



## Eurex Clearing AG

Assessment of Eurex Clearing AG's compliance against the CPSS-IOSCO Principles for financial market infrastructures (PFMI) and disclosure framework associated to the PFMIs

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## 1. Executive Summary

In April 2012, the Committee on Payment and Settlement Systems (CPSS)<sup>1</sup> and the Technical Committee of the International Organization of Securities Commissions (IOSCO) published the report "Principles for financial market infrastructures" (PFMI). In December 2012, CPSS and IOSCO published a report containing the "Disclosure framework for financial market infrastructures" (disclosure framework) and the "Assessment methodology for the principles for FMIs and the responsibilities of authorities" (assessment methodology).

EUREX Clearing Aktiengesellschaft (Eurex Clearing AG, "Eurex Clearing") performed an assessment of its compliance with the CPSS-IOSCO PFMI in accordance with the CPSS-IOSCO assessment methodology<sup>2</sup>. Based on the results of this assessment Eurex Clearing is of the opinion that it fully observes the CPSS-IOSCO PFMI.

Eurex Clearing's self-assessment was reviewed and validated by KPMG as an independent outside auditor also concluding that Eurex Clearing fully observes the CPSS-IOSCO PFMI. More details and the full text of KPMG's assessment can be found on KPMG's website at <http://www.kpmg.de/bescheinigungen/RequestReport.aspx?39311>

Eurex Clearing is one of the leading global central counterparties (CCPs) assuring the safety and integrity of markets while providing innovation in risk management, clearing technology and client asset protection. Eurex Clearing clears a broad scope of products — both listed and OTC products — under a single framework in Europe and accepts a wide spectrum of eligible collateral. Eurex Clearing acts as a buyer to all sellers and as a seller to all buyers thereby minimising counterparty risk and maximising operational efficiency. The offering comprises flexible trade management functions, advanced risk management services, efficient collateral and delivery management tools. Eurex Clearing delivers a comprehensive value chain of clearing services with our high-quality, cost-efficient and state-of-the-art clearing and risk management system.

Eurex Clearing is a credit institution under the German Banking Act (Kreditwesengesetz – KWG) and fulfils the regulatory and liquidity requirements under Solvency Regulation (SolvV) and the Liquidity Regulation (LiqV), as well as the provisions relating to large loans under the Large Exposures and Million Loans Reporting Regime (GroMiKV).

On 10 April 2014, Eurex Clearing received a permission from the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, "BaFin") to perform clearing services pursuant to Article 17 of Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories EMIR. The authorisation as EMIR compliant CCP also determines Eurex Clearing as a qualifying CCP (QCCP) under CRD IV.

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<sup>1</sup> On 1 September 2014 the Committee on Payment and Settlement Systems (CPSS) was renamed to Committee on Payments and Market Infrastructures (CPMI).

<sup>2</sup> Eurex Clearing assessed its compliance against all