to which it might otherwise be entitled in any suit, action or proceeding in the Courts of England or of any other country or jurisdiction relating in any way to this Agreement and agrees that it will not raise, claim or cause to be pleaded any such immunity at or in respect of any such suit, action or proceeding.

16. Domicile

Each of Borrower and Lender elects domicile in Belgium at the Bank for the purpose of any suit, action or proceeding in Belgium arising out of or relating to this Agreement and will appoint promptly on request from the Bank authorised agents in London for the purpose of receiving service of process in any such suit, action or proceeding in England.

17. Service of Process

Each of Borrower and Lender consents to the service of any and all process, notices or other documents which may be served in any such suit, action or proceeding either:

- (i) by mailing a copy thereof to its address referred to in Section 18(a) (*Notices*) by registered or certified mail;
- (ii) by serving a copy thereof at its domicile in Belgium or upon any agent for service appointed as provided in Section 16 (*Domicile*) (whether or not the election of domicile or the appointment of such agent for service of process will for any reason prove to be ineffective or such agent will fail to accept or acknowledge such service) and mailing a copy thereof to its address referred to in Section 18(a) (*Notices*) by registered or certified mail; or
- (iii) in any other manner permitted by applicable law.

Each of Borrower and Lender waives all claims of error by reason of any service in accordance with this Section 17 and agrees that such service (x) will be deemed in every respect effective service of process upon it and (y) will be taken and held to be valid personal service upon and personal delivery to it.

18. Miscellaneous

(a) Notices

Unless otherwise specified herein, notices required by this Agreement must be in writing (which will include, without limitation, facsimile, EUCLID, EasyWay or SWIFT).

Borrower and Lender agree that any notices given under this Agreement will be sent to the Bank to the attention of 'Collateral Management Administration' at the address set forth in Exhibit 1 or to the attention of such other contact at such other address as the Bank may from time to time designate to Borrower and Lender in writing. The Bank is not required to comply with and is not deemed to have any notice or knowledge of any notice sent by any Client. Any notice to Borrower or Lender authorised or required by this Agreement will be addressed to the persons indicated at the addresses set forth in Exhibit 1 or to such other person or persons as the receiving party may from time to time designate to the other parties in writing. Chapter 3 (*Transaction Processing*) of the LSA Operating Procedures contains the Timetable, setting out the deadlines by which the various notices must be received by the Bank for processing. The Bank may, in its sole discretion, attempt to process notices received or validated after the deadlines set forth in the Timetable. Notices will be effective from the time they are actually received by the intended recipient by telephone, facsimile, EUCLID, EasyWay or SWIFT. or any other means designated by the Bank.

In any situation in which this Agreement requires written notice, the Bank may but is not required to act on oral notice reasonably believed by it to be notice of a person acting on behalf of Borrower or Lender or, for the purposes of Section 10(c) (Termination on Revocation of Representative's Authority), a Client or a person purporting to be a Client, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication. Borrower and Lender shall confirm in writing any oral or electronic data notice. Failure to confirm in writing or any conflict between subsequent written notices and oral or data notices will not affect the authority of any acts taken or omitted by the Bank pursuant to oral or electronic data notices. The Bank reserves the right to record telephone conversations with Borrower or Lender and to refer to such recordings in the event of any dispute. Nothing in this paragraph permits oral amendments to this Agreement.

(b) Binding Agreement; Assignment and Novation

The provisions of this Agreement shall be binding upon and inure to the benefit of the Bank, Borrower and Lender and their respective successors and assigns (including any trustee, conservators or other officers of the court in any bankruptcy or insolvency proceeding), subject to the next paragraph.

The rights and obligations of each party under this Agreement may not be assigned or novated without the written consent of the other parties and any assignment or novation without such consent will be null and void.

(c) Severability

Each provision and agreement in this Agreement will be separate from any other provision or agreement in this Agreement and will be enforceable, notwithstanding the unenforceability of any other provision or agreement.

(d) Representatives

Despite the fact that any Representative is acting for the benefit of any Client in connection with this Agreement:

- (i) that Representative will have and be entitled to assert any claim, counterclaim or defence in connection with this Agreement or the Bank's performance of services under this Agreement only to the extent that it has or is entitled to assert that claim, counterclaim or defence in its capacity as a principal party to this Agreement;
- (ii) that Representative shall be liable for the performance of all its obligations and for all its indemnities given under this Agreement, including but not limited to the indem-nity contained in Section 8 (*Indemnification*), as a principal party to this Agreement;
- (iii) no Client is a party to this Agreement and no Client will have any rights under or in connection with this Agreement against the Bank; and
- (iv) the Bank will have obligations under or in connection with this Agreement only to Borrower and Lender and will not be liable to any Client under or in connection with this Agreement in any manner whatsoever (including, without limitation, in contract or in tort).

(e) Survival

All releases, limitations of liability and indemnifications provided in this Agreement will survive the termination of this Agreement.

(f) Headings and References

The headings and captions in this Agreement are for reference only and will not affect the construction or interpretation of any of its provisions.

19. Glossary

References in this Agreement to the singular include the plural, and vice versa.

The following words, as used in this Agreement, have the following meanings:

'Agreement' has the meaning set forth in the first sentence of this Agreement.

'AutoSelect' means an electronic processing module owned by the Bank designed to facilitate the selection of securities for Triparty Agreements. 'AutoSelect Methodology' means the method by which the AutoSelect processing module selects securities to be transferred between Borrower's Account and counterparty accounts, as described in Chapter 6 (*AutoSelect Processing Methodology*) of the LSA Operating Procedures.

'AutoSelect Processing' means an option in Annexes I and II which determines whether or not Borrower and Lender may use AutoSelect processing of Transactions in an Eligibility Set under this Agreement.

'AutoSelect Transaction' means a Transaction that is processed by the Bank using AutoSelect.

'Bank' means Euroclear Bank and its successors and assigns, as secured loan service agent under this Agreement.

'Borrower' has the meaning set forth in the first sentence of this Agreement.

'Borrower's Account' means a Securities Clearance Account in the Euroclear System in the name of Borrower and the Cash Account in the Euroclear System in the name of Borrower associated therewith, the number of which is indicated in the Annexes, which will be used for Securities and Cash, respectively, with respect to Transactions and which in each case will be designated a 'client account' if Borrower has entered into this Agreement for the benefit of one Client.

'Business Day' means a day when the operation of the Euroclear System takes place.

'Cash' means Eligible Cash or Collateral Cash.

'Claims' means any claim, demand, action, investigation or administrative proceeding made or brought by an Indemnitor or any Related Party of that Indemnitor in connection with this Agreement.

'Client' means each person other than Borrower or Lender:

- who has entered into, or who will enter into, the Loan Agreement and the Security Agreement with Borrower or Lender; or
- for whose benefit Borrower or its Client (if applicable) or Lender or its Client (if applicable) has entered into, or will enter into, the Loan Agreement and the Security Agreement,

and for whose benefit Borrower or Lender has entered into the Pledged Account Agreement (if applicable) and has entered into, or will enter into, this Agreement. 'Collateral Cash' means, with respect to a Transaction:

- the Eligible Cash, if any, credited with respect to such Transaction to the relevant Lender's Account; or
- a sum of money equivalent to the proceeds from the redemption of any Collateral Security or proceeds received as consideration upon a takeover or similar event with respect to any Collateral Security increased or decreased by any cash credited or debited, as the case may be, to the relevant Lender's Account from time to time with respect to such Transaction pursuant to a substitution of Eligible Securities for Collateral Cash, a Transaction-size decrease or a closing pursuant to this Agreement.

'Collateral Securities' means, with respect to any Transaction:

- the Eligible Securities credited with respect to such Transaction to the relevant Lender's Account as of the relevant Initiation Date (as defined in the LSA Operating Procedures), increased or decreased by any Securities credited or debited, as the case may be, to of from that Lender's Account from time to time with respect to such Transaction pursuant to this Agreement; or
- Equivalent Securities thereto.

'Eligibility Set' means the Eligible Securities and Eligible Cash identified in each set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and the options, amounts and percentages selected in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time.

'Eligible Cash' means on any date:

- any Settlement Currency which Borrower and Lender have designated as the securities denomination currency of an Eligible Security in the applicable Eligibility Set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time; and
- if any such currency has been replaced by the euro, the euro; and
- with respect to a Transaction, the Transaction Currency of that Transaction.

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'Eligible Securities' means on any date any of the Eurocleareligible securities of a type which Borrower and Lender have agreed, with the consent of the Bank, will be eligible as of such date to become Collateral securities for a Transaction by their inclusion in the applicable set in Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time, and as may be limited by certain options in the corresponding set of Annexes I and II or by way of the Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections, as such Annexes or Unconditional SWIFT Elections may be amended from time to time.

'Equivalent Securities' means, with respect to any Transaction:

- securities of the same issuer, being of an identical type, nominal value, description and amount to the Collateral Securities with respect to such Transaction; or
- in relation to Collateral Securities which are partly paid or have been converted, subdivided, consolidated, made the subject of a takeover, capitalisation issue, rights issue, redenomination or event similar to any of the foregoing, the following:
 - in the case of conversion, subdivision or consolidation, securities equivalent to the securities into which the Collateral Securities have been converted, subdivided or consolidated;
 - in the case of takeover, securities equivalent to the consideration or alternative consideration received;
 - in the case of a call on partly paid securities, securities equivalent to the paid-up securities;
 - in the case of a capitalisation issue, securities equivalent to the Collateral Securities together with the securities allotted by way of bonus thereon;
 - in the case of a rights issue, securities equivalent to the Collateral Securities together with the securities allotted in respect thereof;
 - in the event that income in the form of securities, or a certificate which may at a future date be exchanged for securities or an entitlement to acquire securities is distributed, securities equivalent to the Collateral Securities together with securities or a certificate or an entitlement equivalent to those allotted;
 - in the case of a redenomination into euro (and a related renominalisation, if applicable), securities of the same issuer, being of an identical type, nominal value, description and amount to the redenominated (and renominalised, if applicable) Collateral Securities; and
 - in the case of any event similar to any of the foregoing, securities equivalent to the Collateral Securities together with or replaced by securities or other property equivalent to that received in respect of such Collateral Securities resulting from such event.

'Euroclear Operator' means Euroclear Bank, and its successors and assigns, acting in the capacity of operator of the Euroclear System.

'Euroclear System' means the clearance system for internationally traded securities operated under contract by the Euroclear Operator.

'Euroclear Tariff' means the Euroclear Tariff folder (which includes a general fees brochure and specific tariff sheets) distributed to all Participants, as may be amended from time to time.

'Euroclear-eligible securities' means, at any time, any of the securities accepted at that time for deposit into the Euroclear System in accordance with the Operating Procedures.

'Force Majeure' means any event or circumstance beyond the reasonable control of the Bank, including, without limitation, war, insurrection, riot, civil commotion, act of God, accident, fire, water damage, explosion, mechanical breakdown, computer or systems failure or other equipment failure, failure or malfunctioning of any communications media for whatever reason (whether or not such media are made available to Borrower or Lender by the Bank), interruption (partial or total) of power supply or other utility or service, strike or other labour stoppage (partial or total) and any law, decree, regulation or order of any government or governmental body (including any court or tribunal).

'Indemnified Party' means each of the Bank, its officers, directors and employees.

'Indemnitor' means Borrower, or Lender, as the case may be.

'Intended Transaction Amount' means, with respect to a Transaction, the monetary amount of the loan (being, in the case of a loan of a commodity, the monetary value of the commodity loaned as specified in accordance with the LSA Operating Procedures) indicated as such in the matching initiation notice, increased by amounts of cash proposed to be transferred from Lender's Account to Borrower's Account in a matching notice of Transaction-size increase and decreased by amounts of cash proposed to be transferred from Borrower's Account to Lender's Account in a matching notice of Transaction-size decrease or pursuant to a closing.

'Internet Report' means the internet report made available at the website of the Euroclear System by the Bank as described in Chapter 5 (*Reporting by the Bank*) of the LSA Operating Procedures to recipients subscribing for the service in a separate subscription agreement.

'Lender' has the meaning set forth in the first sentence of this Agreement.

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'Lender's Account' means the Securities Clearance Account (or, in the case of Multiple Lender Accounts, one of such Securities Clearance Accounts) in the Euroclear System in the name of Lender and the Cash Account in the Euroclear System in the name of Lender associated therewith, the number of which is indicated in the Annexes I and II which will be used only for Securities and Cash, respectively, with respect to Transactions under this Agreement and which in each case shall be designated a 'client account' if Lender has entered into this Agreement for the benefit of one or more Clients.

'Loan' means, in respect of a Transaction, the loan to which the Transaction relates in this Agreement (such loan being of cash only if it is to be settled in the Euroclear System).

'Loan Agreement' means one or more agreement(s) between Borrower and Lender and/or one or more of their respective Clients under which Borrower or its Client(s) (if applicable) may borrow money or a commodity from Lender or one or more of its Clients (if applicable).

'Losses' means, in relation to any person, any losses, liabilities, obligations, fines, penalties, damages, taxes (other than taxes on the overall income of such person), costs, expenses (to the extent reasonable and other than ordinary administrative expenses) or fees (including reasonable counsel's fees and accountant's fees) of any kind or nature whatsoever at any time.

'LSA Operating Procedures' means the Triparty Secured Loan Service Agreement Operating Procedures, as amended from time to time, which, together with the LSA Terms and Conditions, form one contractual agreement.

'LSA Terms and Conditions' means the Loan Service Agreement Terms and Conditions, which, together with the LSA Operating Procedures, form one contractual agreement.

'Manual Transaction' means a Transaction that is not an AutoSelect Transaction.

'Multiple Lender Accounts' means an option in Annexes I and II which determines whether or not Lender may open more than one Lender's Account.

'Net Paying Security' means any security with respect to which any interest, dividend or other distribution payable by the issuer to either Borrower or Lender is required by law to be paid subject to withholding or deduction for or on account of taxes or duties of any nature imposed, levied, collected, withheld or assessed by any authority having power to tax. **'Operating Procedures'** means *The Operating Procedures of the Euroclear System* established in accordance with Section 3 of the Terms and Conditions, as such Operating Procedures may be amended from time to time.

'Pledged Account Agreement' means the Acceptance Agreement to the *Single Pledgor Pledged Account Terms and Conditions*.

'Related Party' in respect of an Indemnitor means any agent (including employees of such agent), employee, client (including Clients) or any other person for whose benefit or on whose behalf that Indemnitor acts or who acts for the benefit of or on behalf of that Indemnitor.

'Representative' means either or each of Borrower and Lender if it has entered into, or will enter into, this Agreement for the benefit of one or more Clients.

'Securities' means Eligible Securities or Collateral Securities.

'Security Agreement' means one or more agreement(s) between Borrower and Lender and/or one or more of their respective Clients under which Borrower or its Client (if applicable) provides security (whether by conferring a security interest over property or by transferring title to property outright) for the loan made to it under the Loan Agreement from time to time, to the Lender or one or more of its Clients (if applicable).

'Settlement Currency' at any time means any of the currencies accepted at that time in the Euroclear System as a Settlement Currency in accordance with the Operating Procedures.

'Terms and Conditions' means the *Terms and Conditions Governing Use of Euroclear*, as amended from time to time.

'**Timetable**' means the table of deadlines set forth in Chapter 3 (*Transaction processing*) of the LSA Operating Procedures, as amended from time to time.

'Transaction' means any secured loan governed by the Loan Agreement, the Security Agreement, the Pledged Account Agreement (if applicable) and this Agreement.

'Transaction Currency' means, with respect to a Transaction, the currency in which the Intended Transaction Amount is denominated.

'Triparty Agreement' means an agreement among two Participants and the Bank under which the Bank serves as service agent.

'Unconditional SWIFT Elections' has the meaning set forth in section 2(e) of this Agreement.

20. Effectiveness

- (A) This Agreement will become binding upon Borrower, Lender and the Bank if:
 - (i) the Bank has executed this Agreement, previously signed by Borrower and Lender; and
 - (ii) the Bank has received from Lender the duly authorised and executed documentation relating to the opening of the Lender's Account (or, in the case of Multiple Lender Accounts, the opening of all such accounts); and
 - (iii) the Bank has notified Borrower and Lender that the Agreement is effective.
- (B) Notwithstanding the provisions of paragraph (A) above, this Agreement will also become binding Borrower, Lender and the Bank if:
 - (i) the Borrower and the Bank have executed the Form of Agreement RG 810 specifying (a) the Loan Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (ii) the Lender and the Bank have executed the Form of Agreement RG 810 specifying (a) the Loan Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (iii) either Borrower or Lender have duly executed Annexes I and II and the provisions of Sections 2(d),(e) and (f) of this Agreement are complied with in relation to such Annexes; and
 - (iv) the Bank has received from Lender the duly authorised and executed documentation relating to the opening of the Lender's Account (or, in the case of Multiple Lender Accounts, the opening of all such accounts); and
 - (v) the Bank has notified Borrower and Lender that the Agreement is effective.

21. Counterparts

This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, and all of which together will be one Agreement.



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Euroclear is a carbon neutral company – PAS2060 certified in 2015

www.euroclear.com

LG027

EUROCLEAR BANK SA/NV

Exhibit P-18



August 2015

Collateral Allocation Interface Service Agreement

Terms and Conditions

Post-trade made easy

Collateral Allocation Interface Service Agreement

Terms and Conditions

(to be read in conjunction with the CAI Operating Procedures)

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Collateral Allocation Interface Service Agreement

This collateral service agreement (the 'Agreement') among

(1)
J	1	J

insert name of \Box^1 collateral giver or \Box^1 collateral giver's representative, as applicable

(Account No. ____

_____) ('Collateral Giver')², and

(2) Euroclear Bank SA/NV as collateral service agent (the 'Bank'),

comprises two parts, the CAI Terms and Conditions and the CAI Operating Procedures.

All references to 'the Agreement' or 'this Agreement' are to the CAI Terms and Conditions and the CAI Operating Procedures, both as amended from time to time, which are to be read and construed as, and which together form, one contractual agreement.

CAI Terms and Conditions

Collateral Giver has requested the Bank to perform certain service functions and procedures in connection with the provision of collateral by Collateral Giver or its Client (if applicable). Therefore, in consideration of the promises included in this Agreement and intending to be legally bound hereby, the parties agree to the following terms.

Capitalised words used in these CAI Terms and Conditions have the meanings assigned to them in Section 18 (Glossary). Capitalised words used only in the CAI Operating Procedures have the meanings assigned to them in Chapter 8 (Glossary) of the CAI Operating Procedures. If any capitalised word is defined in both these CAI Terms and Conditions and the CAI Operating Procedures, and the definitions assigned are inconsistent, the definition in these CAI Terms and Conditions will prevail. If capitalised terms are used but not defined, they have the meaning assigned to them in the Terms and Conditions and the Operating Procedures. The use of the term 'type' with respect to securities means securities with the same security code and description.

1. Appointment and Acceptance of the Bank

Collateral Giver appoints the Bank as collateral service agent to carry out the duties described in this Agreement and to take any actions incidental to those duties. The Bank accepts such appointment and consents to act as collateral service agent to carry out only those duties.

2. Selections

(a) Eligible Securities

Collateral Giver, with the consent of the Bank, by initialing each page of Annexes I and II, has agreed with Eligible Securities defined in Annexes I and II, in one or more sets, to be used with respect to Transactions under this Agreement.

(b) Eligibility Set Profiles

Collateral Giver, with the consent of the Bank, by checking the relevant boxes or filling in the relevant lines in Annexes I and II and initialing each page of Annexes I and II, has selected certain options, amounts and percentages applicable to each set of Eligible Securities. If no selection is made with respect to a given option, amount or percentage, the default selection, as indicated in Annexes I and II, will apply.

(c) Annexes

Collateral Giver and the Bank agree to the selections made in Annexes I and II (as the same may be amended from time to time in accordance with Section 12 (Amendments)). Annexes I and II and any other numbered Annexes to this Agreement form an integral part of this Agreement.

3. Euroclear System

Collateral Giver acknowledges that securities and cash credited to Collateral Giver's Account are held in the Euroclear System pursuant to the Terms and Conditions and the Operating Procedures.

¹ Check as applicable.

² Collateral Giver, if it has selected the AutoSelect Processing, may not represent more than one Client unless it makes one of the representations under Section 4(a)(v).

4. Representations

(a) Representations of Collateral Giver

Collateral Giver represents to the Bank, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of the jurisdiction of its organisation with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all requisite corporate action, and this Agreement is a legal, valid and binding obligation of it enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally;
- (iii) the execution, delivery and performance by it of this Agreement have been and will be duly authorised by all necessary governmental and other approvals, including exchange control approvals;
- (iv) the execution, delivery, and performance by it of this Agreement and the transactions contemplated under this Agreement do not and will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any statute, regulation, rule, order or judgment applicable to it (including any statute, regulation, rule, order or judgment relating to taxes);
- (v) it has the power and authority to deliver and transfer the securities and cash delivered or transferred and to take any other action hereunder and, if it is a Representative, each Client has authorised it to execute and deliver this Agreement and to take all such actions hereunder for such Client's benefit; and
- (vi) if it is a Representative and has selected the AutoSelect Processing option in one or more sets of Annexes I and II, either:
 - (A) (x) it is not acting for the benefit of more than one Client under this Agreement and (y) it is not acting through Collateral Giver's Account for the benefit of any other client under another collateral allocation interface service agreement; or
 - (B) it has received from each such Client or client a specific authorisation to engage in transactions under collateral allocation interface service agreements for the benefit of other clients out of the same Collateral Giver's Account.

(b) Representations of the Bank

The Bank represents to Collateral Giver, as of the date of this Agreement and as of each date on which a Transaction is outstanding, that:

- (i) it is duly organised and existing under the laws of Belgium with full power and authority to execute and deliver this Agreement and to perform all the duties and obligations to be performed by it under this Agreement;
- (ii) the execution, delivery and performance by it of this Agreement have been duly authorised, in accordance with all required corporate action, and this Agreement is a legal, valid and binding obligation of the Bank enforceable in accordance with its terms, except as such terms may be limited by bankruptcy, insolvency or similar laws, or by equitable principles relating to or limiting creditors' rights generally; and
- (iii) the execution, delivery, and performance of this Agreement will not violate or constitute a default under any agreement by which it is bound, or its constitutional documents, or any Belgian statute, regulation, rule, order or judgment applicable to it.

5. Transactions

(a) Authority of the Bank to Enter Instructions into the Euroclear System

Collateral Giver authorises the Bank to enter or cancel instructions on its behalf into the Euroclear System and to take all other actions in connection with such instructions in accordance with the terms of this Agreement.

(b) Authority of the Bank to Use AutoSelect

If Collateral Giver has selected the AutoSelect Processing option in one or more sets of Annexes I and II, it authorises the Bank to select Securities on its behalf and deliver them out in accordance with the AutoSelect Methodology, as described in Chapter 6 (AutoSelect Processing Methodology) of the CAI Operating Procedures, with respect to AutoSelect Transactions assigned to the corresponding Eligibility Set(s).

(c) AutoSelect acknowledgements

- (i) Collateral Giver acknowledges that instructions with respect to AutoSelect Transactions (if any) are being generated and entered by the Bank on behalf of Collateral Giver in accordance with the AutoSelect Methodology and such other procedures consistent therewith as agreed to from time to time by Collateral Giver and the Bank and that such instructions are generated and entered only to the extent Securities are, in accordance with such procedures, available for allocation and transfer.
- (ii) Collateral Giver acknowledges that it may enter into any agreements with the Bank under which AutoSelect processing is used for transactions in accordance with the contractual documentation applicable to any of such agreements.

6. Bank Fees

Unless otherwise agreed, Collateral Giver agrees to pay to the Bank all fees and all amounts relating to this Agreement and as such amounts are set forth in monthly billing statements sent by the Bank to Collateral Giver in accordance with the Euroclear Tariff, as in effect from time to time. Amounts payable by Collateral Giver will be debited from Collateral Giver's Account or such other Cash Account as Collateral Giver may specify by written notice to the Bank from time to time or, if no such Cash Account has been duly specified, any Cash Account of Collateral Giver.

7. Duties and Liabilities of the Bank

(a) General

- (i) The Bank has no obligations except as expressly set out in this Agreement.
- (ii) The Bank is not liable to Collateral Giver for any Losses arising in connection with:
 - (A) any event or matter referred to in paragraphs (i),
 (ii) or (iii) of Section 8(a) (Collateral Giver's Instructions, Default or Breach) or paragraphs (i) or (ii) of Section 8(b) (Bank's Performance) or Section 9 (Effect of Certain Events and Disputes) of this Agreement, or Section 12(c) of the Terms and Conditions; or
 - (B) any act or omission of the Bank in connection with this Agreement, except in the case of its negligence or wilful misconduct.
- (iii) The Bank is not liable to anyone for unforeseeable Losses, Losses not flowing directly and naturally from a breach of this Agreement or Losses representing loss of profit, except in the case of its wilful misconduct and then only to Collateral Giver.
- (iv) In the event of any dispute, Collateral Giver bears the burden of proving negligence or wilful misconduct by the Bank.
- (v) The Bank is not liable to anyone for any Losses arising in connection with this Agreement, or any other related agreement except, but only to the extent specified in paragraphs (ii) and (iii) above to Collateral Giver.
- (vi) Acceptance of securities into the Euroclear System is governed by the Operating Procedures and not this Agreement. Acceptance and setting up new securities for use in the services described in this Agreement is not part of the services which the Bank agrees to provide pursuant to this Agreement.
- (vii) All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from this Agreement.

(b) Collateral Giver's Responsibilities

The Bank makes no representation regarding, need not inquire into, does not guarantee and is not liable to anyone for any Losses arising in connection with the following, all of which are Collateral Giver's sole responsibility:

- (i) the title, validity or genuineness of any Security;
- (ii) the legality of the delivery or transfer of any Security;
- (iii) the correctness of any financial or other information derived by the Bank, in connection with its duties under this Agreement, from any source nominated or approved by Collateral Giver;
- (iv) the due authorisation of any person to act on behalf of Collateral Giver in connection with Eligible Securities held in Collateral Giver's Account;
- (v) the capacity and authority of a Representative to act for the benefit of any Client;
- (vi) the characterisation of any Security as a Net Paying Security or the eligibility of any Security as a Collateral Security pursuant to any Third Party Arrangements;
- (vii) the validity or enforceability of, or any statement or representation made by Collateral Giver in connection with this Agreement or any other related agreement;
- (viii)the performance of the obligations of Collateral Giver under this Agreement or any other related agreement;
- (ix) an extension of credit in connection with any Transaction;
- (x) the settlement of instructions entered into the Euroclear System; or
- (xi) the value (or the sufficiency of the value) of any Securities delivered or transferred.

(c) Bank's Notice and Inquiry

Except as expressly set out in this Agreement, the Bank will be deemed to have no notice of, and need not inquire into, any transaction between Collateral Giver (or one or more of its Clients, if applicable) and any third party to this Agreement or otherwise or the performance or breach of this Agreement or any other related agreement.

(d) Notices to Bank

- (i) The Bank may rely on any notice or data from Collateral Giver under this Agreement and is not liable to anyone for any Losses arising in connection with:
 - (A) unsigned notices, or the unauthorised signing or giving of written or oral notices by any person, or the unauthorised alteration of them or of any other instrument;
 - (B) the incorrectness or incompleteness of information in any notice; or
 - (C) the incorrectness or incompleteness of data transmitted by computer tape or terminal or other computer facility, unless, and to the extent that, the Bank actually knows (x) that the notice or data was not sent by Collateral Giver; (y) of the lack of authority; or (z) that the information or data was incorrect.

- (ii) The Bank is not liable to anyone for any Losses arising in connection with:
 - (A) any notices sent otherwise than in accordance with this Agreement;
 - (B) its acting upon oral notice reasonably believed by it to be from a person acting on behalf of Collateral Giver on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication, even if subsequent written notices differ from such oral or data notices; or
 - (C) its acceptance of, and its acting, in its discretion, upon, notices from Collateral Giver received after the deadlines set out in the Timetable.

(e) AutoSelect Allocation

The Bank makes no representation that any allocations of securities or cash generated by AutoSelect in accordance with this Agreement will represent the optimal allocation of securities among all AutoSelect Transactions or all counterparties of Collateral Giver. The Bank is not liable to anyone for any Losses arising in connection with securities not being optimally allocated.

(f) Price Data

The Bank is not liable to anyone for any Losses arising in connection with any error by, or any incorrect price received from, any pricing or other information source used by the Euroclear Operator in its ordinary course of business or the appropriateness or relative change of any price and need not determine volatility factors with respect to or the appropriateness of any price.

(g) Force Majeure

If the Bank acts or fails to act (including, without limitation, fails to receive or deliver, or cause to be received or delivered, Securities) as a result of or in connection with Force Majeure, such action or failure is not a breach of this Agreement and the Bank is not liable to anyone for Losses arising in connection with such action or failure.

8. Indemnification

(a) Collateral Giver's Instructions, Default or Breach Subject to Section 8(e), Collateral Giver will promptly upon demand by the Bank release, defend, indemnify and hold harmless each Indemnified Party for and against Losses or Claims suffered by that Indemnified Party arising in connection with:

- (i) the Bank's execution of instructions based on that Collateral Giver's notices;
- (ii) the Bank's failure or delay, in whole or in part, to take any action to be taken under this Agreement or otherwise to fulfil any of its obligations under this Agreement, to the extent that such failure or delay arises in connection with the negligence or willful misconduct of that Collateral Giver or any Related Party of that Collateral Giver; or
- (iii) any breach by that Collateral Giver or any Related Party of that Collateral Giver of any provision of this Agreement or any law, decree, regulation or order of any government or governmental body (including any court or tribunal),

except, subject to Section 8(c)(i), Losses or Claims arising out of the negligence or willful misconduct of the Bank.

(b) Bank's Performance

Subject to Section 8(e), Collateral Giver will, promptly upon demand by the Bank, release, defend, indemnify and hold harmless each Indemnified Party for and against Losses and Claims, other than Losses or Claims against which the Bank is indemnified under Section 8(a), suffered by such Indemnified Party arising in connection with:

- (i) any act or omission of the Bank in connection with this Agreement or the Terms and Conditions; or
- (ii) the performance of obligations under Belgian or other applicable law in connection with this Agreement or the Terms and Conditions,

except, subject to Section 8(c)(ii), Losses or Claims arising out of the negligence or wilful misconduct of the Bank.

(c) Breach and Related Party Claims

- (i) The exception to Section 8(a) does not apply in respect of:
 (A) Losses or Claims suffered by the Indemnified Party arising as a result of any breach as referred to in Section 8(a)(iii); or
 - (B) Losses caused or Claims made or brought by any Related Party of the Collateral Giver.
- (ii) The exception to Section 8(b) does not, in relation to Collateral Giver apply in respect of Losses caused or Claims made or brought by any Related Party of Collateral Giver.

(d) Burden of Proof

Collateral Giver from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) bears the burden of proving:

- (i) the negligence or wilful misconduct of the Bank for the purposes of the exception to Section 8(a) or Section 8(b), respectively; or
- (ii) the application, if any, of Section 8(e).

(e) Limitations

Collateral Giver from whom the Bank is seeking an indemnity under Section 8(a) or Section 8(b) is not liable in respect of:

- Losses caused or Claims made or brought by any third party (other than any Related Party of the party from whom the Bank is seeking such an indemnity); or
- (ii) Losses caused by an event or circumstance constituting Force Majeure and which is beyond the reasonable control of the party from whom the Bank is seeking such an indemnity.

9. Effect of Certain Events and Disputes

(a) Withdrawal of Authorisation or Insolvency

The Bank will, to the extent permitted by applicable law, cease entering any instructions into the Euroclear System pursuant to this Agreement as soon as reasonably practicable after the receipt by the Bank of:

- (i) any written notice of a withdrawal by Collateral Giver of its authorisation(s) under Section 5(a) (Authority of the Bank to Enter Instructions into the Euroclear System); or
- (ii) any written notice from Collateral Giver that it has filed for bankruptcy or declared that it is insolvent or bankrupt or that it has become the subject of any involuntary proceeding in respect of its insolvency or bankruptcy,

provided that, in each case, the Bank will enter instructions in accordance with a final order (whether or not subject to appeal) of a court of competent jurisdiction.

(b) Continuing Disputes

In the event of any other (x) dispute between Collateral Giver, a Client and/or any other person (other than withdrawals of authorisation, notices of default or filings for or declarations of insolvency or bankruptcy notified to the Bank pursuant to Section 9(a)) the Bank may decline to comply with any and all claims, demands, notices or instructions or to take any action hereunder with respect to the cash, the Securities, Collateral Giver's Account as long as that dispute or conflict is continuing. The Bank will not be liable for any Losses arising out of such failure to act or to comply with such claims, demands, notices or instructions. The dispute or conflict will be deemed to continue and the Bank will be entitled to refuse to act or comply until either:

- the conflicting or adverse claims or demands have been determined in a court of competent jurisdiction or settled by agreement among the conflicting parties and/or such a court; or
- (ii) the Bank has received security or an indemnity satisfactory to it sufficient to hold it harmless from and against any and all Losses which it may incur by reason of taking any action directly or indirectly in connection with this Agreement.

The Bank may assume that no disputes exist unless it has received a copy of a written notice thereof sent by Collateral Giver.

10. Termination

(a) Termination on Notice

Except as provided in Section 17(e) (Survival), this Agreement may be terminated by any party hereto on 30 Business Days' written notice to the other parties. In spite of any such notice of termination, this Agreement will remain applicable to any Transactions then outstanding.

(b) Immediate Termination

The Bank may terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions in the event that:

- (i) any representation made by Collateral Giver in this Agreement will have been incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated; or
- (ii) Collateral Giver ceases to be a Participant in the Euroclear System.

(c) Termination on Revocation of Representative's Authority

If a Representative's authority to take action hereunder for the benefit of a Client is revoked by such Client, such Representative may, by giving written notice (which notice shall be conclusive evidence of such revocation for the purposes of this Agreement) to the Bank specifying the relevant outstanding Transactions, terminate this Agreement immediately with respect to such outstanding Transactions, and all such proposed transactions, in each case, as have been, or are proposed to be, entered into by the Collateral Giver for the benefit of such Client. In addition, if the Bank receives written notice from a Representative or its Client that such Representative's authority as aforesaid has been revoked by such Client, the Bank may, in its discretion, by giving notice to Collateral Giver either:

- terminate this Agreement immediately with respect to all outstanding Transactions and all proposed transactions; or
- (ii) terminate this Agreement immediately with respect to such outstanding Transactions and all such proposed Transactions, in each case, as have been, or are proposed to be, entered into for the benefit of such Client.

(d) Delivery after Termination

Upon the effectiveness of any termination of this Agreement as aforesaid, or as soon thereafter as is reasonably practicable, the Bank will, unless otherwise directed by Collateral Giver and subject to Section 9 (Effect of Certain Events and Disputes) of this Agreement and subject to Section 14(d) of the Terms and Conditions, cause to be delivered to Collateral Giver any amounts of cash and securities then credited to Collateral Giver's Account.

11. Confidentiality

The Bank represents to Collateral Giver that information which reveals or relates to, or which would permit the determination of the Euroclear securities positions of, or Transactions by, Collateral Giver and/or its Client, respectively (including any future or planned securities positions or transactions), or the type and amount of any Collateral Securities, will only be used by the Bank in connection with the operation of the Euroclear System or the provision of banking services to Collateral Giver, as the case may be.

Notwithstanding the foregoing, the Bank may, where it is bound by the law of any territory or country or pursuant to any requirement of any regulatory body, disclose any information or produce any document in its possession or control. If the Bank discloses information concerning Collateral Giver and/or its Client (if applicable) to any such regulatory body, the Bank will inform Collateral Giver, as appropriate, unless the Bank may not do so or has been requested not to do so by such regulatory authority.

12. Amendments

(a) CAI Terms and Conditions

These CAI Terms and Conditions may be amended or modified only by a written agreement executed by the parties. An amendment under this Section 12 (a) is effective when the Bank notifies Collateral Giver that it is effective.

(b) Unilateral Amendment

The Bank will have the unilateral right to amend Annexes I and II to include or exclude any security or securities from Eligible Securities of one or more types or categories of security and at any time, upon notice to and without the agreement of Collateral Giver.

Collateral Giver will have the unilateral right to amend Annexes I and II to exclude from Eligible Securities, for a stated period or until a subsequent notice of Collateral Giver is given to the Bank, one or more types or categories of security, upon notice to and with the consent of the Bank.

An amendment requested by Collateral Giver to amend Annexes I and II to include any security or securities from Eligible Securities of one or more types or categories of security, must be subject to a written agreement executed by the parties.

The Bank may, upon notice to Collateral Giver, amend Annex II at any time.

Collateral Giver may, upon notice to and with the consent from the Bank, amend Annex II.

Any amendment under this Section 12(b) must be in writing, which may include a facsimile, and will be effective when the Bank notifies Collateral Giver that it is effective.

(c) CAI Operating Procedures

The Bank may amend the CAI Operating Procedures at any time by notice to Collateral Giver. Collateral Giver will be deemed to have agreed to and accepted any such amendment (i) effective immediately, if the amendment does not adversely affect Collateral Giver or (ii) effective 30 Business Days after the Bank sends it, for any other amendment.

(d) No Waivers

No waiver, or acceptance of performance other than as provided in this Agreement, on the part of any party hereto will be a waiver, or acceptance of such performance, in the future. The Bank's acceptance, in its discretion, of any notice or notices from Collateral Giver received after the relevant deadline set out in the Timetable does not oblige it to accept any such notice so received in the future.

13. Applicable law; Jurisdiction

This Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims)will be governed by and construed in accordance with English law.

Collateral Giver irrevocably agrees for the exclusive benefit of the Bank that the Courts of England are to have jurisdiction to settle any disputes or claims which may arise out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) and that, accordingly, any suit, action or proceeding arising out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims) may be brought in such Courts. Nothing contained in this Section 14 will limit the right of the Bank to take any such suit, action or proceeding against Collateral Giver or both in any other court of competent jurisdiction nor will the taking of such suit, action or proceeding in one or more jurisdictions preclude the taking of any such suit, action or proceeding in any other jurisdiction by the Bank whether concurrently or not, to the extent permitted by the law of such other jurisdiction.

The Collateral Giver waives (and agrees not to raise) any objection, on the ground of forum non conveniens or any other ground, to the taking of proceedings by the Bank in any court in accordance with this Section 14. The Collateral Giver also agrees that a judgment against it in the Bank's favour in proceedings brought in any jurisdiction in accordance with this Section 14 shall be conclusive and binding upon it and may be enforced in any other jurisdiction.

14. Waiver of Immunity

Collateral Giver waives, to the fullest extent permitted by applicable law, all immunity (on the basis of sovereignty or otherwise) from jurisdiction, attachment (both before and after judgment) and execution to which it might otherwise be entitled in any suit, action or proceeding in the Courts of England or of any other country or jurisdiction relating in any way to this Agreement and agrees that it will not raise, claim or cause to be pleaded any such immunity at or in respect of any such suit, action or proceeding.

15. Domicile

Collateral Giver elects domicile in Belgium at the Bank for the purpose of any suit, action or proceeding in Belgium arising out of or relating to this Agreement and will appoint promptly on request from the Bank authorised agents in London for the purpose of receiving service of process in any such suit, action or proceeding in England.

16. Service of Process

Collateral Giver consents to the service of any and all process, notices or other documents which may be served in any such suit, action or proceeding either:

- by mailing a copy thereof to its address referred to in Section 17(a) (Notices) by registered or certified mail;
- (ii) by serving a copy thereof at its domicile in Belgium or upon any agent for service appointed as provided in Section 15 (Domicile) (whether or not the election of domicile or the appointment of such agent for service of process will for any reason prove to be ineffective or such agent will fail to accept or acknowledge such service) and mailing a copy thereof to its address referred to in 17(a) (Notices) by registered or certified mail; or
- (iii) in any other manner permitted by applicable law.

Collateral Giver waives all claims of error by reason of any service in accordance with this Section 17 and agrees that such service (x) will be deemed in every respect effective service of process upon it and (y) will be taken and held to be valid personal service upon and personal delivery to it.

17. Miscellaneous

(a) Notices

Unless otherwise specified herein, notices required by this Agreement must be in writing (which will include, without limitation, facsimile, EUCLID, EasyWay or SWIFT).

Collateral Giver agrees that any notices given under this Agreement will be sent to the Bank to the attention of 'Collateral Management Administration' at the address set forth in Exhibit 1 or to the attention of such other contact at such other address as the Bank may from time to time designate to Collateral Giver in writing. The Bank is not required to comply with and is not deemed to have any notice or knowledge of any notice sent by any Client. Any notice to Collateral Giver authorised or required by this Agreement will be addressed to the persons indicated at the addresses set forth in Exhibit 1 or to such other person or persons as the Collateral Giver may from time to time designate to the Bank in writing.

Chapter 3 (Transaction Processing) of the CAI Operating Procedures contains the Timetable setting out the deadlines by which the various notices must be received by the Bank for processing. The Bank may, in its sole discretion, attempt to process notices received or validated after the deadlines set forth in the Timetable. Notices will be effective from the time they are actually received by the intended recipient by telephone, facsimile, EUCLID, EasyWay or SWIFT or any other means designated by the Bank.

In any situation in which this Agreement requires written notice, the Bank may but is not required to act on oral notice reasonably believed by it to be notice of a person acting on behalf of Collateral Giver or, for the purposes of Section 10(c) (Termination on Revocation of Representative's Authority), a Client or a person purporting to be a Client, as the case may be, or on data received over any electronic system whereby the receiver is able to verify by code or otherwise with reasonable certainty the identity of the sender of such communication. Collateral Giver shall confirm in writing any oral or electronic data notice. Failure to confirm in writing or any conflict between subsequent written notices and oral or data notices will not affect the authority of any acts taken or omitted by the Bank pursuant to oral or electronic data notices. The Bank reserves the right to record telephone conversations with Collateral Giver and to refer to such recordings in the event of any dispute. Nothing in this paragraph permits oral amendments to this Agreement.

(b) Binding Agreement; Assignment and Novation

The provisions of this Agreement shall be binding upon and inure to the benefit of the Bank and Collateral Giver and their respective successors and assigns (including any trustee, conservators or other officers of the court in any bankruptcy or insolvency proceeding), subject to the next paragraph.

The rights and obligations of each party under this Agreement may not be assigned or novated without the written consent of the other parties and any assignment or novation without such consent will be null and void.

(c) Severability

Each provision and agreement in this Agreement will be separate from any other provision or agreement in this Agreement and will be enforceable, notwithstanding the unenforceability of any other provision or agreement.

(d) Representatives

Despite the fact that any Representative is acting for the benefit of any Client in connection with this Agreement:

- (i) that Representative will have and be entitled to assert any claim, counterclaim or defence in connection with this Agreement or the Bank's performance of services under this Agreement only to the extent that it has or is entitled to assert that claim, counterclaim or defence in its capacity as a principal party to this Agreement;
- (ii) that Representative shall be liable for the performance of all its obligations and for all its indemnities given under this Agreement, including but not limited to the indemnity contained in Section 8 (Indemnification), as a principal party to this Agreement;
- (iii) no Client is a party to this Agreement and no Client will have any rights under or in connection with this Agreement against the Bank; and

(iv) the Bank will have obligations under or in connection with this Agreement only to Collateral Giver and will not be liable to any Client under or in connection with this Agreement in any manner whatsoever (including, without limitation, in contract or in tort).

(e) Survival

All releases, limitations of liability and indemnifications provided in this Agreement will survive the termination of this Agreement.

(f) Headings and References

- (i) The headings and captions in this Agreement are for reference only and will not affect the construction or interpretation of any of its provisions.
- (ii) Notwithstanding the use of expressions 'Collateral Giver', 'Collateral Giver's Account', and 'collateralised', nothing in this Agreement shall create, or shall be construed to create, in favour of any party hereto any mortgage, charge, lien, pledge, encumbrance or other security interest over or in any Collateral Securities.

18. Glossary

References in this Agreement to the singular include the plural, and vice versa.

The following words, as used in this Agreement, have the following meanings:

'Agreement' has the meaning set forth in the first sentence of this Agreement.

'AutoSelect' means an electronic processing module owned by the Bank designed to facilitate the selection of securities for Triparty Agreements.

'AutoSelect Methodology' means the method by which the AutoSelect processing module selects securities to be transferred between Collateral Giver's Account and counterparty accounts, as described in Chapter 6 (AutoSelect Processing Methodology) of the CAI Operating Procedures.

'AutoSelect Processing' means an option in Annexes I and II which determines whether or not Collateral Giver may use AutoSelect processing of Transactions in an Eligibility Set under this Agreement.

'AutoSelect Transaction' means a Transaction that is processed by the Bank using AutoSelect.

'Bank' means Euroclear Bank, and its successors and assigns, as collateral service agent under this Agreement.

'Business Day' means a day when the operation of the Euroclear System takes place.

'Claims' means any claim, demand, action, investigation or administrative proceeding made or brought by an Collateral Giver or any Related Party of that Collateral Giver in connection with this Agreement.

'Client' means each person other than Collateral Giver for whose benefit Collateral Giver has entered into, or will enter into, this Agreement

'Collateral Giver' has the meaning set forth in the first sentence of this Agreement.

'Collateral Giver's Account' means a Securities Clearance Account in the Euroclear System in the name of Collateral Giver and the Cash Account in the Euroclear System in the name of Collateral Giver associated therewith, the number of which is indicated in the first sentence of this Agreement, which will be used only for Securities and Cash, respectively, with respect to Transactions and which in each case will be designated a 'client account' if Collateral Giver has entered into this Agreement for the benefit of one or more Clients.

'Collateral Securities' means, with respect to any Transaction:

- the Eligible Securities credited with respect to such Transaction to the relevant Collateral Taker's Account as of the relevant Initiation Date (as defined in the CAI Operating Procedures), increased or decreased by any Securities credited or debited, as the case may be, to of from that Collateral Taker's Account from time to time with respect to such Transaction pursuant to this Agreement; or
- Equivalent Securities thereto.

Collateral Taker's Account' means the bank account opened in or outside the Euroclear System, whose number is indicated in Annexes I and II, which will be used for Securities with respect to Transactions under this Agreement.

'CAI Operating Procedures' means the collateral allocation interface operating procedures, as amended from time to time, which, together with the CAI Terms and Conditions, form one contractual agreement.

'CAI Terms and Conditions' means these collateral allocation interface terms and conditions, which, together with the CAI Operating Procedures, form one contractual agreement.

'Eligibility Set' means the Eligible Securities identified in each set of Annexes I and II, as such Annexes may be amended from time to time, and the options, amounts and percentages selected in the corresponding set of Annexes I and II, as such Annexes may be amended from time to time.

'Eligible Securities' means on any date any of the Eurocleareligible securities of a type which Collateral Giver has selected, with the consent of the Bank, will be eligible as of such date to become Collateral Securities for a Transaction by their inclusion in the applicable Eligibility Set in Annexes I and II, as such Annexes may be limited by certain options in the corresponding Eligibility Set of Annexes I and II.

'Equivalent Securities' means, with respect to any Transaction:

- securities of the same issuer, being of an identical type, nominal value, description and amount to the Collateral Securities with respect to such Transaction; or
- in relation to Collateral Securities which are partly paid or have been converted, subdivided, consolidated, made the subject of a takeover, capitalisation issue, rights issue, redenomination or event similar to any of the foregoing, the following:
 - in the case of conversion, subdivision or consolidation, securities equivalent to the securities into which the Collateral Securities have been converted, subdivided or consolidated;
 - in the case of takeover, securities equivalent to the consideration or alternative consideration received;
 - in the case of a call on partly paid securities, securities equivalent to the paid-up securities;
 - in the case of a capitalisation issue, securities equivalent to the Collateral Securities together with the securities allotted by way of bonus thereon;
 - in the case of a rights issue, securities equivalent to the Collateral Securities together with the securities allotted in respect thereof;
 - in the event that income in the form of securities, or a certificate which may at a future date be exchanged for securities or an entitlement to acquire securities is distributed, securities equivalent to the Collateral Securities together with securities or a certificate or an entitlement equivalent to those allotted;
 - in the case of a redenomination into euro (and a related renominalisation, if applicable), securities of the same issuer, being of an identical type, nominal value, description and amount to the redenominated (and renominalised, if applicable) Collateral Securities; and
 - in the case of any event similar to any of the foregoing, securities equivalent to the Collateral Securities together with or replaced by securities or other property equivalent to that received in respect of such Collateral Securities resulting from such event.

'Euroclear-eligible securities' means, at any time, any of the securities accepted at that time for deposit into the Euroclear System in accordance with the Operating Procedures.

EUROCLEAR BANK SA/NV

'Euroclear Operator' means Euroclear Bank, and its successors and assigns, acting in the capacity of operator of the Euroclear System.

'Euroclear System' means the clearance system for internationally traded securities operated under contract by the Euroclear Operator.

'Euroclear Tariff means the Euroclear Tariff folder (which includes a general fees brochure and specific tariff sheets) distributed to all Participants, as may be amended from time to time.

'Force Majeure' means any event or circumstance beyond the reasonable control of the Bank, including, without limitation, war, insurrection, riot, civil commotion, act of God, accident, fire, water damage, explosion, mechanical breakdown, computer or systems failure or other equipment failure, failure or malfunctioning of any communications media for whatever reason (whether or not such media are made available to Collateral Giver by the Bank), interruption (partial or total) of power supply or other utility or service, strike or other labour stoppage (partial or total) and any law, decree, regulation or order of any government or governmental body (including any court or tribunal).

'Indemnified Party' means each of the Bank, its officers, directors and employees.

'Intended Transaction Amount' means, with respect to a Transaction, the amount indicated as such in Collateral Giver's initiation notice:

- increased by the amount proposed to be transferred from Collateral Giver's Account to Collateral Taker's Account in one or more matching notices of Transaction-size increase; and
- decreased by the amount proposed to be transferred from Collateral Taker's Account to Collateral Giver's Account in one or more matching notices of Transaction-size decrease or pursuant to a closing.

'Internet Report' means the internet report made available at the website of the Euroclear System by the Bank as described in Chapter 5 (Reporting by the Bank) of the CAI Operating Procedures to recipients subscribing for the service in a separate subscription agreement.

'Losses' means, in relation to any person, any losses, liabilities, obligations, fines, penalties, damages, taxes (other than taxes on the overall income of such person), costs, expenses (to the extent reasonable and other than ordinary administrative expenses) or fees (including reasonable counsel's fees and accountant's fees) of any kind or nature whatsoever at any time. **'Manual Transaction'** means a Transaction that is not an AutoSelect Transaction.

'Net Paying Security' means any security with respect to which any interest, dividend or other distribution payable by the issuer to Collateral Giver is required by law to be paid subject to withholding or deduction for or on account of taxes or duties of any nature imposed, levied, collected, withheld or assessed by any authority having power to tax.

'Operating Procedures' means the Operating Procedures of the Euroclear System established in accordance with Section 3 of the Terms and Conditions, as such Operating Procedures may be amended from time to time.

'Related Party' in respect of an Collateral Giver means any agent (including employees of such agent), employee, client (including Clients) or any other person for whose benefit or on whose behalf that Collateral Giver acts or who acts for the benefit of or on behalf of that Collateral Giver.

'Representative' means Collateral Giver if it has entered into, or will enter into, this Agreement for the benefit of one or more Clients.

'Securities' means Eligible Securities or Collateral Securities.

'Settlement Currency' at any time means any of the currencies accepted at that time in the Euroclear System as a Settlement Currency in accordance with the Operating Procedures.

'Terms and Conditions' means the Terms and Conditions Governing Use of Euroclear, as amended from time to time.

'Timetable' means the table of deadlines set forth in Chapter 3 (Transaction Processing) of the CAI Operating Procedures, as amended from time to time.

'Third Party Arrangement' means any contractual arrangements and agreements between Collateral Giver and any third party to this Agreement.

'Transaction' means any provision of collateral governed by this Agreement.

'Transaction Currency' means, with respect to a Transaction, the currency in which the Intended Transaction Amount is denominated.

19. Effectiveness

- (A) This Agreement will become binding upon Collateral Giver and the Bank if:
 - the Bank has executed this Agreement, previously signed by Collateral Giver; and
 - (ii) the Bank has received from Collateral Giver the duly authorised and executed documentation relating to the opening of Collateral Giver's Account (if applicable); and
 - (iii) the Bank has notified Collateral Giver that the Agreement is effective.
- (B) Notwithstanding the provisions of paragraph (A) above, this Agreement will also become binding upon Collateral Giver and the Bank if:
 - (i) the Collateral Giver and the Bank have executed the Form of Agreement RG 810 specifying (a) the Collateral Allocation Interface Service Agreement under 'Specific services' or (b) all collateral management service agreements under 'All services' or such other form and in such manner as may be specified by the Bank; and
 - (ii) the Collateral Giver have duly executed Annexes I and II and the provisions of Sections 2(a) and (b) of this Agreement are complied with in relation to such Annexes; and
 - (iii) the Bank has received from Collateral Giver the duly authorised and executed documentation relating to the opening of the Collateral Giver's Account (if applicable); and
 - (iv) the Bank has notified Collateral Giver that the Agreement is effective.

20. Counterparts

This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, and all of which together will be one agreement.

Exhibit 1 - Addresses

Euroclear Bank SA/NV 1 Boulevard du Roi Albert II B-1210 Brussels Belgium Attn.: Triparty Client Service Fax: +32 2 326 2502

Collateral Giver

Name:	
Address:	
Attn:	
Dept:	
Fax:	
Tel:	

The parties to this Agreement have caused this Agreement to be duly executed by their respective authorised corporate officers as of

Collateral Giver				
By:				
	Name:			
	Title:			
By:				
	Name:			
	Title:			

Euroclear Bank

By:	
	Name:
	Title:
By:	
Бу.	
	Name:
	Title:



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Euroclear is a carbon neutral company – PAS2060 certified in 2015

www.euroclear.com

LG081

Exemption Statement

Euroclear Bank SA/NV ("**Euroclear Bank**") is filing with the Securities and Exchange Commission (the "**Commission**") an amendment to its previously filed Form CA-1¹ to modify an existing exemption from clearing agency registration ("**Modification Application**") pursuant to Section 17A of the Securities Exchange Act of 1934 ("**Exchange Act**")² and Rule 17Ab2-1 thereunder.³

On February 11, 1998, the Commission issued an order exempting Euroclear Bank's predecessor as operator of the Euroclear System, Morgan Guaranty Trust Company of New York (Brussels Office) from registration as a clearing agency.⁴ On January 4, 2001, the Commission issued a modified exemption order to Euroclear Bank as the successor operator of the Euroclear System⁵ (as modified, the "**Existing Exemption Order**").⁶

The Existing Exemption Order enables Euroclear Bank to perform the functions of a clearing agency with respect to transactions involving Eligible U.S. Government Securities for its U.S. Participants subject to certain limitations without registering as a clearing agency.⁷ Specifically, the Existing Exemption Order authorizes Euroclear Bank to provide clearance, settlement and collateral management services for transactions in Eligible U.S. Government Securities by U.S. Participants (the "U.S. Government Securities Clearing Agency Activities"). The Existing

³ 17 C.F.R. 240.17Ab2-1.

 $\frac{5}{2}$ On Dec. 31, 2000, the business and related assets and liabilities of the Euroclear System vested in Euroclear Bank and virtually all of the staff and systems associated with the Euroclear System were transferred to Euroclear Bank.

⁶ Self-Regulatory Organizations; Morgan Guaranty Trust Company, Brussels Office, as Operator of the Euroclear System and Euroclear Bank, S.A.; Order Approving Application to Modify an Existing Exemption Order from Clearing Agency Registration, 66 Fed. Reg. 819 (Jan. 4, 2001) ("**2001 Exemption Order**").

¹ See Commission File No. 600-01.

²15 U.S.C. 78q-1.

⁴ Self-Regulatory Organizations; Morgan Guaranty Trust Company of New York, Brussels Office, as Operator of the Euroclear System; Order Approving Application for Exemption from Registration as a Clearing Agency, 63 Fed. Reg. 8232 (Feb. 18, 1998) ("**1998 Exemption Order**"). As used herein, the term "**Euroclear System**" is used to describe the collection of securities settlement and related services that have been offered by Euroclear Bank or its predecessor since 1968, and the assets, means and rights related to such services. All services performed by Euroclear Bank that relate to securities settlement and custody are part of the "Euroclear System."

² See 1998 Exemption Order, 63 Fed. Reg. at 8239. As used herein, the term "**Eligible U.S. Government Security**" refers to the following: (i) "government securities" as defined in Section 3(a)(42) of the Exchange Act that are eligible for transfer or processing on Fedwire, except that it shall not include any foreign-targeted U.S. government or agency securities or securities issued or guaranteed by the International Bank for Reconstruction and Development or any other similar international organization; (ii) mortgage-backed pass-through securities that are guaranteed by the Government National Mortgage Association ("GNMA"); and (iii) collateralized mortgage obligations whose underlying securities are Fedwire-eligible U.S. government securities. As used herein, the term "U.S. Participant" refers to any Euroclear System participant having a U.S. residence, based upon the location of its executive office or principal place of business, including, without limitation, (i) a U.S. bank (as defined by Section 3(a)(6) of the Exchange Act), (ii) a foreign branch of a U.S. bank or U.S.-registered broker-dealer and (iii) any broker-dealer registered as such with the Commission even if such broker-dealer does not have a U.S. residence.

Exemption Order relates only to the offering of U.S. Government Securities Clearing Agency Activities, and does not relate to Euroclear Bank's other activities in securities other than Eligible U.S. Government Securities or the offering of services to participants that are not U.S. Participants.⁸ The Existing Exemption Order also provides that Euroclear Bank may request that the exemption be broadened to provide securities processing services for securities other than Eligible U.S. Government Securities.⁹

Euroclear Bank requests that the Commission broaden Euroclear Bank's Existing Exemption Order to permit Euroclear Bank to offer specified securities processing services for Equity Securities¹⁰ issued by U.S. Issuers¹¹ ("U.S. Equities" or "U.S. Equity Securities") to the extent that Euroclear Bank performs the functions of a clearing agency with respect to such U.S. Equity Securities for U.S. Participants. As described in greater detail below, Euroclear Bank proposes to allow eligible U.S. Participants to receive and use U.S. Equity Securities in their EB Accounts¹² for collateral management purposes (the "U.S. Equities Proposal").

Euroclear Bank therefore requests that the Commission, on the basis of the Modification Application, modify the Existing Exemption Order (the "**Modification Request**") as follows:

- continue the authority granted to Euroclear Bank in the 2001 Exemption Order to provide clearance, settlement and collateral management services for its U.S. Participants' transactions in Eligible U.S. Government Securities without registering as a clearing agency with the Commission on substantially the same conditions applicable to such U.S. Government Securities Clearing Agency Activity under the Existing Exemption Order; and
- grant to Euroclear Bank the authority to provide, through accounts held at Euroclear Bank, clearing agency services (such as certain central securities depository services¹³ and collateral management services) for its U.S. Participants' use of U.S. Equity Securities in support of collateral obligations utilizing the collateral management services provided by Euroclear Bank,

⁸ See 62 Fed. Reg. 26833, 26835 n.16 (May 15, 1997); see also 1998 Exemption Order, 63 Fed. Reg. at 8234, 8239.

⁹ See 1998 Exemption Order, 63 Fed. Reg. at 8239.

 $[\]frac{10}{10}$ As used herein, the term "**Equity Security**" refers to an instrument that represents a direct ownership in a company, such as a stock, share, certificate of interest or participation in any profit sharing agreement, preorganization certificate of subscription, voting trust certificate or certificate of deposit for an equity security, limited partnership interest, interest in a joint venture or certificate of interest in a business trust. However, the term "Equity Security" does not include interests in structured finance vehicles such as limited partnerships, business trusts or similar arrangements that have no independent operations and are used solely as special purpose financing vehicles.

 $[\]frac{11}{10}$ As used herein, the term "U.S. Issuer" refers to an issuer organized or incorporated under the laws of any state of the United States, territory thereof, or the District of Columbia.

 $[\]frac{12}{12}$ As used herein, the term "**EB Account**" refers to securities accounts and current cash accounts of Euroclear Bank participants ("**EB Participants**") on the books of Euroclear Bank.

 $[\]frac{13}{13}$ As used herein, the term "**central securities depository services**" has the meaning set forth in 17 C.F.R. 240.17Ad-22(a)(2).

including U.S. Participants' receipt and delivery of U.S. Equity Securities through dedicated accounts at Euroclear Bank related to the provision of inventory management services ("**IMS**") by the joint venture with DTCC-Euroclear Global Collateral Ltd. ("**DEGCL**"), without registering as a clearing agency with the Commission and subject only to the conditions specified below.

Throughout the Modification Application, any references to the combined scope of activities included in the U.S. Equities Clearing Agency Activities (as defined below) and the U.S. Government Securities Clearing Agency Activities are generally referred to as the "Clearing Agency Activities."

Euroclear Bank, as an international central securities depository ("**ICSD**"), is a well-known global provider of clearance, settlement, collateral management and related services that provide EB Participants with a means of acquiring, holding, transferring and pledging security entitlements by electronic book-entry on its records outside of the United States, either free of payment or against payment, in multiple currencies. Euroclear Bank is organized under the laws of the country of Belgium and has its headquarters in Brussels, Belgium.

As described in Exhibit A and Exhibit D, Euroclear Bank is part of the Euroclear Group of companies¹⁴ that provide critical market infrastructure by offering clearing agency and related services as central securities depositories ("**CSDs**") to the domestic markets in Belgium, Netherlands, France, England and Ireland, Sweden and Finland (collectively with Euroclear Bank, the "**Euroclear Group (I)CSDs**"). The Euroclear Group (I)CSDs are subsidiaries of Euroclear SA/NV ("**ESA**"), where control and direction of the Euroclear Group strategic decisions is vested. In 2015, the Euroclear Group CSDs and Euroclear Bank had assets under custody of 27.5 trillion, turnover equivalent to 674.7 trillion and a settlement volume of 190.7 million netted transactions. Euroclear Group's collateral management platform, the Collateral Highway, processed collateralized transactions in 2015 for an amount of 1.068 trillion on a daily basis.

Generally all of the Clearing Agency Activities of Euroclear Bank are and will be performed by Euroclear Bank in its European locations.¹⁵ ESA provides common services to Euroclear Bank and other affiliated companies of the Euroclear Group. ESA maintains intercompany agreements with Euroclear Bank setting forth respective services and obligations.

As further described below, the U.S. Equities Proposal would permit U.S. Participants in the Euroclear System to give and receive U.S. Equity Securities as collateral in special collateral and related accounts at Euroclear Bank, using Euroclear Bank's collateral management services ("**EB-CMS**"). Euroclear Bank or its predecessor has provided its EB-CMS to EB Participants, including U.S. Participants, since 1993. Since its introduction, the EB-CMS has provided a robust, well-known framework for exchanging collateral to fulfill bilateral obligations between central banks and their counterparty commercial banks, central counterparties ("**CCPs**") and

¹⁴ See Exhibit D-1 (Organizational Chart).

 $[\]frac{15}{5}$ Some operational services are provided by Euroclear Bank's Hong Kong and Krakow branches. For a description of the services provided by the Hong Kong and Krakow branches, please refer to <u>Exhibit I</u>.

their members, and many other of the world's largest and most active banks, brokers and dealers as well as treasury management functions of large qualified corporate entities (collectively, "**EB-CMS Users**").

As described in Section I.C.2 below, U.S. Participants would not be permitted to use U.S. Equity Securities for any other purpose in Euroclear Bank,¹⁶ including for any settlement and custody activity unrelated to such collateral activity. The EB-CMS is described below and in the narrative responses and documents provided as attachments to Exhibit E, Exhibit J and Exhibit P of this Modification Request.

This remainder of this <u>Exhibit S</u> is organized in three parts:

- Part I: Description of Proposed Modification to Existing Exemption Order;
- Part II: Policy Considerations; and
- Part III: Exemption Order Request and Conditions.

I. Description of Proposed Modification to Existing Exemption Order

A. Description of Euroclear Bank Existing Operations

The securities settlement system operated by Euroclear Bank is referred to as the "Euroclear System," which has been in operation since 1968. As described elsewhere in the Modification Application,¹⁷ Euroclear Bank offers settlement and related services to EB Participants, including settlement services for over-the-counter ("OTC") transactions and certain exchange transactions and asset servicing. The terms and conditions applicable to the EB Accounts ("Euroclear System Contracts") are governed by Belgian law.¹⁸

Euroclear Bank also offers to qualified EB Participants the option to receive certain ancillary services, complementing EB Participants' use of the settlement and custody services. These optional services consist of securities lending and borrowing services, certain credit and related banking services, collateral management services and inventory management services.

Each such optional service is subject to contractual terms and conditions that are unique to that service (which may be governed by Belgian law or another law, as specified in such contracts) and which are separate from the Euroclear System Contracts. These services utilize the EB Accounts (including specific types of EB Accounts dedicated to collateral management, as

 $[\]frac{16}{16}$ U.S. Participants would only be able to use U.S. Equity Securities in limited default situations. *See infra* Sections I.C.1 and I.C.2.

 $[\]frac{17}{2}$ See <u>Exhibit J</u>.

¹⁸ See Terms and Conditions Governing Use of Euroclear ("**Terms and Conditions**") and the Operating Procedures of the Euroclear System ("**Operating Procedures**") and additional contractual documentation referenced therein. EB Participants are bound by the Terms and Conditions upon signing an agreement to participate in the Euroclear System. Any dispute arising under the Terms and Conditions may be submitted to the non-exclusive jurisdiction of the Brussels courts.

described below) and the settlement processes and infrastructure that are used by Euroclear Bank to provide the primary settlement and custody services.

1. <u>Collateral Management Services</u>

Euroclear Bank currently offers collateral management services to its participants that operate as described generally in Exhibit J.¹⁹

These services permit EB Participants who are party to bilateral arrangements²⁰ that require the posting of collateral by one party to the other in order to secure a credit exposure arising under such arrangements, to deliver, receive and manage such collateral through EB Accounts.

To make use of the collateral management services in Euroclear Bank, the relevant EB Participants enter into an agreement with Euroclear Bank to provide the collateral management services (an "**EB-CMS Services Agreement**").²¹ Collateral is transferred from an EB Account of the collateral giver into a type of EB Account dedicated to EB-CMS (a "**Collateral Account**")²² held by a collateral taker. To execute such transfers, instructions are generated by EB-CMS and such instructions are then processed by Euroclear Bank's settlement platform, subject to the same protocols and validation rules that apply to settlement activities in EB Accounts.

2. <u>Services to U.S. Participants in U.S. Eligible Government Securities and U.S. Equities</u>

Pursuant to the 1998 Exemption Order, Euroclear Bank began offering settlement and related services in Eligible U.S. Government Securities to U.S. Participants. Euroclear Bank also offers its services to U.S. Participants in securities that are not subject to a Commission exemption order.

Subsequent to the 1998 Exemption Order, Euroclear Bank began offering settlement and related services in U.S Equities. Following discussions with the Commission staff, Euroclear Bank voluntarily limited its settlement services for U.S Equity Securities to EB Participants that did not qualify as "U.S. participants" as defined by the Commission in the 1998 Exemption Order ("non-U.S. Participants").

As part of its contractual documentation with its participants, Euroclear Bank prohibits any U.S. Participant from holding U.S. Equities in its EB Account(s) for any purpose ("**Current Equities**

¹⁹ See generally 2015 EB Disclosure Report, at 13-14. Although Euroclear Bank's collateral management services utilize the settlement processes and infrastructure run by Euroclear Bank, the collateral management services are subject to separate contractual documentation and service-specific procedures.

 $[\]frac{20}{20}$ It is also possible for an EB Participant to act as custodian for a party to such bilateral arrangements.

 $[\]frac{21}{2}$ See <u>Exhibit P</u>.

 $[\]frac{22}{2}$ As used herein, the term "**Collateral Account**" refers to any securities or cash account at Euroclear Bank used to receive collateral pursuant to an EB-CMS Services Agreement.

Restrictions").²³ Automated systems protocols and control procedures are implemented in Euroclear Bank to enforce these Current Equities Restrictions. The systems protocols consist of coded validation rules that are part of Euroclear Bank's fully automated and standard processes that run prior to the settlement of any securities movement to/from an EB Account. These arrangements regarding U.S. Equities held in the Euroclear System were discussed with Commission staff prior to implementation.

Consequently, EB Participants that qualify as U.S. Participants cannot currently hold, give or receive U.S. Equities in Euroclear Bank.

B. Introduction of DTCC-Euroclear Global Collateral Services

Beginning in September 2016, new and enhanced regulatory requirements ("**New Collateral Regulations**") are leading derivative and financing counterparties to seek increased efficiency in the availability and deployment of collateral and streamlined margin processing.²⁴ When fully implemented, the New Collateral Regulations will result in increased capital requirements, mandatory central clearing of more derivative transactions and new margining rules for bilateral trades, which will increase demand for high quality collateral. The requirement for more transactions and exposures to be collateralized globally is projected to result in a significant increase in the number of required collateral movements between market participants, which will have implications for counterparty credit risk, funding and capital charges, reputational and operational risk. Addressing such implications will require operational efficiency, collateral mobility, transparency and security in collateral management services.

For example, these regulatory changes include requirements for initial margin for counterparties as well as a reduction or removal of thresholds for variation margin. It is expected that the

 $[\]frac{23}{23}$ Euroclear Bank's customer contracts provide that: "Due to restrictions imposed on Euroclear Bank by the United States Securities and Exchange Commission (S.E.C.) following SEC Rule 17Ab2-1, equities, ETFs and REITs issued by companies incorporated in a state or territory of the United States can be held in Euroclear Bank by non-US Participants only."

²⁴ Regulatory mandates resulting in increased collateral delivery requirements, channels and movements include: Basel III liquidity rules (Basel Committee on Banking Supervision, Basel III: A global framework for more resilient banks and the banking system, December 2010 and revised June 2011; Basel Committee on Banking Supervision, Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, January 2013; Basel Committee on Banking Supervision, Basel III: the net stable funding ratio, October 2014, available at www.bis.org/bcbs/basel3.htm); regulatory changes by the Commodity Futures Trading Commission (Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants, 81 Fed. Reg. 635 (January 6, 2016); 17 C.F.R. Parts 23 and 140); changes to margin and capital requirements implemented by the Office of the Comptroller of the Currency - Treasury, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Farm Credit Administration, and the Federal Housing Finance Agency (Margin and Capital Requirements for Covered Swap Entities, 80 Fed. Reg. 74840 (November 30, 2015); 12 C.F.R. Parts 45, 237, 349, 624 and 1221); the European Market Infrastructure Regulation (European Supervisory Authorities' (ESAs) Final Draft Regulatory Technical Standards on risk-mitigation techniques for OTC-derivative contracts not cleared by a CCP under Article 11(15) of Regulation (EU) No 648/2012 (EMIR), available at https://www.eba.europa.eu/ documents/10180/1398349/RTS+on+Risk+Mitigation+Techniques+for+OTC+contracts+%28JC-2016+18%29.pdf/ fb0b3387-3366-4c56-9e25-74b2a4997e1d); and the Basel Committee on Banking Supervision ("BCBS") and the International Organization of Securities Commissions ("IOSCO") (BCBS-IOSCO, Margin requirements for noncentrally cleared derivatives (March 2015), available at http://www.bis.org/bcbs/publ/d317.htm).

inclusion of initial margin will significantly increase the amount of collateral required and will create additional margin calls by affected counterparties. In addition, it is expected that the removal or reduction of thresholds for variation margin will mean any changes in underlying valuations may trigger increased margin calls requiring market participants to hold additional collateral available for posting. Also, these regulatory changes include new restrictions on eligible collateral, requiring the use of highly liquid assets, prescribed haircuts, segregation requirements, as well as a prohibition on rehypothecation for initial margin.

Among other things, the New Collateral Regulations are expected to greatly increase the complexity of collateral management²⁵ and create new competition for collateral. Industry research indicates that as these regulatory changes take effect, the volume of required collateral movements will increase and the number of collateral settlement fails and associated costs are likely to rise proportionally.²⁶

Effectively managing collateral inventory on a real-time basis is integral to reducing the operational risk and increasing efficiencies in the collateral management process. At the same time, one important challenge of covering exposures with collateral will be delivering the right collateral to the right place at the right time. Securities available for use as collateral have often been locked in a particular market, entity or time zone. This reduces collateral management efficiency and collateral optimizations, especially in a cross-border context.

1. <u>DEGCL Joint Venture</u>

In order to help market participants address the challenges driven by the New Collateral Regulations, ESA and The Depository Trust & Clearing Corporation ("**DTCC**") entered into the DEGCL joint venture in 2014. DEGCL was formed for the purpose of offering global information, recordkeeping and processing services for derivatives collateral transactions and other types of financing transactions. DEGCL seeks to provide services to its users, including buy-side and sell-side financial institutions, in meeting their risk management and regulatory requirements for the holding and exchange of collateral as required by the New Collateral Regulations. These services will be offered to users located primarily in Europe and the United States. DEGCL will offer a utility-based solution to deliver improvements in asset and collateral mobility in order to respond to the New Collateral Regulations, capital requirements and other forces driving the need for better and more efficient global collateral management.

²⁵ See, e.g., Implications of Collateral Settlement Fails: An Industry Perspective on Bilateral OTC Derivatives (Feb. 2016), *available at* <u>http://www.imas.org.sg/uploads/media/2016/03/03/1046_Implications_of_Collateral</u> Settlement Fails FINAL.pdf; Collateral Management in Europe: Searching for Central Intelligence (May 2015), *available at* https://www.euroclear.com/dam/Brochures/Euroclear-Collateral-Management-Aite-Paper.pdf; The Economics of Collateral (Dec. 2013), *available at* http://dtcc.com/~/media/Files/Downloads/WhitePapers/ LSE%20Report.ashx. Collateral movements will need to be tracked and actually applied against a growing number and type of credit support documentation, segregation rules will multiply the number of collateral accounts needed and correspondingly increase the complexity of accurately processing collateral movements across account types, fragmented central clearing and collateral delivery channels.

 $[\]frac{26}{26}$ See, e.g., *id.* at 5.

2. <u>DEGCL Inventory Management Services</u>

One of the services that DEGCL intends to offer to market participants is an inventory management service (the "**JV-IMS**") that provides an automated mechanism for an entity that is a participant of both Euroclear Bank and The Depository Trust Company ("**DTC**") to reposition securities from its account at DTC to its account at Euroclear Bank (and for the return of such securities to its account at DTC).²⁷ The JV-IMS would address the increased demand for cross-border availability of securities collateral, some of which may be held at DTC.

To facilitate the IMS, Euroclear Bank will become a participant at DTC, subject to approval by DTC, its standard membership requirements and certain heightened requirements for a non-U.S. entity. As a DTC participant, Euroclear Bank will have an account at DTC²⁸ for the receipt, free of payment, of securities transferred to it by other DTC participants that are users of the JV-IMS ("**IMS Users**"). A DEGCL user that wishes to use JV-IMS will set parameters that specify which assets (and in what amounts) it will make available for the JV-IMS. The IMS User will then transfer assets that meet the parameters to a special sub-account of its DTC main account that is designated for, and dedicated to, IMS use, and deliver instructions will be given to DTC to move such identified assets free of payment to Euroclear Bank's account at DTC. While held in Euroclear Bank's account at DTC, these assets will then be credited by Euroclear Bank to the relevant IMS User's account at Euroclear Bank. The JV-IMS will also facilitate the automated return of such assets to the IMS User's account at DTC when necessary to meet other settlement obligations and for corporate actions. All of the foregoing will be subject to DTC rules to be developed for the JV-IMS pursuant to DTC's and the Commission's normal rule filing and approval procedures.

The JV-IMS can be used to manage certain DTC-eligible U.S. securities that the IMS User wishes to make available for use in its EB Accounts. The current DEGCL planning contemplates that securities eligible for the JV-IMS will include securities that would be considered to be U.S. Equities under Euroclear Bank's current operational procedures as described in Section I.A above.

The JV-IMS will be offered to any entity that is an EB Participant and also has a participant account at DTC (a "**DTC Participant**"). IMS Users will include entities that would qualify as U.S. Participants. In the course of ongoing validation and planning discussions with market participants, U.S. Participants have expressed interest in using the JV-IMS directly for U.S. Equities. U.S. Participants already are active users of the EB-CMS. However, as described in Section I.A above, these U.S. Participants currently cannot use the EB-CMS for U.S. Equities. Based on these market discussions, Euroclear Bank understands that the improved efficient global collateral management benefits provided by JV-IMS would be reduced for these U.S. Participants if they are unable to include U.S. Equities in the scope of their use of the JV-IMS.

 $[\]frac{27}{10}$ The DTC participant and the EB Participant must be the same legal entity in order to use the IMS, pursuant to DEGCL's contract with the JV-IMS users.

 $[\]frac{28}{28}$ Euroclear Bank has signed a DTC Participant's Agreement pursuant to which it agreed, *inter alia*, that the DTC rules shall be a part of the terms and conditions of every contract or transaction that Euroclear Bank may make or have with DTC.

3. <u>DEGCL Collateral Management Services</u>

DEGCL also intends to offer collateral management services (the "**JV-CMS**"). Euroclear Bank will operate the JV-CMS as a service provider to DEGCL, using the same infrastructure (hardware, software, operational procedures, etc.) that Euroclear Bank has developed for the EB-CMS. However, the JV-CMS is not the same service as the EB-CMS. Although certain market participants may choose to become users of both the EB-CMS and the JV-CMS, these are separate services, subject to separate contractual relationships and differing procedures and scope.

As well as being different services, the EB-CMS and the JV-CMS are not operationally linked and the two services will not interact with each other. Users of the JV-CMS will use that service's processing in connection with assets held outside of Euroclear Bank,²⁹ while users of the EB-CMS will use the EB-CMS processing in connection with assets held on accounts at Euroclear Bank.

C. Operation of U.S. Equities Proposal

1. Operational Flows of the Inventory Management Services

DEGCL intends to offer the JV-IMS as a separate service from the JV-CMS. $\frac{30}{2}$

Securities that an IMS User wants to make available via the JV-IMS for mobilization as collateral through the EB-CMS will be debited from the IMS User's dedicated JV-IMS sub-account at DTC, and credited to an account of Euroclear Bank at DTC (securities so credited are referred to below as "IMS Securities").³¹

The following paragraphs describe the processes that Euroclear Bank intends to implement within the Euroclear System and the EB-CMS, in order to facilitate the use by EB Participants of IMS Securities within the EB-CMS (irrespective of implementation of the U.S. Equities Proposal).

After IMS Securities are credited to the Euroclear Bank account at DTC, the IMS Securities will be credited to the relevant EB Participant's EB Account at Euroclear Bank.³² Dedicated EB Accounts ("**IMS Linked Accounts**") will be established for this crediting of IMS Securities on the books of Euroclear Bank, each of which will be designated by the EB Participant for JV-IMS related activity. These IMS Linked Accounts will be structured to only allow the EB Participant: (1) to receive IMS Securities in these accounts; (2) to deliver IMS Securities out of these

²⁹ Settlement of collateral movements in connection with the JV-CMS will be organized by the relevant collateral taker's and giver's designated settlement service providers, on the books of DTC, Fedwire or such service provider or other U.S. custodian, independently of the JV-CMS, DEGCL, the EB-CMS and Euroclear Bank.

 $[\]frac{30}{20}$ Users that subscribe to and receive the JV-CMS are not obliged to receive the JV-IMS (and vice versa).

 $[\]frac{31}{1}$ This process will be subject to DTC rules to be developed for the JV-IMS.

 $[\]frac{32}{2}$ All settlement activity related to the JV-IMS that occurs on the books of DTC is governed exclusively by DTC procedures. All activity related to the use of assets that occurs on the books of Euroclear Bank is governed exclusively by the Euroclear Bank contractual framework.

accounts for mobilization as collateral through the EB-CMS infrastructure; and (3) to deliver IMS Securities back to the relevant IMS User's dedicated sub-account at DTC. These IMS Linked Accounts will not permit delivery of IMS Securities out of such accounts for any other purposes in the Euroclear System, such as normal settlement activity. The intended result of these restrictions is that, at all times that IMS Securities are credited to the Euroclear Bank account at DTC that is used for JV-IMS activity, a corresponding credit will be reflected on Euroclear Bank books either in IMS Linked Accounts or within the EB-CMS structure as described below.

In order to implement these principles, IMS Securities will be first credited at Euroclear Bank to an IMS Linked Account of the EB Participant that is dedicated to the processing of such IMS Securities. Such securities are then available for mobilization as collateral through the EB-CMS by transfer to a Collateral Account (which may be a Collateral Account of the IMS User or one of its EB-CMS counterparties acting as collateral taker).³³ Such transfer instructions will be processed (by the Euroclear Bank settlement processing infrastructure) as a debit from the IMS Linked Account and a credit to the relevant Collateral Account, under the normal terms and conditions of the EB-CMS.

Once credited to the Collateral Account, the following scenarios can occur:

- If the Collateral Account is in the name of the IMS User, the IMS Securities may remain in such Collateral Account until an instruction is received from the EB-CMS system to deliver such IMS Securities on behalf of the IMS User (acting as collateral giver) to one of its EB-CMS counterparties (acting as collateral taker) or until the IMS Securities are recalled for crediting back to the IMS User's dedicated sub-account at DTC.
- If the Collateral Account is in the name of an EB-CMS counterparty acting as collateral taker, the IMS Securities may remain credited to such Collateral Account until the IMS Securities are no longer used as collateral for the relevant collateral arrangement.
- Where a collateral taker (or subsequent collateral taker) is permitted to onward use the collateral by the relevant bilateral arrangements with its collateral giver, the collateral taker may deliver IMS Securities that it has received to a subsequent collateral taker through the EB-CMS.
- When a collateral giver wants to recall collateral, the EB-CMS will debit that collateral and re-credit it back to the original collateral giver that has triggered the recall, substituting alternative collateral as permitted according to the underlying arrangements between each pair of collateral counterparties and the standard EB-CMS rules.

 $[\]frac{33}{10}$ The relevant EB Participant/IMS User will determine whether to transfer to a Collateral Account in its name or directly to a Collateral Account of an EB-CMS counterparty, at its discretion.

• Finally, if any collateral giver in a chain has defaulted on its underlying bilateral arrangements, the default procedures described below will apply.

As described above, once IMS Securities are credited to a segregated Collateral Account, it is possible that a collateral giver will default on its relevant underlying collateral obligation. $\frac{34}{10}$ In this case, a pre-agreed default process will apply, according to the counterparties' bilateral arrangements and the EB-CMS Services Agreements. Under these arrangements, Euroclear Bank will receive a notice from the relevant collateral taker or collateral giver that a default has happened, which will trigger a special process supported by Euroclear Bank operations staff to permit a liquidating collateral taker to deliver the relevant securities used as collateral out of its Collateral Account. Euroclear Bank will process the liquidation instructions as normal settlement instructions, subject to the same protocols and validation rules that apply to settlement activities in EB Accounts (including the Current Equities Restrictions).^{$\frac{35}{2}$} When the collateral involved in a default includes IMS Securities, these procedures will also apply. However, to remain consistent with the JV-IMS structure as described previously, Euroclear Bank will adopt an additional process as part of the process of execution of instructions to liquidate IMS Securities that are held in a Collateral Account. Specifically, Euroclear Bank will instruct DTC to debit the same IMS Securities from the Euroclear Bank account at DTC related to the JV-IMS and to credit such securities to the account at DTC of the custodian through which Euroclear Bank normally holds securities at DTC instead. $\frac{36}{36}$

2. <u>Operational Flows of the Proposed U.S. Equities Service</u>

Under the Current Equities Restrictions applied by Euroclear Bank, EB Participants that qualify as U.S. Participants would not be able to use the JV-IMS for any IMS Securities that qualify as U.S. Equities.

To implement the U.S. Equities Proposal, the Current Equities Restrictions would be dis-applied (both contractually and operationally) to IMS Linked Accounts and Collateral Accounts under the following conditions:

(a) EB Participants that are U.S. Participants would be permitted to receive U.S. Equities through the JV-IMS into their IMS Linked Accounts and into Collateral Accounts in the EB-CMS in order to give such U.S. Equities as collateral (but not to use such U.S. Equities in any other manner, including normal settlement);

 $[\]frac{34}{2}$ The below paragraphs describe the processes that apply in case a collateral giver defaults on its underlying collateral obligation to its collateral taker, without related insolvency proceedings. Where such default occurs in the context of the insolvency of an EB Participant, Euroclear Bank would apply its procedures that relate to a participant insolvency, which are manual processes that are conducted in accordance with the requirements of the insolvency jurisdiction that will govern such insolvency proceeding and in accordance with the Euroclear Bank asset protection regime.

 $[\]frac{35}{25}$ The Current Equities Restrictions prohibit the delivery by a liquidating collateral taker of U.S. Equities to a U.S. Participant within the Euroclear System as part of this process.

³⁶ Euroclear Bank's U.S. custodian is currently J.P. Morgan Chase Bank, N.A.

- (b) U.S. Participants would be permitted to receive U.S. Equities as collateral in their Collateral Accounts within the EB-CMS structure from both U.S. Participants and non-U.S. Participants (including U.S. Equities received through the JV-IMS), but not in any other service or any other EB Account or for any other purposes within Euroclear Bank (including normal settlement, with a limited exception to implement the default process described above); and
- (c) if U.S. Participants that receive U.S. Equities in their Collateral Account in the EB-CMS are permitted by their underlying arrangements to re-use collateral, such U.S. Participants would be permitted to re-use such U.S. Equities by giving them as collateral to their counterparty's Collateral Account in the EB-CMS, but not in any other service or for any other purposes within Euroclear Bank.

Under the U.S. Equities Proposal, an EB Participant that is a U.S. Participant would be permitted to utilize the JV-IMS to receive U.S. Equities that are IMS Securities in its IMS Linked Accounts and act as a collateral giver to make such securities available for mobilization as collateral through the EB-CMS, in the same manner and subject to the same procedures and restrictions as described above.

Under the U.S. Equities Proposal, a U.S. Participant acting as collateral taker would be permitted to receive U.S. Equities (which may be IMS Securities or non-IMS Securities received from non-U.S. Participants) only in its Collateral Account within the EB-CMS structure. Once credited to its Collateral Account, the U.S. Equities would be subject to the same procedures and restrictions as described above.

In all cases, U.S. Participants that give or receive U.S. Equity Securities as collateral in the EB-CMS would not be permitted to deliver or otherwise use such U.S. Equity Securities outside of the EB-CMS structure, except to return such U.S. Equity Securities to the relevant giver account within the EB-CMS structure, to an IMS Linked Account, or to liquidate such U.S. Equity Securities in the very limited instance of a collateral giver default.

In all circumstances except those described above, the Current Equities Restrictions would remain in place and would continue to prohibit U.S. Participants from receiving, holding or delivering U.S. Equities from an EB Account. The combination of the structure described above and the limited lifting of the Current Equities Restrictions would ensure that U.S. Participants could use U.S. Equities within Euroclear Bank only under the above limited and well-defined conditions.

II. Policy Considerations

Euroclear Bank believes that modifying the Existing Exemption Order to permit Euroclear Bank to offer the U.S. Equities Clearing Agency Activities (1) will produce substantial U.S. public benefits, (2) will provide U.S. investors and the U.S. national clearance and settlement system

with substantially the same level of protection against risk related to custody, clearance and settlement that full registration would provide, and (3) will advance the purposes of Section 17A of the Exchange Act.

A. Statutory Standards

Section 17A of the Exchange Act directs the Commission to facilitate the establishment of (1) a national system for the prompt and accurate clearance and settlement of securities transactions and (2) linked or coordinated facilities for clearance and settlement of securities transactions.³⁷ In facilitating the establishment of the national clearance and settlement system, the Commission must have due regard for the public interest, the protection of investors, the safeguarding of securities and funds and maintenance of fair competition among brokers and dealers, clearing agencies and transfer agents.^{$\frac{38}{2}$} Section 17A(b)(1) of the Exchange Act requires all clearing agencies to register with the Commission.^{$\frac{39}{2}$} It also states that, upon the Commission's motion or upon a clearing agency's application, the Commission may conditionally or unconditionally exempt a clearing agency from any provision of Section 17A of the Exchange Act or the rules or regulations thereunder if the Commission finds that such exemption is consistent with the public interest, the protection of investors and the purposes of Section 17A, including the prompt and accurate clearance and settlement of securities and funds. Specifically. Sections 17A(b)(3)(A)-(I) identify determinations that the Commission must make about the rules and structure of a clearing agency prior to granting registration. $\frac{40}{2}$

Under the terms of the Existing Exemption Order, the Commission required that the Euroclear System be substantially in compliance with Section 17A of the Exchange Act and the rules and regulations thereunder. In issuing the Existing Exemption Order, the Commission reviewed Euroclear Bank's operations, governance, internal controls and regulatory oversight in Belgium and found that issuing the Existing Exemption Order was consistent with the required and appropriate standards, both upon issuance of the 1998 Exemption Order and again upon issuance of the 2001 Exemption Order.⁴¹ As described in this Modification Application, Euroclear Bank's arrangements have evolved since the 1998 Exemption Order in light of changing market conditions and enhanced regulatory requirements internationally and the addition to the Euroclear Group of the Euroclear Group CSDs. Euroclear Bank continues to materially satisfy the objectives of Section 17A and the standards adopted thereunder, and provides at least as robust arrangements as reviewed by the Commission in 2001. Therefore, Euroclear Bank considers that the Modification Request is consistent with Euroclear Bank's ongoing substantial compliance with the fundamental requirements and purposes of clearing agency oversight by the Commission under Section 17A.

³⁷ See 15 U.S.C. 78q-1(a)(2)(A).

³⁸ See, e.g., Bloomberg STP LLS; SS&C Technologies, Inc.; Order of the Commission Approving Applications for an Exemption from Registration as a Clearing Agency, 80 Fed. Reg. 75388, 75390 nn.10-12 (Nov. 24, 2015) ("**2015 Matching Exemption Orders**").

³⁹ 15 U.S.C. 78q-1(b)(1).

 $[\]frac{40}{15}$ 15 U.S.C. 78q-1(b)(3)(A)-(I). The Commission staff has published guidance on meeting the requirements of Section 17A. *See* Exchange Act Release No. 16900 (June 17, 1980), 45 Fed. Reg. 41920 (June 23, 1980).

⁴¹ 2001 Exemption Order, at 820.

In the context of the 2015 Matching Exemption Orders, the Commission restated its view that it might not be necessary or appropriate for an entity that limited its clearing agency functions to providing matching services to be subject to the full range of clearing agency regulation. The Commission stated that it anticipated that an entity seeking an exemption from clearing agency registration in order to provide services that the Commission considered did not create the same risks as 'core' clearing agency functions would be required to: (1) provide the Commission with information on the exempted clearing agency service and on material changes to such service; (2) allow the Commission to inspect its facilities and records; (3) make periodic disclosures to the Commission regarding its operations; and (4) comply with conditions specific to the exempted clearing service.⁴² As noted more fully below, Euroclear Bank suggests that it would also be appropriate for the Commission to conclude that the U.S. Equities Clearing Agency Activities do not create the same risks that might be associated with the provision of core settlement and custody clearing agency functions for U.S. Equity Securities and that, therefore, broadening the Existing Exemption Order to permit Euroclear Bank to provide the U.S. Equities Clearing Agency Activities is appropriate on the conditions described in Part III below.

Since the Commission issued the Existing Exemption Order, the Commission has also recognized that Section 17A of the Exchange Act permits the Commission to take into account evolving international standards in establishing the Commission's standards for clearing agencies and in its oversight of clearing agencies.⁴³ The Commission referenced in its adoption of Rule 17Ad-22 the standards developed by IOSCO and the Committee on Payment and Settlement Systems ("CPSS") ("PFMI Principles") that are contained in the report entitled *Principles for Financial Market Infrastructures* ("PFMI Report").⁴⁴ The PFMI Report, published on April 16, 2012, was formulated by securities regulators and central banks to promote sound risk management practices and encourage the safe design and operation of entities that provide clearance and settlement services.⁴⁵ Noting that the Commission staff participated in the standards set forth in the PFMI Report are generally consistent with the requirements applicable to clearing agencies set forth in the Exchange Act.⁴⁶

The Commission also recognized that regulatory authorities around the world are updating their regulatory regimes to adopt measures that are in line with the standards set forth in the PFMI Report.⁴⁷ Belgium has fully adopted the PFMI Report standards applicable to CSDs and securities settlement systems.⁴⁸ The National Bank of Belgium ("**NBB**") assesses the Euroclear

⁴⁶ See Clearing Agency Standards Adopting Release, at 168871-72, nn.48-53.

 $\frac{47}{1}$ Id.

⁴² See, e.g., 2015 Matching Exemption Orders, at 75390 n.16.

⁴³ 15 U.S.C. 78q-1(i).

⁴⁴ The CPSS is now referred to as the Committee on Payments and Market Infrastructures ("**CPMI**"). The National Bank of Belgium is a member of the CPMI and also participated in the preparation of the PFMI Report.

⁴⁵ See Exchange Act Release No. 34-68080 (Oct. 22, 2012), 77 Fed. Reg. 66219 (Nov. 2, 2012) ("Clearing Agency Standards Adopting Release"), at 66222-23, nn.30-34.

⁴⁸ The PFMI Report standards have been made expressly applicable in Belgium by the NBB and the NBB assesses Euroclear Bank and its operations against the Principles. *See, e.g.*, NBB Circular dated July 20, 2012 (NBB 2012 06). CPSS-IOSCO, Implementation Monitoring of PFMIs – Level 1 Assessment Report (Aug. 2013), *available at*

System as operated by Euroclear Bank against the PFMI Principles, also taking into account international best practices where appropriate (such as in the field of operational reliability, business continuity, liquidity and links). In addition, Belgium is implementing the European Union's Central Securities Depositories Regulation ("CSDR"), which came into force in September 2014.⁴⁹ The CSDR imposes additional requirements on European CSDs, further increasing the prudential supervision and regulations that apply to Euroclear Bank and its affiliate CSDs.⁵⁰

Euroclear Bank makes available annually its report on observance by Euroclear Bank of the PFMI Report standards, in a "Disclosure Framework" report that follows the disclosure framework and assessment methodology for the PFMIs published by CPSS-IOSCO. This public disclosure is intended to promote consistent and comprehensive public disclosure by financial market infrastructures in line with the requirements of the PFMIs and to provide guidance for monitoring and assessing observance with the PFMIs. Euroclear Bank's most recent report, published October 20, 2015, is provided as part of the Modification Application as <u>Exhibit K-5</u> ("2015 EB Disclosure Report").

In addition to the standards against which the Commission assessed Euroclear Bank's application for the Existing Exemption Order in 1998 and 2001, the Commission has adopted Rule 17Ad-22 which establishes minimum requirements regarding how registered clearing agencies must maintain effective risk management procedures and controls, as well as meet the statutory requirements under the Exchange Act on an ongoing basis. The Existing Exemption Order was granted and maintained prior to the adoption of Rule 17Ad-22, and Rule 17Ad-22 does not apply to entities that are operating pursuant to an exemption from registration as a clearing agency granted by the Commission.⁵¹ Nonetheless, Euroclear Bank considers that it materially meets the relevant obligations of Rule 17Ad-22⁵² with respect to the U.S. Government Securities Clearing Agency Activities. As noted above, the Rule 17Ad-22 requirements are consistent with the PFMI Principles, which Euroclear Bank and the Euroclear System are assessed against by the

⁵⁰ See, e.g., The CSD Regulation, A Guide for our Clients (Sept. 2014), *available at* https://www.euroclear.com/dam/PDFs/Whitepapers/Whitepaper-The-CSD-regulation.pdf.

⁵¹ See Clearing Agency Standards Adopting Release, at 16871, n.47.

http://www.bis.org/cpmi/publ/d111.htm, the First Update to the Level 1 Assessment Report (May 2014), *available at* http://www.bis.org/cpmi/publ/d117.htm, the Second Update to the Level 1 Assessment Report (June 2015) *available at* http://www.bis.org/cpmi/publ/d129.htm, and the Implementation monitoring of PFMI: Assessment and Review of Application of Responsibilities for Authorities (Nov. 2015) *available at* http://www.bis.org/cpmi/publ/d139.htm.

⁴⁹ Regulation 909/2014 of July 23, 2014, on improving securities settlement in the European Union and on central securities depositories (CSDs) and amending Directive 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012, *available at* http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0909&from=EN.

 $[\]frac{52}{17}$ 17 C.F.R. 240.17Ad-22(a)(2). "Central securities depository services means services of a clearing agency that is a securities depository as described in Section 3(a)(23) of the Act (15 U.S.C. 78c(a)(23)(A))." The Clearing Agency Activities involve the services of a "central securities depository" as defined in Rule 17Ad-22. The Clearing Agency Activities are not the services of a "central counterparty" as defined in Rule 17Ad-22 and therefore this Exhibit S-1 does not address provisions of Rule 17Ad-22 that apply solely to such central counterparty services. "Central counterparty means a clearing agency that interposes itself between the counterparties to securities transactions, acting functionally as the buyer to every seller and the seller to every buyer." 17 C.F.R. 240.17Ad-22(a)(1).

NBB and which is the subject of Euroclear Bank's annual disclosure publication under the PFMI Disclosure Framework. Accordingly, Euroclear Bank considers that its compliance with the PFMI Principles (as discussed below and in more detail in the 2015 EB Disclosure Report) demonstrates Euroclear Bank's material compliance with the principles adopted by the Commission in Rule 17Ad-22. As the proposed U.S. Equities Clearing Agency Activities will be operated on the basis of Euroclear Bank's existing arrangements, as described above, Euroclear Bank considers that it will also substantially meet the Rule 17Ad-22 requirements with respect to the U.S. Equities Clearing Agency Activities.

The following sections of this <u>Exhibit S-1</u> describe in more detail specific factors that the Commission has noted in its consideration of other applications for exemption from clearing agency registration. In each section, Euroclear Bank identifies the relevant Rule 17Ad-22 provision that addresses the relevant consideration, and the corresponding PFMI Principles that Euroclear Bank complies with as described in greater detail in the 2015 EB Disclosure Report.⁵³

B. Efficiency

Congressional findings upon adoption of Section 17A state that inefficient procedures for clearance and settlement impose unnecessary costs on investors and persons facilitating transactions. In granting exemptions from clearing agency registration, the Commission has considered whether an applicant would improve or decrease the efficiency of the U.S. clearing and settlement system (particularly processing efficiencies) and whether an exemption would lead to unnecessary costs.⁵⁴ The Modification Request would, if granted, be consistent with the "efficiency" purposes of Section 17A, as described in more detail below.

Rule 17Ad-22(d)(6) – *Cost-effectiveness.* Rule 17Ad-22(d)(6) requires registered clearing agencies to be cost-effective in meeting the requirements of participants while maintaining safe and secure operations. PFMI Principle 21 (Efficiency) requires that "An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves." Euroclear Bank complies with PFMI Principle 21 and the purposes of Rule 17Ad-22(d)(6), as described in more detail in the 2015 EB Disclosure Report.⁵⁵

The U.S. Equities Proposal would benefit the U.S. market and U.S. Participants, particularly in improved efficiencies and reduction in systemic risk for U.S. Participants that have collateral obligations in Europe, in light of the growing need to deliver collateral that is expected to increase in 2016 and thereafter as the New Collateral Regulations take effect. Achieving these benefits would support the underlying objectives of the Exchange Act, further the goals of investor protection and support and promote integrity of the securities markets.

 $[\]frac{53}{53}$ <u>Exhibit K</u> and <u>Exhibit M</u> include other relevant descriptions of Euroclear Bank's compliance with concepts discussed herein, including Euroclear Bank's annual ISAE 3402 disclosure and the Euroclear Group's Pillar 3 disclosure.

⁵⁴ See, e.g., 2015 Matching Exemption Orders, at 75391-97.

⁵⁵ 2015 EB Disclosure Report, at 127-129.

As described above, the implementation of the New Collateral Regulations is expected to increase the need to post and manage significant amounts of additional collateral, to deal with increased intraday collateral posting obligations and reduced collateral velocity due to new segregation and documentation requirements, and to mobilize collateral in the most operationally efficient and cost effective ways. Reducing collateral processing risk that is associated with the increased collateral obligations will require improved collateral mobility (across collateral locations currently siloed by region and counterparty), transparency on the global view of eligible assets for more efficient deployment of collateral of all grades (particularly in light of increased capital requirements that restrict the availability of high-grade assets for collateral use), greater operational and efficiency at lower costs, and highly secure, efficient and sophisticated collateral management systems.

One result of the projected increased global collateral needs is that the cost of settlement fails for collateral deliveries are projected to grow as well. The average annual value of collateral assets that are currently supporting bilateral OTC derivatives is estimated to be almost \$890 billion, just for the 40+ firms participating in the annual survey of the International Swap Dealers Association.⁵⁶ Research indicates that currently there is a three percent settlement fail rate for collateral movements (*i.e.*, a failure of a collateral giver to deliver the required amount and type of collateral to the collateral taker on time and in the correct location).⁵⁷ If this current rate is sustained at the same time that collateral obligations and movements is projected to dramatically increase due to the New Collateral Regulations, research suggests that the operational costs of such fails will be unsustainably high, particularly for buy-side firms. For sell-side firms, a three percent collateral settlement fail rate correlates to nearly \$27 billion industry-wide of unsupported exposure due to collateral settlement failure (adding in unsupported exposure for buy-side firms would increase this figure). At the same time, there is a risk that the problems that cause collateral settlement fails may be exacerbated given the complex changes that will need to be made to OTC derivative workflows and documentation.

Another result of increased capital regulations and the New Collateral Regulations is that, to meet new regulatory ratios and reduce their intraday credit needs, banks and broker-dealers need to optimize their securities funding activities across securities financing transactions in the repo and securities lending segments. When combined with OTC derivative reforms, the increased regulation means that banks and broker-dealers must be able to make collateral available wherever and whenever it is needed in order to remain efficient.⁵⁸ This requires improved asset mobility. While some firms have developed a sophisticated approach to managing assets across operational and jurisdictional silos, others have not.⁵⁹

⁵⁶ 2015 International Swap Dealers Association Survey.

⁵⁷ See, e.g., Implications of Collateral Settlement Fails: An Industry Perspective on Bilateral OTC Derivatives, *infra* note 25.

 $[\]frac{58}{58}$ For example, Basel III's requirement to hold high quality liquid assets on the balance sheet means that sell-side firms are likely to have fewer available assets to pledge as collateral, and the shortage will in turn cause the cost of pledging these assets to go up. It also creates the need to mobilize lower quality collateral where acceptable. Collateral mobility concerns will therefore increase.

⁵⁹ See, e.g., Implications of Collateral Settlement Fails: An Industry Perspective on Bilateral OTC Derivatives, *infra* note 25.

The inability to identify, move or recognize available collateral in a timely manner (particularly in times of market stress before or during market crises) could exacerbate collateral shortfalls. A study by the London School of Economics concluded that, while there may be sufficient actual aggregate collateral globally available to meet the industry's collateral needs even after the implementation of the New Collateral Regulations, it may be inaccessible to those who need it, resulting in eligible collateral being immobilized in one part of the global financial system and unattainable by credit-worthy borrowers.⁶⁰ A collateral bottleneck in one part of the global financial system, in any location and at any point in time, may have knock-on effects across interrelated markets elsewhere and risks impacting the global flow of liquidity.

Market research commissioned by DEGCL suggests that a primary challenge for sell-side firms to deal with the New Collateral Regulations is the ability to move collateral around the globe to meet collateral requirements or calls in specific countries. Research by market institutions and think tanks have attempted to calculate the change in demand for collateral; a recent study by the Bank of International Settlement estimates that the amount of collateral needed to meet requirements posed by the New Collateral Regulations globally could reach \$4 trillion. That figure rises to \$11.2 trillion in stressed market conditions, according to estimates of the U.S. Treasury Borrowing Advisory Committee.⁶¹ As firms become more aware of the increase in the demand for collateral, there is concern that they are unable to sufficiently mobilize and transform collateral or to determine the specific eligibility required to allocate the collateral against their exposures and across collateral channels (which are increasingly splintered across jurisdictions, central counterparties and operational silos). According to recent studies, as much as 15% of collateral available to financial institutions is currently left idle costing the industry more than \pounds billion a year.⁶²

The DEGCL services are designed to help address this need for improved collateral mobility and more efficient, consistent and reliable collateral management tools in a trusted, well-controlled and proven market infrastructure environment. The JV-IMS will help to address the above concerns in part by providing a more efficient way for participants with accounts in both DTC and Euroclear Bank to mobilize DTC assets in Euroclear Bank when they are needed there to meet collateral obligations with European and other counterparties that subscribe to the EB-CMS.⁶³ The broader services to be offered by DEGCL will also permit more efficient infrastructure based collateral management for assets located in the United States. These DEGCL services, and particularly the IMS, will give dealers access to additional pools of funding for corporate bonds, asset-backed securities and equities, thereby expanding their funding bases for "less-liquid" collateral.

⁶⁰ The Economics of Collateral, *infra* note 25.

⁶¹ See Office of Debt Management, Fiscal Year 2013 Q2 Report, at 61, *available at* https://www.treasury. gov/resource-center/data-chart-center/quarterly-refunding/Documents/TBAC_Discussion_Charts_May_2013_r.pdf %20-%20Adobe%20Acrobat%20Pro.pdf.

⁶² Accenture and Clearstream, Collateral Management: Unlocking the Potential in Collateral, *available at* http://www.clearstream.com/blob/10620/e5bf3b589c8f3ff6afd19166f9d53d3b/accenture-collateral-report-pdf-data.pdf.

 $[\]frac{63}{10}$ It is expected that U.S. parties will primarily use the U.S. Equities Proposal to manage collateral obligations with European and international counterparties in Collateral Accounts at Euroclear Bank.

The U.S. Equities Proposal will permit U.S. Participants to benefit from these risk and cost reductions identified above, by allowing them to mobilize U.S. Equity Securities as collateral for their collateral counterparts in Euroclear Bank. As non-U.S. Participants will be able to make use of the JV-IMS with U.S. Equities for these purposes without restriction, the U.S. Equities Proposal will provide the same benefits to U.S. Participants.

Granting the Modification Request will therefore reduce transaction costs and collateral settlement fail risks arising from insufficient collateral at the right location when needed by allowing U.S. Participants expanded use of U.S. Equities to meet their collateral obligations in the European time zone and with European and international counterparties. Permitting Euroclear Bank to offer the U.S. Equities Clearing Agency Activities would also promote the public interest in increased competition for the provision of collateral management services that can utilize U.S. Equities on behalf of U.S. Participants.

Euroclear Bank also notes that additional costs for the market of implementing the U.S. Equities Proposal are expected to be low; U.S. Participants permitted to use the U.S. Equities Clearing Agency Activities would either themselves or through their Euroclear affiliates already use the Euroclear Bank collateral management services and, under the requirements for the JV-IMS, must also have DTC accounts. There will be fees charged for the servicing of U.S. Equity Securities as part of the JV-IMS. All other fees will be the normal DTC and Euroclear Bank fees associated with the use and provision of their respective services.

We also note that, as the U.S. Equities Proposal is limited to the use of U.S. Equity Securities by U.S. Participants for collateral management purposes (and not for normal settlement in a Euroclear Bank main account or other non-collateral related purposes), the U.S. Equities Proposal should not impact settlement of transactions in U.S. Equity Securities as part of the cash market for such securities. Euroclear Bank will not settle trades in U.S. Equities for U.S. Participants that are unrelated to the U.S. Equities Proposal as described herein.

C. Safety and Soundness Protections in General

1. <u>Regulatory Oversight</u>

As stated in the 2001 Exemption Order, Euroclear Bank is authorized in Belgium as a Belgian credit institution.⁶⁴ It is subject to consolidated supervision by the NBB and the Belgian Financial Services Market Authority ("**FSMA**"), and is also recognized as a central securities depository for financial instruments and a designated settlement system.⁶⁵ Among other things, the New Banking Law enacts into Belgian law the European Union's Capital Requirements Directive.

⁶⁴ Euroclear Bank is authorized in Belgium under the banking law dated March 22, 1993 and also under the new banking law dated April 25, 2014 ("**New Banking Law**").

⁶⁵ See generally 2015 EB Disclosure Report, at 16-18.

ESA is authorized in Belgium as a holding company of a regulated credit institution (Euroclear Bank) and also as "an institution assimilated to a securities settlement system" and is also supervised by the NBB. 66

ESA and Euroclear Bank are subject to the comprehensive supervision on a consolidated basis by Belgian financial authorities. Specifically, as a licensed credit institution operating in Belgium, Euroclear Bank is subject to the prudential supervision and oversight of the NBB,⁶⁷ which exercises its supervision on a consolidated basis. Euroclear Bank is also subject to the supervision of the NBB in its role as operator of the Euroclear system and is recognized as a "central securities depository for financial instruments."⁶⁸ As a result, Euroclear Bank is supervised on both the basis of international standards applicable to banks, as well as international standards applicable to central depositories/settlement systems.

The NBB is required to ensure that Euroclear Bank's clearance, settlement and payment systems operate properly and that they are efficient and sound, as well as ensuring that Euroclear Bank meets all the obligations applicable to credit institutions under applicable European law (as adopted into Belgian law). The NBB has the authority to order Euroclear Bank to limit, suspend or stop activities if they are deemed to impede Euroclear Bank's solvency. The NBB can also withdraw Euroclear Bank's authorizations if Euroclear Bank does not comply with the regulatory requirements of its various authorizations. In addition to assessing Euroclear Bank under the PFMI Principles, the NBB also considers best practices where appropriate (*e.g.*, in the field of operational reliability/business continuity, liquidity and links).

The NBB oversight applies a risk-based approach. In its capacity as prudential supervisor, the NBB also verifies that Euroclear Bank continuously meets the authorization requirements and operating criteria laid down in relevant laws and regulations. This implies inter alia that the NBB ascertains that the institution's organization and functioning are appropriate, and carries out supervision over its activities and financial situation (on a stand-alone and consolidated basis).

In addition to its primary supervision by the NBB, Euroclear Bank is also regulated by the Belgian FSMA for the purposes of compliance with investor protection rules, rules on operation, integrity and transparency of the Belgian financial markets. These include requirements relating

 $[\]frac{66}{6}$ Euroclear SA (not Euroclear Bank) is an institution assimilated to a settlement institution and is as such subject to the Belgian Royal Decree of September 26, 2005 on the status of settlement institutions and institutions assimilated thereto ("2005 Decree"). Pursuant to Article 20, § 2 of the 2005 Decree, institutions assimilated to a settlement institution may not have shareholdings in commercial companies without the prior approval of the NBB, unless the shareholding is taken in companies whose activities consist, in whole or in part, in the activities which a settlement institution or an institution assimilated thereto may carry out.

 $[\]frac{67}{5}$ See Regulation 575/2013 of June 26, 2013 on prudential requirements for credit institutions and investment firms (CRR) IV and Regulation 909/2014 of July 23, 2014 on improving securities settlement in the European Union and on central securities depositaries.

⁶⁸ Royal Decree of August 22, 2002. The laws and regulations that are applicable to the Euroclear System and which form its legal basis are published in the Official Gazette of the Kingdom of Belgium (accessible to the public at http://www.ejustice.just.fgov.be/cgi/welcome.pl). In addition, legislation related to the financial sector can be consulted on the website of the FSMA (http://www.fsma.be) or on the website of the National Bank of Belgium (http://www.nbb.be).

to conflicts of interest with clients, customer protection in case of insolvencies and enforcement of conduct requirements.

In addition, the relevant supervisors of the Euroclear Group (I)CSDs have entered into cooperative and information sharing agreements that provide for coordinated and common oversight and supervision and, where applicable, coordinated assessment, of ESA in its role as service provider to Euroclear Group entities. The common supervision of ESA for these purposes is governed by a Memorandum of Understanding ("MOU") among the relevant Euroclear Group regulators.⁶⁹ The MOU permits these regulators to also consider compliance of the ESA services with relevant international standards and to discuss regulatory issues relating to ESA services directly with the NBB and FSMA, as the direct regulator for ESA.

The implementation of the MOU has led to the establishment of committees among the signatory regulators of the MOU, which operate on a consensus basis for the purpose of coordinating supervision of common aspects of the Euroclear Group's (I)CSD services.

The regulatory oversight arrangements described above apply fully to Euroclear Bank's provision of the U.S. Government Securities Clearing Agency Activities and will apply equally to Euroclear Bank's provision of U.S. Equities Clearing Agency Activities. In addition to the regulation of Euroclear Bank, ESA and the Euroclear Group as described above, Euroclear Bank also notes that the U.S. Equity Securities that will be the subject of the U.S. Equities Clearing Agency Activities will be held by Euroclear Bank directly at DTC (in Euroclear Bank's account at DTC) or indirectly (through Euroclear Bank's U.S. custodian)²⁰ and that any depository bank through which Eligible U.S. Government Securities or U.S. Equities are held by Euroclear Bank would be subject to the comprehensive supervision of U.S. bank regulators.

D. Competition, Choice and Innovation

Section 17A of the Exchange Act directs the Commission in facilitating the establishment of the national clearance and settlement system, to have due regard for, among other things, maintenance of fair competition among clearing agencies.⁷¹ The Modification Request would, if granted, be consistent with the "fair competition" purposes of Section 17A for several reasons.

First, Euroclear Bank through a modified exemption would not change competition as it relates to the U.S. national system for clearance and settlement in U.S. Equity Securities for U.S. Participants and may improve competition among market participants offering collateral management services. The U.S. Equities Proposal as described above is limited in its scope and purpose: it is intended to permit a more efficient use of U.S. Equity Securities to meet collateral

⁶⁹ Memorandum of Understanding on the Co-operation Framework for the Oversight/Supervision of Euroclear SA/NV (ESA), *available at* https://www.nbb.be/doc/cp/eng/aboutcbfa/mou/pdf/mou_2009-10-05_supervisionofeuroclear.pdf.

 $[\]frac{70}{10}$ Euroclear Bank notes that there are a *de minimis* number of U.S. Equity Securities that the U.S. Issuer has chosen to deposit outside of DTC, which are eligible in the Euroclear System. Euroclear Bank intends to include these within the scope of the Modification Request, although these would of necessity be held by Euroclear Bank through its custodian in the relevant market where these securities have been initially deposited.

^{<u>71</u>} 15 U.S.C. 78q-1(a)(2)(A).

obligations of a wider range of market participants. A substantial number of U.S. Participants use the EB-CMS today, but are disadvantaged compared to non-U.S. Participants in the range of collateral they are able to mobilize to meet their collateral obligations if their collateral counterparty wants to use the EB-CMS. The U.S. Equities Proposal would level the playing field between U.S. Participants and non-U.S. Participants in the types of U.S. securities that they can offer as collateral in the EB-CMS.

Second, it is not expected that, by expanding the EB-CMS for U.S. Participants to enable the use of U.S. Equity Securities, the primary activity for use of U.S. Equity Securities as collateral would concentrate in Euroclear Bank. U.S. Participants have the option today of providing U.S. Equity Securities as collateral by using the services of a market intermediary that is not regulated by the Commission as a clearing agency (typically a bank) or by making bilateral collateral management arrangements and undertaking collateral management activities themselves. Granting the Modification Request would not eliminate these alternatives nor make them more or less efficient than they are today.

Finally, as described above, the DEGCL joint venture is intended ultimately to make the robust and well-known functionality of the EB-CMS available for assets in the United States without the need for U.S. Participants to move assets manually from their accounts at DTC or other U.S. settlement location. Through DEGCL, market participants will eventually be able to use the same processing structures and features that they are familiar with in the EB-CMS, provided by a market infrastructure provider, to give/take as collateral assets held in DTC (or other U.S. settlement locations, including their intermediaries). As co-founder of DEGCL with DTCC, Euroclear Group fully supports the plans of DEGCL to achieve these additional options and benefits for the U.S. market. Euroclear Bank also believes that the DEGCL service offering will provide additional benefits to U.S. Participants when launched, including same time zone advantages, operational efficiencies and cost savings and the ability to leverage staff and procedures that are already used for DTC settlement with collateral management activities. At the same time, in the face of anticipated increased global collateral needs, Euroclear Bank considers that it would also be very beneficial to U.S. Participants to have the option to use U.S. Equity Securities as collateral in Euroclear Bank, where European counterparts of U.S. Participants may prefer to locate their collateral management operations.

Euroclear Bank also notes that its provision of services must comply with relevant European Union competition law principles, which effectively require fair and non-discriminatory practices towards competitors.

Finally, although the U.S. Equities Proposal is related to provision of services by DEGCL and DTC as described above, these entities will provide their services in their separate capacities. DTC's provision of services is subject to the Commission's oversight and rules on fairness¹² and is not contingent on, nor priced commonly with, the Euroclear Bank U.S. Equities Proposal.

⁷² See 17 C.F.R. 240.17Ad-22(b)(5) and (c)(8).

E. Systemic Risk

As described above, Euroclear Bank believes that the U.S. Equities Proposal will reduce systemic risk associated with increase collateral obligations, by allowing collateral to be used more efficiently, in existing and safe systems by U.S. Participants in the highly regulated environment of Euroclear Bank.

The U.S. Equities Proposal will not create a single point of dependency; U.S. Participants today can deliver U.S. Equities as collateral for their obligations outside of the EB-CMS and there are multiple other providers of these services.

In addition, as a regulated settlement system operator, (I)CSD and credit institution, Euroclear Bank is already subject to substantial oversight in light of its provision of critical infrastructure services to the European and global market infrastructure, based on the same internationally developed standards with regard to evaluating its financial condition, operational safeguards and systemic risk monitoring that the Commission has recognized as substantially similar to its own standards for registered clearing agencies.

1. <u>Solvency of Applicant</u>

As a Belgian credit institution, Euroclear Bank must meet capital requirements applicable to banks authorized in Europe imposed by the EU Capital Requirements Regulation and the EU Capital Requirements Directive. Euroclear Bank has been assigned a AA+ rating by Fitch Ratings and a AA rating by Standard & Poor's.⁷³ In rating Euroclear Bank, ratings agencies have emphasized Euroclear Bank's strong and dynamic risk management framework, very low risk profile and the strong regulatory framework under which Euroclear Bank operates.⁷⁴

Euroclear makes available on its public website the following documents, prepared in accordance with Belgian law requirements imposed on credit institutions, that demonstrate the strong financial position of Euroclear Bank and Euroclear Group: its group annual report, the annual audited consolidated financial statement of ESA and the annual audited consolidated financial statements include the statutory auditor's reports), interim results and Euroclear Bank's current ratings.⁷⁵ As noted in Plc's 2015 annual report, the Euroclear Group overall maintained a capital ratio of 40%.

Rule 17Ad-22(c)(2) - Record of Financial Resources and Annual Audited Financial Statements.Rule 17Ad-22(c)(2) requires each clearing agency and its subsidiaries to post on its website annual audited financial statements. Euroclear Bank and the Euroclear Group comply with this requirement by publishing annually by the end of the first quarter following the end of its fiscal year consolidated and stand-alone financial statements which are prepared in accordance with

⁷³ Further information about Euroclear Bank's ratings can be found at https://www.euroclear.com/investor-relations/financials/ratings.html.

⁷⁴ Standard & Poor's Ratings Services, *RatingsDirect: Euroclear Bank S.A.* (Aug. 22, 2014), *available at* https://www.euroclear.com/dam/Brochures/About/Standard_and_Poors_Euroclear_Bank_Analysis.pdf.

 $[\]frac{75}{10}$ Euroclear Annual Reports, *available at* https://www.euroclear.com/investorrelations/financials/annual-report.html.

International Financial Reporting Standards as adopted by the European Union, and audited in accordance with the relevant International Standards on Auditing by a registered qualified and independent public accounting firm and include an auditor's statement.

Rule 17Ad-22(d)(14) - Risk *Controls to Address Participants Failure to Settle.* Rule 17Ad-22(d)(14) requires registered clearing agencies to institute risk controls, including collateral requirements and limits to cover the clearing agency's credit exposure to each participant family. PFMI Principles 4, 5 and 7 require that an FMI effectively measure, monitor and manage credit exposures to participants and those arising from its payment, clearing and settlement processes including maintaining sufficient financial resources with a high degree of confidence (Principle 4, Credit Risk),⁷⁶ that an FMI that requires collateral accepts collateral with low credit, liquidity and market risks and enforces appropriate haircuts and concentration limits (Principle 5, Collateral), and that an FMI effectively measure, monitor and manage liquidity risk (Principle 7, Liquidity Risk).⁷⁷ Euroclear Bank complies with Principles 4, 5 and 7. In addition to the description of Euroclear Group and Euroclear Bank's high-level approach to risk management below, the 2015 EB Disclosure Report describes in detail how Euroclear Bank complies with Principles 4, ⁷⁸ 5,⁷⁹ and 7.⁸⁰

Rule 17Ad-22(d)(5) – Money Settlement Risks. Rule 17Ad-22(d)(5) requires registered clearing agencies to adopt written policies and procedures to employ money settlement arrangements that eliminate or strictly limit the clearing agency's settlement bank risks, that is, its credit and liquidity risks from the use of banks to effect money settlements with its participants; and requires funds transfers to the clearing agency to be final when effected. PFMI Principle 9 (Money Settlements) requires that "if central bank money is not used, an FMI should minimize and strictly control the credit and liquidity risk arising from the use of commercial bank money." In addition to compliance with Principles 4 (Credit Risk), 5 (Collateral), 7 (Liquidity Risk) and 8 (Settlement Finality) as described above, Euroclear Bank complies with Principle 9. Euroclear Bank does not use settlement banks to effect money settlement. Money settlement in all eligible

 $\frac{80}{2}$ See id. at 63-73.

⁷⁶ Principle 4 provides that: "An FMI should effectively measure, monitor and manage its credit exposures to participants and those arising from its payment, clearing and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

⁷⁷ Principle 7 provides that "An FMI should effectively measure, monitor and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions."

⁷⁸ See 2015 EB Disclosure Report, at 52-57.

^{<u>79</u>} See id. at 58-62.

settlement currencies is carried out on the books of Euroclear Bank, a well-capitalized, AA+ rated, de facto limited purpose bank. All EB Participants have cash accounts in the relevant settlement currencies on the books of Euroclear Bank and money settlements are effected by crediting and debiting the relevant cash accounts of the EB Participants. The 2015 EB Disclosure Report describes in detail how Euroclear Bank complies with Principle 9.⁸¹

F. Operational Risk

Under Section 17A of the Exchange Act, applicants must demonstrate that they are so organized and have the capacity to be able to facilitate the prompt and accurate clearance and settlement of securities transactions.

Rule 17Ad-22(d)(4) - Identification and Mitigation of Operational Risks. Rule 17Ad-22(d)(4) requires written policies and procedures to identify sources of operational risk and minimize them through the development of appropriate systems, controls and procedures, to implement systems that are reliable, resilient and secure, and have adequate, scalable capacity, and to have business continuity plans that allow for timely recovery of operations and fulfillment of a clearing agency's obligations. PFMI Principle 3 requires that "an FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational and other risks." The 2015 EB Disclosure Report describes in detail how Euroclear Bank complies with Principle 3.⁸²

In addition, PFMI Principle 17 requires that "an FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfillment of the FMI's obligations, including in the event of a wide-scale or major disruption." Euroclear Bank complies with Principle 17, as described in detail in the 2015 EB Disclosure Report⁸³ and Section H. below.

In addition to assessment against the PFMI Principles, Euroclear Bank and ESA are required to comply with the extensive risk management obligations that apply to credit institutions under international banking standards. Euroclear Bank and ESA are fully integrated into the Euroclear Group's enterprise risk management framework ("**ERM**"),⁸⁴ which constitutes a strong internal control system that includes the following: (1) an extensive risk management framework; (2) an

^{<u>81</u>} See id. at 77-78.

⁸² See 2015 EB Disclosure Report, at 39-51.

⁸³ See id. at 95-115.

⁸⁴ Euroclear's ERM framework is based on relevant market and regulatory standards, including the work of the Committee of Sponsoring Organizations of the Treadway Commission ("**COSO**"); ISO 31000:2009 principles and generic guidelines on risk management and ISO 27001:2005 for Information Security; the Recommendations for Securities Settlement Systems published by the European System of Central Banks and the Committee of European Securities Regulators; and other relevant requirements, standards and guidelines issued by international, European and local regulatory bodies, including the Basel Committee on Banking Supervision and the CPSS-IOSCO.

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extensive policy framework for risk management and compliance; and (3) comprehensive documentation of policies, management resolutions and procedures.⁸⁵ Key features of the risk management framework are:

- A risk management strategy aligned with Euroclear Group's corporate objectives and commensurate with its role as financial infrastructure. Risk tolerance levels are defined and adapted annually by the Board of Directors of Euroclear Bank, consistent with available capital, and risk tolerance levels are set by the management annually with the objective to keep the risk profile low and stable.
- Euroclear Group and Euroclear Bank implement an Internal Capital Adequacy Assessment Process (ICAAP) and the Internal Capital Measurement Approach as part of its ERM. The Euroclear Group risk management framework is reviewed and approved by the Euroclear Bank Board of Directors. Euroclear Group implements every pillar of the ERM framework consistently across Euroclear Group, including Euroclear Bank. The results of the Euroclear Bank ICAAP are expressed in capital requirements over a one-year horizon and approved by the highest levels of Euroclear Bank and ESA Boards of Directors annually, together with an analysis of the potential capital requirements over a five-year time horizon reported in the capital plan. The Euroclear Bank Board of Directors annually approves the risk and capital assessment models and the resulting capital plan.
- Comprehensive policies that set out how the internal control system operations and guidelines that support repeatability of results, all within a comprehensive documentation process.
- An active risk register, high-level control objectives and more detailed control objectives to identify, track and mitigate risks.
- Responsibility for risk control at all levels that is clearly assigned, including strong escalation and crises procedures at entity and group levels that are regularly tested.
- Risk management and audit functions that are separate and independent and report directly to the Euroclear Group CEO. The head of Euroclear Group risk management function is a member of the Management Committee of Euroclear Bank and a member of the ESA Management Committee.
- Review of quarterly audit and risk reports by the Euroclear Bank and ESA Management Committees and Boards of Directors (including the Audit Committees).

⁸⁵ See 2015 EB Disclosure Report, at 32-51.

• Risk management controls that identify and address six distinct categories of risk (credit risk, liquidity risk, operational risk, market risk, business risk and strategic risk).

In addition to the foregoing, the CSDR will also require the Euroclear Group (I)CSDs to demonstrate compliance with the CSDR risk management requirements in order to obtain and retain licenses to operate as CSDs going forward.

Euroclear provides an extensive description of its audit and risk management framework and practices as part of its annual publication of its Disclosure Framework report. Euroclear Bank makes this assessment available to its participants on its website, along with Euroclear Bank's annual response to the Association of Global Custodians (AGC) questionnaire relating to the SEC's Rule 17f-7 under the Investment Company Act of 1940 and Eplc's Pillar 3 disclosure. Euroclear Bank also makes its annual International Standard on Assurance Engagements (ISAE) 3402 control report available to its participants and authorities. Euroclear's external auditors also are required to report findings annually on Euroclear Bank's internal controls to the NBB.

Euroclear Bank notes that, in addition to Euroclear Group's strong risk control culture and practices that are subject to oversight by multiple European regulators in light of both local and international standards, the Commission will have additional controls over the activities of Euroclear Bank in the United States relating to its holding of U.S. Equity Securities. First, the U.S. Equities Proposal will provide services for U.S. Equity Securities that are held by Euroclear Bank at DTC either directly (in Euroclear Bank's account at DTC) or indirectly (through Euroclear Bank's U.S. custodian, an entity supervised by U.S. regulators) and through accounts at DTC subject to DTC's normal risk control measures. As noted above, DTC will adopt rules regarding the Euroclear Bank account to be held at DTC and the operation of such account in relation to the JV-IMS and such rules will be subject to the normal rule adoption and review process of the Commission for rules of self-regulatory organizations.⁸⁶

Under the proposed conditions to the modified exemption, the Commission also will receive ongoing information from Euroclear Bank regarding the Clearing Agency Activities, including: notice from Euroclear Bank of material changes to the U.S. Equities Clearing Agency Activities that require amendment of Form CA-1; supplemental annual reports describing material changes to the Clearing Agency Activities and related arrangements that would not require amendment of Form CA-1 and describing Euroclear Bank's process for compliance with the conditions of the exemption order; and periodic volume reports regarding U.S. Equities Clearing Agency Activities). This additional reporting will help the Commission consider whether fundamental changes to the U.S. Equities Clearing Agency Activities are necessary and whether the evolution of the market for collateral management services in the United States is introducing additional operational risks that require further oversight by the Commission in the future. Any modified exemption order granted by the Commission pursuant to this Modification Request will also include provisions for modification if necessary or appropriate in the public interest, in the protection of investors, or otherwise in furtherance of the

^{86 17} C.F.R. 240.19b-4.

purposes of the Exchange Act. The Commission may also limit, suspend or revoke any exemption if it finds that Euroclear Bank violates or is unable to comply with any of the provisions of the order if such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act.⁸⁷

1. <u>Cross-border aspects</u>

In the 2015 Matching Exemption Orders, the Commission considered whether the processing of exempted services outside of the United States would create additional risks for the U.S. market or market participants. The Commission concluded that the commitments made by the applicant SS&C in that situation were sufficient.

Euroclear Bank considers that the provisions it has in place, together with its long-standing existing operations on behalf of U.S. Participants (including with respect to Eligible U.S. Government Securities) are at least as robust in protecting its U.S. Participants as the arrangements considered by the Commission in the 2015 Matching Exemption Orders. Euroclear Bank's incorporation, primary regulatory oversight and operations continue to be located in Europe, as was the case when the Commission approved the Existing Exemption Order. Euroclear Bank has operated with U.S. Participants fully and actively participating in its services since it assumed operation of the Euroclear System in 2000. The U.S. Equities Proposal will operate on the same systems that Euroclear Bank uses currently to provide its collateral management services and, underlying this, the movements of U.S. Equity Securities to/from IMS Linked Accounts and Collateral Accounts by U.S. Participants is undertaken by the same systems that support the movement of Eligible U.S. Government Securities which are already subject to the Existing Exemption Order and which the Commission already found to be adequate to justify an exemption from clearing agency registration.

Euroclear Bank also agrees to a series of conditions to exemption described below, to ensure that the Commission can fulfill its regulatory obligations with respect to the U.S. Equities Clearing Agency Activities. In addition, the Commission has entered into an MOU with the Belgian Commission Bancaire, Financière et des Assurances ("**CBFA**")⁸⁸ concerning consultation and cooperation regarding firms that are members of clearing agencies that are registered (or otherwise exempt from registration) with the Commission.⁸⁹ This MOU provides that (1) both authorities will consult with each other regarding issues of mutual concern relating to Belgian firms in scope of the MOU, (2) the CBFA will obtain and make available to the Commission, upon request, information related to the oversight and financial condition of Belgian firms in scope of the MOU and (3) both authorities will notify each other in emergency situations and communicate appropriate information during such situations.

⁸⁷ 2015 Matching Exemption Orders, at 75407.

 $[\]frac{88}{10}$ FSMA is the successor regulatory authority to CBFA.

⁸⁹ Undertaking on Consultation and Cooperation regarding Belgian Firms that are Members of U.S. Clearing Organizations, *available at* https://www.nbb.be/doc/cp/nl/aboutcbfa/mou/pdf/mou_2006-07-06_ clearing organizations.pdf.

G. Governance

The Commission already has concluded in granting the Existing Exemption Order that the governance arrangements of the Euroclear Group, which provide for industry Boards of Directors at the parent level of Euroclear plc ("**Eplc**"), the ultimate parent company of Euroclear Bank, and a separate Board of Directors of Euroclear Bank is sufficiently designed to help ensure that Euroclear Bank is operated in a manner that is consistent with the public interest and the protection of investors.⁹⁰ While governance of Euroclear Bank has evolved with the addition of ESA since the Existing Exemption Order was issued, the ESA board composition mirrors that of Eplc (with the addition of executive directors).

Rule 17Ad-22(d)(8) – Governance. Rule 17Ad-22(d)(8) requires registered clearing agencies to have governance arrangements that are clear and transparent to fulfill the public interest requirements in Section 17A of the Act (15 U.S.C. 78q-1) applicable to clearing agencies, to support the objectives of owners and participants and to promote the effectiveness of the clearing agency's risk management procedures. PFMI Principle 2 (Governance) requires that "an FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI and support the stability of the broader financial system, other relevant public interest considerations and the objectives of relevant stakeholders." In addition to the description of Euroclear Group and Euroclear Bank's governance arrangements above and elsewhere in the Modification Application, the 2015 EB Disclosure Report describes in detail how Euroclear Bank complies with Principle 2.⁹¹

Euroclear Group's governance includes representatives of Euroclear's stakeholders (including both owners and customers of the Euroclear Group services). Euroclear Bank is indirectly wholly owned by the Euroclear Group ultimate parent company, Eplc. Eplc shares are largely owned by users of the Euroclear Group services and the Euroclear Group's primary Boards of Directors (Eplc and ESA, which have the same non-executive Board members) are composed of members drawn from a cross-section of market participants that use the Euroclear Group services, allowing users' interests and sensitivities to influence the decision-making process of Euroclear Group including Euroclear Bank. In addition, independent directors not affiliated with market participants that use the Euroclear Group's services have been appointed to each of the Boards of Directors of Eplc, ESA and Euroclear Bank. The representative Board of Directors of Eplc as the ultimate parent of the Euroclear Group is responsible for:

- ensuring that the necessary financial resources are in place to meet strategic goals;
- all shareholder matters; and
- setting values and standards in governance matters.

The Board of Directors of ESA is responsible for:

⁹⁰ See 2001 Exemption Order, supra note 6.

⁹¹ See 2015 EB Disclosure Report, at 27-38.

- setting group strategy and overseeing its implementation;
- ensuring effective controls are in place to enable risk to be properly managed; and
- setting the framework for group policies.

Users can also influence the Euroclear Group's decision-making bodies through market advisory committees; the CSDR will require that Euroclear Bank establishes a user market advisory committee at the Euroclear Bank level.⁹²

In addition to the overarching governance of Euroclear Bank activities by the industry-led Boards of Directors of Eplc and ESA, the Euroclear Bank Board of Directors must meet standards of corporate governance imposed by the NBB on Belgian supervised banks and operators of settlement system.⁹³ In addition, the CSDR will require that Euroclear Bank establishes a user committee (in addition to existing Euroclear CSD market advisory groups) specifically to provide the Euroclear Bank Board of Directors with the direct input on the views and interests of EB Participants.⁹⁴

Euroclear Group makes information about Euroclear Group's and Euroclear Bank's governance structure public in order to provide accountability to owners, clients and other stakeholders including on Euroclear Group's public website, along with its annual reports and financial statements.

Euroclear Bank also has a regulatory obligation to describe how it complies with Belgian legal and regulatory requirements on governance in a "Governance Memorandum" that it must provide annually to the NBB for its review. In keeping with its Belgian law requirements, directors of Euroclear Bank must be adequately qualified both with a balance of skills and experience across the board, and include both generic skills (finance, accounting, management and organization) and skills specific to Euroclear Bank's business (banking, operations, securities settlement, capital markets and IT knowledge). Euroclear Bank maintains Board committees exclusively composed of non-executive directors (Audit, Risk, Nominations and Governance, Remuneration) as well as a Management Committee composed of executive directors that has responsibility for managing the business of Euroclear Bank within the strategy and general policy decided by the Board of Directors and by Euroclear Bank's parent company, ESA. Euroclear Bank has adopted conflict of interest policies that apply to its Board of Directors, management and employees. The Euroclear Bank Board of Directors also carries out

⁹² Regulation 909/2014 of July 23, 2014, on improving securities settlement in the European Union and on central securities depositories (CSDs) and amending Directive 98/26/ECCSD RegOJEU, August 28 2014, L.257/1, *available at* http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0909&from=EN.

⁹³ See Section II.C.1, supra.

⁹⁴ Draft Technical Standards under CSDR, *European Securities and Markets Authority* (Sept. 28, 2015), *available at* https://www.esma.europa.eu/sites/default/files/library/2015/11/2015-esma-1457_-_annex_ii_-_csdr_ts_on_csd_ requirements_and_internalised_settlement.pdf.

annual governance self-assessments and effectiveness review of the Board as a whole, the Chairman and individual directors. $\frac{95}{2}$

Euroclear Group's and Euroclear Bank's governance arrangements also promote effective risk management procedures, including creating an oversight framework that fosters a focus on the critical role that risk management plays in promoting prompt and accurate clearance and settlement. As explained more fully above, the Euroclear Group and Euroclear Bank take risk management very seriously and have implemented a robust risk management framework across the Euroclear Group and adopts a "three lines of defense" model consistent with best market practice.

Finally, as noted in the 2015 Matching Exemption Orders and above, the Commission will retain authority to, and provisions for, modifying any modified exemption order should that prove necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act.

Euroclear Bank recognizes that the corporate governance of market infrastructure providers continues to evolve as market circumstances change and it is possible that Euroclear Group ownership and governance will continue to evolve as well. However, in such case Euroclear Bank commits to inform the Commission of any material changes to the governance described herein as part of its supplemental annual report to the Commission and also notes that the ongoing continued supervision of the Euroclear Group by European securities and banking regulators also includes ongoing review of the Euroclear Group's governance arrangements against international standards for providers of market infrastructure services. Therefore, should any concerns arise about Euroclear Bank's or Euroclear Group's governance in the future (notwithstanding its long-standing history as a market infrastructure provider and close supervision by multiple European regulators), the Commission retains sufficient tools to ensure that Euroclear Bank continues to act consistently with the public interest, the protection of investors and the purposes of Section 17A of the Exchange Act with regard to the Clearing Agency Activities.

Rule 17Ad-22(d)(9) – *Information on Services.* Rule 17Ad-22(d)(9) requires registered clearing agencies to provide market participants with sufficient information for them to identify and evaluate the risks and costs associated with using its services. PFMI Principle 23 (Disclosure) requires that "An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed." The 2015 EB Disclosure Report describes how Euroclear Bank complies with Principle 23.⁹⁶

⁹⁵ The terms of reference for Euroclear Bank's Board of Directors and its committees can be found here: https://www.euroclear.com/investorrelations/company/corporate-governance/boards-and-committees/euroclear-bank-mgmt-board.html.

⁹⁶ See 2015 EB Disclosure Report, at 131-39.

H. Systems Security and Integrity

As noted above, under Section 17A of the Exchange Act, applicants for exemption from registration as a clearing agency must demonstrate that they are so organized and have the capacity to facilitate the prompt and accurate clearing and settlement of securities transactions.

On November 19, 2014, the Commission adopted Regulation SCI, which requires covered entities ("SCI entities") to comply with requirements with respect to their automated systems that support the performance of their regulated activities.⁹⁷

1. <u>Application of Regulation SCI to Euroclear Bank as an Exempted</u> <u>Clearing Agency</u>

The Commission adopted Regulation SCI in order to bolster the operational integrity of key U.S. securities market participants to prevent systems issues that had resulted in trading disruptions, compliance issues, systems intrusions and other systems issues.⁹⁸ The Commission reasoned that the adoption of Regulation SCI would:

"advance the goals of the national market system by enhancing the capacity, integrity, resiliency, availability, and security of the automated entities important to the functioning of the U.S. securities markets, as well as reinforce the requirement that such systems operate in compliance with the Exchange Act and rules and regulations thereunder, thus strengthening the infrastructure of the U.S. securities markets and improving its resilience when technological issues arise."

Regulation SCI on its face is not applicable to entities that are exempted from registration as a clearing agency, unless such entity is "an exempt clearing agency subject to the [Commission's Automation Review Policy ("**ARP**")]."⁹⁹ In the Regulation SCI Adopting Release, the Commission explained that it considered it appropriate that Regulation SCI apply to entities "that play a significant role in the U.S. securities markets and/or have the potential to impact investors, the overall market, or the trading of individual securities".¹⁰⁰

At the time of adoption, only one entity that was exempted from clearing agency registration qualified as an SCI entity, Omgeo Matching Services -- U.S. LLC ("Omgeo"), a provider of

⁹⁷ Exchange Act Release No. 34-73639 (Nov. 19, 2014), 79 Fed. Reg. 72251 (Dec. 5, 2014) ("**Regulation SCI** Adopting Release").

 $[\]frac{98}{2}$ See Regulation SCI Adopting Release, at 72254-56. The Commission provided examples of events where systems issues had led to disruption and compliance issues such as delayed opening of trading, incorrect order booking, trading halts, quote and trade reporting errors, ineffective automated surveillance programs and other failures of automated oversight programs responsible for implementing the oversight obligations of a self-regulatory organization.

⁹⁹ Regulation SCI Adopting Release, at 72437. Rule 1000 of Regulation SCI defines an SCI entity to include "an exempt clearing agency subject to ARP". An exempted clearing agency subject to the ARP includes only those entities that have as a condition to such exemption a requirement to comply to the Commission's ARP or any Commission regulation that supersedes or replaces such policies. *Id.* at 72271.

¹⁰⁰ *Id.* at 72258.

trade matching and confirmation services for the U.S. equities markets.¹⁰¹ The Commission has since imposed Regulation SCI on two additional exempted clearing agencies, which also propose to provide matching and related services.¹⁰² The Commission concluded that it was appropriate to include Omgeo and similarly situated exempt clearing agencies in the definition of SCI entity, noting that Omgeo had itself stated that the application of Regulation SCI to matching and confirmation service providers was reasonable, in light of the critical role performed by such services in the infrastructure of the U.S. financial markets.¹⁰³

The Existing Exemption Order applicable to Euroclear Bank does not include a condition relating to the Commission's ARP, and therefore Euroclear Bank is not required to comply with Regulation SCI with regard to the U.S. Government Securities Clearing Agency Activities.

Euroclear Bank believes that it is not necessary for the Commission to impose compliance with Regulation SCI as a condition of a modified exemption order with regard to U.S. Equities Clearing Agency Activities in order to fulfill the purposes of the Exchange Act with regard to such order. This is primarily due to the following factors:

- The systems that support the U.S. Equities Clearing Agency Activities are already used to operate the Euroclear Group's services as important market infrastructures in multiple European countries. These systems are subject to systems integrity assessments by multiple European home regulators of such (I)CSDs, based on international standards and in accordance with local laws;
- Euroclear Bank has a long history of safely operating the exact services proposed to be exempted as U.S. Equities Clearing Agency Activities, as well as the already exempted U.S. Government Securities Clearing Agency Activities for U.S. Participants (which operate on the same systems and under the same risk control framework); and
- The U.S. Equities Clearing Agency Activities are limited in nature and will not play a critical role to support underlying trading in U.S. Equities in the United States.

Euroclear Bank and ESA are already held to high standards for internal controls, redundancy, security, business continuity and disaster recovery and the other areas covered by Regulation SCI. The Euroclear Group's information technology environment is described in the 2015 EB Disclosure Report and Euroclear Bank's ISAE 3402 Report.¹⁰⁴

PFMI Principle 17 requires that an "FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems,

¹⁰¹ See id. at 72271.

 $[\]frac{102}{10}$ Id. at 75409-75410.

 $[\]frac{103}{10}$ Id. at 72272.

¹⁰⁴ See ISAE 2015 Report, Section 5; see also Excerpt from Euroclear Bank 2015 report in draft, Section 5 attached hereto.

policies, procedures and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfillment of the FMI's obligations, including in the event of a wide-scale or major disruption." The "key considerations" relating to Principle 17 regarding systems integrity and controls also reflect specific requirements of Regulation SCI, including: systems review, audit, testing and change control, capacity, physical and information security, business continuity plans, disaster recovery, and threat identification, monitoring and management.

Euroclear Bank meets PFMI Principle 17. ESA manages a resilient, high-availability IT and communications infrastructure that has been relied upon for many years by U.S. and international market participants. The Euroclear System has been providing clearance and settlement services to U.S. Participants since 1968,¹⁰⁵ and has operated the EB-CMS since 1993. The U.S. Equities Clearing Agency Activities will operate on the same systems that already support the EB-CMS service used by many U.S. Participants to meet collateral obligations with a wide variety of assets other than U.S. Equities and used by many non-U.S. Participants with assets including U.S. Equities.

Euroclear Group's risk management policies are closely aligned with the PFMI Principles, as well as the risk management recommendations of G30, the European Securities and Markets Authority, the European Banking Authority, the European Central Bank, the Basel Committee for Banking Supervision and the local regulation applicable to Euroclear Group's CSD operations. As a credit institution authorized by the NBB in Belgium, Euroclear Bank is required to comply with Article 21, §1, 7° of the New Banking Law; Euroclear Group's CSDs also are subject to requirements regarding operational risk, including systems integrity. In addition to the operational risk requirements currently imposed on Euroclear Bank in accordance with the standards referenced above, Euroclear Bank and each Euroclear Group European CSD must apply for a license from its home regulator, pursuant to the CSDR, in order to continue to operate.¹⁰⁶

In order to meet these requirements, Euroclear Group applies a comprehensive operational risk framework that includes systems integrity and control and business continuity planning, requiring formal risk identification and mitigation plans, logging and monitoring of mitigation actions, measuring risk resolution, risk monitoring, independent audit and testing. The Euroclear Group's risk policies are also developed and maintained in accordance with the following industry guidelines: COSO Principle 11, ISO 31000:2009, ISO 27001:2013, as well as the applicable local regulatory requirements and the standards and guidelines issues by the Basel Committee. These risk policies, procedures and plans cover the elements identified above under Principle 17 and Regulation SCI. Euroclear Bank's compliance with the requirements of PFMI Principle 17 are disclosed publicly in detail in the 2015 EB Disclosure Report.¹⁰⁷

 $[\]frac{105}{105}$ As operated by MGT-Brussels, prior to the transition to Euroclear Bank in which Euroclear Bank assumed most of the staff, systems and controls of MGT-Brussels.

 $[\]frac{106}{5}$ See note 49, supra.

¹⁰⁷ 2015 EB Disclosure Report, at 95-115.

In addition, Euroclear Bank agrees to comply with the systems compliance and integrity conditions with respect to all of the Clearing Agency Activities, as stated in Part III, C. below.¹⁰⁸

I. Additional Safety and Soundness Protections

1. Legal Framework and Transparent Participant Rules

Exhibit E and Exhibit P describe the legal framework and contractual structure Euroclear Bank.

Rule 17Ad-22(d)(1) - Robust Legal Framework; Transparent and Enforceable Rules and*Procedures*. Rule 17Ad-22(d)(1) requires registered clearing agencies to have written policies and procedures to provide for a well-founded, transparent and enforceable legal framework for each aspect of its activities in all relevant jurisdictions.¹⁰⁹ PFMI Principle 1 (Legal Basis) requires that "an FMI should have a well-founded, clear, transparent and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions."¹¹⁰ Euroclear Bank complies with Principle 1. As described in the Modification Application and in the 2015 EB Disclosure Report, Euroclear Bank¹¹¹ is subject to a robust regulatory framework that holds Euroclear Bank not only to the standards articulated in the PFMI Principles as implemented in Belgium and generally by the European Union, but also to the obligations of a credit institution.

2. <u>Asset Protection, Settlement and Safekeeping</u>

Rule 17Ad-22(d)(3) - Custody of Assets and Investment Risk. Rule 17Ad-22(d)(3) requires registered clearing agencies to have written policies and procedures to ensure that assets are held in a manner that minimizes risk of loss or of delay in its access to them; and invest assets in instruments with minimal credit, market and liquidity risks. PFMI Principle 16 requires that "an FMI should safeguard its own and its participants' assets and minimize the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market and liquidity risks and minimize the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market and liquidity risks." Euroclear Bank complies with Principle 16, as described in detail in the 2015 EB Disclosure Report.¹¹²

Belgian law provides specifically for a robust asset protection rights for assets deposited in the Euroclear System that provides for the protection of the holding in assets on the books of Euroclear Bank. Belgian law and Euroclear Bank's arrangements provide a high degree of certainty for finality of transfers on Euroclear Bank's books, for the holding of collateral in accounts with Euroclear Bank, for the contractual framework of participant in the Euroclear System and detailed default procedures.

¹⁰⁸ In addition to the foregoing, Euroclear Bank has agreed to comply with DTC's Regulation Systems Compliance and Integrity testing requirements as set forth in DTC Rule 2. *See* note 28 *supra*.

¹⁰⁹ 17 C.F.R. 240.17Ad-22(d)(1).

¹¹⁰ See PFMI Report, Principle 1.

¹¹¹ See 2015 EB Disclosure Report, at 21-26.

¹¹² See id. at 93.

Exhibit L to this Modification Application describes the structure of asset protection for assets deposited in the Euroclear System. The contractual relationship between Euroclear Bank as operator of the Euroclear System and EB Participants is defined by the Terms and Conditions, as supplemented by the Operating Procedures and other contractual documentation. The Terms and Conditions and Operating Procedures are governed by Belgian Law. The Terms and Conditions require, among other things, that EB Participants agree that their rights to securities held through the Euroclear System will be defined and governed by the Belgian Royal Decree No. 62^{113} or similar Belgian legislation governing the fungibility of securities held in the Euroclear System are defined under Belgian law in a manner that is effectively similar to the definition of "security entitlement" under Revised Article 8 of the UCC.

Under Article 23 of the Law of August 2, 2002, the FSMA is required to ensure that settlement institutions such as Euroclear Bank take measures necessary to prevent any conflict of interest from affecting the interests of customers and protect the rights of Euroclear Bank participants in case of insolvency of Euroclear Bank and prevent the use by Euroclear Bank of financial instruments belonging to clients among other prudential regulations.¹¹⁵

Rule 17Ad-22(d)(11) - Default Procedures. Rule 17Ad-22(d)(11) requires registered clearing agencies to make key aspects of the clearing agency's default procedures publicly available and establish default procedures that ensure that the clearing agency can take timely action to contain losses and liquidity pressures and to continue meeting its obligations in the event of a participant default. PFMI Principle 13 (Defaults) requires that "an FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations." Euroclear Bank complies with Principle 13, as described in detail in the 2015 EB Disclosure Report.¹¹⁶

Rule 17Ad-22(d)(12) - Timing of Settlement Finality. Rule 17Ad-22(d)(12) requires registered clearing agencies to ensure that final settlement occurs no later than the end of the settlement day; and require that intraday or real-time finality be provided where necessary to reduce risks. PFMI Principle 8 (Settlement Finality) requires that "an FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time." Euroclear Bank complies with Principle 8 and offers both overnight and real-time settlement processing (with the point of finality being clearly defined and documented). The 2015 EB Disclosure Report describes in detail how Euroclear Bank complies with Principle 8.¹¹⁷

¹¹³ The coordinated Royal Decree No. 62 dated Nov. 10, 1967 on the Deposit of Fungible Financial Instruments and the Settlement of Transactions involving such Instruments ("**Royal Decree 62**").

 $[\]frac{114}{1}$ Terms and Conditions, Section 4(a).

¹¹⁵ See generally 2015 EB Disclosure Report, at 17-18.

 $[\]frac{116}{116}$ See *id.* at 84-86.

¹¹⁷ See 2015 EB Disclosure Report, at 74-76.

Rule 17Ad-22(d)(13) - DVP. Rule 17Ad-22(d)(13) requires registered clearing agencies to eliminate principal risk by linking securities transfers to funds transfers in a way that achieves delivery versus payment. PFMI Principle 12 (Exchange of Value settlement) requires that "If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other." The Euroclear System is a Model 1 DVP system and as such Euroclear Bank complies with Principle 12, as described in detail in the 2015 EB Disclosure Report.¹¹⁸

Rule 17Ad-22(d)(10) – *Immobilization and Dematerialization of Securities Certificates.* Rule 17Ad-22(d)(10) requires registered clearing agencies to immobilize or dematerialize securities certificates and transfer them by book entry to the greatest extent possible when the clearing agency provides central security depository services. PFMI Principle 11 (CSD) requires that "a CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimize and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilized or dematerialized form for their transfer by book entry." Euroclear Bank complies with Principle 11 and the 2015 EB Disclosure Report describes in detail such compliance.¹¹⁹ Euroclear Bank notes that the U.S. Equity Securities that will be available pursuant to the U.S. Equities Proposal will be transferred only by book-entry on the books of Euroclear Bank and will be deposited at DTC (either directly or indirectly).

Rule 17Ad-22(d)(15) - Physical Delivery Risks. Rule 17Ad-22(d)(15) requires registered clearing agencies to state to its participants the clearing agency's obligations with respect to physical deliveries and identify and manage the risks from these obligations. Euroclear Bank's compliance with PFMI Principle 10 (Physical Deliveries) is described in the EB 2015 Disclosure Report.¹²⁰ However, this requirement is not applicable to Euroclear Bank's U.S. Equities Clearing Agency Activities, as Euroclear Bank will not hold U.S. Equity Securities that are part of the U.S. Equities Clearing Agency Activities in physical form (all U.S. Equity Securities that are part of the U.S. Equities Clearing Agency Activities will be held by Euroclear Bank at DTC either directly or indirectly) and Euroclear Bank will not process physical deliveries of U.S. Equity Securities on behalf of U.S. Participants.

3. <u>Access</u>

<u>Exhibit E</u>, <u>Exhibit O</u> and <u>Exhibit P</u> describe the participant access criteria of Euroclear Bank; <u>Exhibit G</u> describes the structures under which Euroclear Bank links with third parties.

Rule 17Ad-22(d)(2) – Participant Requirements. Rule 17Ad-22(d)(2) requires registered clearing agencies to have written policies and procedures that require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the clearing agency and have procedures in place to monitor that participation

¹¹⁸ See id. at 83.

 $[\]frac{119}{10}$ See *id.* at 80-82.

¹²⁰ See id. at 79.

requirements are met on an ongoing basis and have participation requirements that are objective and publicly disclosed, and permit fair and open access. PFMI Principle 18 requires that "an FMI should have objective, risk-based and publicly disclosed criteria for participation, which permit fair and open access." Euroclear Bank complies with Principle 18, as described in detail in the 2015 EB Disclosure Report.¹²¹

Rule 17Ad-22(d)(7) - Links. Rule 17Ad-22(d)(7) requires registered clearing agencies to evaluate the potential sources of risks that can arise when the clearing agency establishes links either cross-border or domestically to clear or settle trades, and ensure that the risks are managed prudently on an ongoing basis. PFMI Principle 20 (FMI Links) requires that "an FMI that establishes a link with one or more FMIs should identify, monitor and manage link-related risks." Euroclear Bank complies with Principle 20, as described in detail in the 2015 EB Disclosure Report.¹²²

III. Exemption Order Request and Conditions

Euroclear Bank requests that the Commission issue a modified exemption order on the basis of the information provided in Euroclear Bank's amended Form CA-1 application, that will (1) continue the exemption from clearing agency registration with respect to U.S. Government Securities Clearing Agency Activities under substantially the same conditions as provided for under the Existing Exemption Order, (2) broaden the exemption to provide authority for Euroclear Bank to provide the U.S. Equities Clearing Agency Activities (as defined below) under new conditions applicable to those Activities, and (3) apply harmonized conditions to the exemption with respect to certain systems compliance and integrity conditions and the Commission's access to general ongoing information common to both types of Clearing Agency Activities.

A. Continuation of Existing Exemption Order on substantially same conditions specific to U.S. Government Securities Clearing Agency Activities

With regard to the Existing Exemption Order, Euroclear Bank specifically requests that:

- 1. The modified exemption order will continue the authority granted in the Existing Exemption Order to Euroclear Bank to provide clearance, settlement, and collateral management services for its U.S. Participants' transactions in Eligible U.S. Government Securities ("U.S. Government Securities Clearing Agency Activities") without registering as a clearing agency with the Commission; and
- 2. The scope of the exemption, the securities covered by the exemption and defined as "Eligible U.S. Government Securities", and the definition of "U.S. Participants" covered by the exemption remain unchanged from the

¹²¹ See 2015 EB Disclosure Report, at 116.

¹²² See id. at 123.

Existing Exemption Order with respect to U.S. Government Securities Clearing Agency Activities; and

- 3. The following conditions of the Existing Exemption Order with regard to the U.S. Government Securities Clearing Agency Activities continue in effect, unchanged from the 2001 Exemption Order:
 - (a) <u>Volume Limit</u>. The average daily volume of eligible U.S. government securities processed through Euroclear Bank as operator of the Euroclear System may not exceed five percent of the total average daily dollar value of the aggregate volume in eligible U.S. government securities.
 - (b) <u>Commission Access to Information regarding U.S. Government Securities Clearing Agency Activities</u>. Euroclear Bank will continue to provide the Commission with quarterly reports, calculated on a twelve-month rolling basis, of (1) the average daily volume of transactions in eligible U.S. government securities for U.S. Participants that are subject to the volume limit as described in Section IV.C.2 of the 1998 Exemption Order and (2) the average daily volume of transactions in eligible government securities for all Euroclear System participants, whether or not subject to the volume limit as described in Section IV.C.2 of the Section IV.C.2 of the 1998 Exemption Order and (2) the average daily volume of transactions in eligible government securities for all Euroclear System participants, whether or not subject to the volume limit as described in Section IV.C.2 of the 1998 Exemption Order; and
- 4. The following conditions of the Existing Exemption Order with regard to the U.S. Government Securities Clearing Agency Activities are replaced and superseded by the conditions in Section D below (Additional Conditions Applicable to all Clearing Agency Activities):
 - (a) the obligations in Section IV.C.3 of the 1998 Exemption Order to provide disclosure documents to the Commission;
 - (b) the obligations in Section IV.C.3 of the 1998 Exemption Order to file with the Commission amendments to its application for exemption on Form CA-1; and
 - (c) the obligations in Section IV.C.3 of the 1998 Exemption Order to notify the Commission regarding material adverse changes in any account maintained by Euroclear for its U.S. Participants and to respond to a Commission request for information about any U.S. Participant about whom the Commission has financial solvency concerns.
- B. Broadening the Existing Exemption Order to Authorize Euroclear Bank to perform U.S. Equities Clearing Agency Activities subject to additional conditions

1. <u>Scope of Exemption with regard to U.S. Equities Clearing Agency</u> <u>Activities</u>

Euroclear Bank requests that the Commission grant to Euroclear Bank the authority to provide, without registering as a clearing agency with the Commission, the "U.S. Equities Clearing Agency Activities," which shall consist of:

- (a) the provision of clearing agency services (such as certain central securities depository services¹²³ and collateral management services) in relation to U.S. Participants' use and reuse of Equity Securities¹²⁴ issued by U.S. Issuers¹²⁵ ("U.S. Equity Securities") in support of collateral obligations utilizing the collateral management services provided by Euroclear Bank in relation to any securities or cash account at Euroclear Bank that is used to receive collateral ("Collateral Accounts"), in connection with the services described in (b) below and in connection with receipt and delivery from other Euroclear System participants that are users of such collateral management services provided by Euroclear Bank; and
- (b) solely for the purpose of implementing the services described in (a) above, the provision of certain clearing agency services for U.S. Participants' receipt and delivery of U.S. Equity Securities in relation to collateral management services through accounts held at Euroclear Bank that are linked to Euroclear Bank's account held at The Depository Trust Company.
- 2. <u>Operational Conditions Relating to U.S. Equities Clearing Agency</u> <u>Activities</u>

Euroclear Bank agrees to the following conditions of exemption with regard to the U.S. Equities Clearing Agency Activities:

(a) Euroclear Bank shall provide to the Commission or its designee quarterly reports, calculated on a twelve-month rolling basis, of
 (i) the average daily value of U.S. Equity Securities that are held in

¹²³ The term "**central securities depository services**" means such term as defined in 17 C.F.R. 240.17Ad-22(a)(2).

 $[\]frac{124}{2}$ As used herein, the term "**Equity Security**" refers to an instrument that represents a direct ownership in a company, such as a stock, share, certificate of interest or participation in any profit sharing agreement, preorganization certificate of subscription, voting trust certificate or certificate of deposit for an equity security, limited partnership interest, interest in a joint venture or certificate of interest in a business trust. However, the term "Equity Security" does not include interests in structured finance vehicles such as limited partnerships, business trusts or similar arrangements that have no independent operations and are used solely as special purpose financing vehicles.

 $[\]frac{125}{125}$ As used herein, the term "U.S. Issuer" refers to an issuer organized or incorporated under the laws of any state of the United States, territory thereof, or the District of Columbia.

Collateral Accounts at Euroclear Bank for U.S. Participants and a break-down of the general types of Euroclear Bank collateral agreements in respect of which such value is given as collateral, (ii) the average daily value of U.S. Equity Securities that are held in Euroclear Bank's account at the Depository Trust Company relating to inventory management services, and (iii) the total value, and a break-down of the general types of Euroclear Bank collateral agreements in respect of which such value is given as collateral, of U.S. Equity Securities that are transferred from Collateral Accounts of U.S. Participants at Euroclear Bank to other Securities Clearance Accounts at Euroclear Bank (other than IMS-Linked Accounts) pursuant to a liquidation of such collateral.

C. Systems Compliance and Integrity Conditions

Euroclear Bank agrees to the following conditions of exemption with regard to the U.S. Equities Clearing Agency Activities and the U.S. Government Securities Clearing Agency Activities (together, the "Clearing Agency Activities"):

- 1. Euroclear Bank shall demonstrate to the Commission prior to commencing the U.S. Equities Clearing Agency Activities that Euroclear Bank maintains written policies and procedures applicable to those systems that support or are integrally related to the Clearing Agency Activities (the "**Systems**") that are reasonably designed to achieve the following:
 - (a) establish a robust operational risk-management framework applicable to the Systems with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks;
 - (b) clearly define the roles and responsibilities of Euroclear Bank personnel for addressing operational risk;
 - (c) review operational policies, procedures, and controls applicable to the Systems;
 - (d) audit the Systems, and test the Systems periodically and at implementation of significant changes;
 - (e) clearly define operational reliability objectives for the Systems;
 - (f) ensure that the Systems have scalable capacity adequate to handle increasing stress volumes and achieve the Systems service-level objectives;
 - (g) establish comprehensive physical and information security policies that address all potential vulnerabilities and threats to the Systems;

- (h) establish a business continuity plan for the Systems that addresses events posing a significant risk of disrupting the Systems' operations, including events that could cause a wide-scale or major disruption in the provision of the Clearing Agency Activities;
- (i) incorporate the use of a secondary site in Euroclear Bank's business continuity plan that is designed to ensure that the Systems can resume operations within two hours following disruptive events;
- (j) regularly test or otherwise validate Euroclear Bank's business continuity plans; and
- (k) identify, monitor, and manage the risks that key participants, other financial market infrastructures and service and utility providers might pose to the Systems' operations in relation to the Clearing Agency Activities.
- 2. Euroclear Bank shall provide the Commission with a yearly update on the status of the items set forth in condition 1.
- 3. Euroclear Bank shall establish, implement, maintain, and enforce written policies and procedures reasonably designed to ensure that the Systems operate in a manner that complies with the conditions of the amended exemption and Euroclear Bank's rules and governing documents, as applicable to the Clearing Agency Activities.
 - (a) Upon Euroclear Bank having a reasonable basis to conclude that a disruption, compliance issue, or intrusion of the Systems that impacts, or is reasonably likely to impact, the Clearing Agency Activities has occurred (a "**Systems Event**"), Euroclear Bank shall:
 - (i) notify the Commission of such Systems Event within 24 hours after occurrence;
 - (ii) until such time as a Systems Event is resolved and Euroclear Bank's investigation of the Systems Event is closed, provide updates pertaining to such Systems Event to the Commission on a regular basis;
 - (iii) within 48 hours after the occurrence of a Systems Event or where Euroclear Bank reasonably determines that such deadline cannot be met and so notifies the Commission, promptly thereafter, submit an interim written notification pertaining to such Systems Event to the Commission containing: (a) A detailed description of: the relevant

discovery and duration times, detection, root cause and remedial actions taken or planned regarding the Systems Event (to the extent known at report time); Euroclear Bank's assessment of the entities (including types of market participants) and Euroclear Bank services affected by the Systems Event; Euroclear Bank's assessment of the impact of the Systems Event on the Participants; and any other pertinent information known by the Euroclear Bank about the Systems Event; and (b) A copy of any information disseminated to Euroclear Bank's U.S. Participants in accordance with Euroclear Bank's notification practices regarding the Systems Event; and

- (iv) within ten business days after the occurrence of a Systems Event, or where Euroclear Bank reasonably determines that such deadline cannot be met and so notifies the Commission, promptly thereafter, submit a written final report regarding the matters covered in the interim report required under (iii) above.
- (b) For the purposes of the amended exemption: (1) a "disruption" means an event in the Systems that significantly disrupts or degrades, or is likely to significantly disrupt or degrade, the normal operation of the Systems in relation to the Clearing Agency Activities or may have medium term impact on U.S. Participants using the Clearing Agency Activities or where the impact or likely impact of such event cannot be reasonably established; (2) a "compliance issue" means an event at Euroclear Bank that has caused any System to operate in a manner that does not comply with the Amended Exemption or Euroclear's rules and governing documents applicable to the Clearing Agency Activities; and (3) an "intrusion" means any unauthorized entry into the Systems that significantly disrupts or degrades, or is likely to significantly disrupt or degrade, the normal operation of the Systems in relation to the Clearing Agency Activities or may have medium term impact on U.S. Participants using the Clearing Agency Activities or where the impact or likely impact of such event cannot be reasonably established.
- 4. Euroclear Bank shall, within 30 calendar days after the end of each quarter, submit to the Commission a report describing completed, ongoing, and planned material changes to the Systems that support or are related to the Clearing Agency Activities during the prior, current, and subsequent calendar quarters, including the dates or expected dates of commencement and completion. (Euroclear Bank shall establish

reasonable written criteria for identifying a change to the Systems as material and report such changes in accordance with such criteria.)

- 5. Euroclear Bank shall provide the Commission with: (i) annually, the audited control report made available to Euroclear Bank's Participants prepared in accordance with internationally accepted standards for assurance reports on controls at a service organization (such as the International Standard on Assurance Engagements (ISAE) Standard No. 3402); (ii) annually, copies of those portions of any annual control report provided by Euroclear Bank to its primary Belgian regulator that describe controls applicable to the Systems as used to support or in relation to the Clearing Agency Activities; and (iii) copies of agendas, reports and presentation materials relating to the capacity, integrity, resiliency, availability, and security or compliance of the Systems that are provided by Euroclear Bank or its primary Belgian regulator to any committee of regulators that implements the memorandum of understanding among regulators of Euroclear Group's CSD entities that provides for the coordinated and common oversight and supervision of the Euroclear Group.
- 6. Euroclear Bank shall make, keep, and preserve at least one copy of all documents relating to its compliance with these conditions; keep all such documents for a period of not less than five years, the first two years in a place that is readily accessible to the Commission or its representatives for inspection and examination; and upon request of the Commission, promptly furnish to the possession of such representative copies of any such documents.

D. Additional Conditions Applicable to all Clearing Agency Activities

Euroclear Bank agrees to the following additional conditions to exemption of the U.S. Equities Clearing Agency Activities or the U.S. Government Securities Clearing Agency Activities (together, the "Clearing Agency Activities").

- 1. Euroclear Bank shall provide to the Commission or its designee its annual audited financial statements prepared by competent independent audit personnel.
- 2. Euroclear Bank shall notify the Commission or its designee of any material changes to any service agreement between Euroclear Bank and any other entity that is performing Exempted Clearing Agency Services on behalf of Euroclear Bank if such changes are reasonably expected to materially affect the Exempted Clearing Agency Services.
- 3. Euroclear Bank will notify the Commission or its designee (i) promptly following termination of any U.S. Participant as a Participant in the Euroclear System, (ii) promptly following the liquidation by Euroclear

Bank of any securities collateral pledged by a U.S. Participant to Euroclear Bank to secure an extension of credit made through the Euroclear System, and (iii) promptly following Euroclear Bank becoming aware of the institution of any proceedings to have a U.S. Participant declared insolvent or bankrupt, and will respond to Commission requests for information about any U.S. Participant about whom the Commission has financial solvency concerns, including, for example, a settlement default by a U.S. Participant.

- 4. Euroclear Bank shall annually provide to the Commission or its designee a report describing: (i) material changes to the arrangements described in this Order that would not otherwise require amendment of Euroclear Bank's application for exemption on Form CA-1 in accordance with these conditions; (ii) the functioning of Euroclear Bank's policies and procedures for monitoring its own compliance with the conditions of this order regarding the Clearing Agency Activities (and the compliance of any affiliated or third-party service provider referred to in condition C.2); and (iii) the management by Euroclear Bank of any conflicts of interest of such affiliated or third-party service provider that Euroclear Bank becomes aware have arisen since the prior report with respect to the performance of the Clearing Agency Activities.
- 5. Euroclear Bank shall keep records relating to the Clearing Agency Activities regarding settlement details, account details, service agreements, and service notices sent to U.S. Participants pertaining to the operation of the Clearing Agency Activities and retain such records for a period of not less than five years, the first two years in an easily accessible place (which may be located in the European Union).
- 6. Euroclear Bank shall respond to and require its service providers to respond to a request from the Commission for additional information relating to the Clearing Agency Activities and provide access to the Commission to conduct on-site inspections of all facilities (including automated systems and systems environment), records, and personnel related to the Clearing Agency Activities. The request for information shall be made and the inspections shall be conducted solely for the purpose of reviewing the Clearing Agency Activities' operations and compliance with the federal securities laws and the terms and conditions in any order exempting Euroclear Bank from registration as a clearing agency with regard to the Clearing Agency Activities.
- 7. Euroclear Bank shall file with the Commission amendments to its application for exemption on Form CA-1 if it makes any material change to the Clearing Agency Activities or any change materially affecting the Clearing Agency Activities as summarized in the relevant exemption order, Euroclear Bank's amended Form CA-1 or in any subsequently filed

amendments to its Form CA-1 that would make such previously provided information incomplete or inaccurate.

8. The Commission may modify by order the terms, scope or conditions of a modified exemption order from registration as a clearing agency if it determines that such modification is necessary or appropriate in the public interest, the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act. Furthermore, the Commission may limit, suspend, or revoke the exemption if it finds that Euroclear Bank has violated or is unable to comply with any of the provisions set forth in a modified order if such action is necessary or appropriate in the public interest, for the protection of investors or otherwise in furtherance of the purposes of the Exchange Act.

IV. Conclusion

Euroclear Bank considers that it is unnecessary to require Euroclear Bank to register as a clearing agency in order to provide the U.S. Equities Clearing Agency Activities, based on the comprehensive regulatory oversight of Euroclear Bank, the existing arrangements of Euroclear Bank that substantially satisfy the regulatory standards applicable to clearing agencies registered in the United States, the limited scope of the Modification Request and the other tools available to the Commission to monitor and make ongoing assessment of the U.S. Equities Clearing Agency Activities through exemption order conditions and Euroclear Bank's additional commitments described herein.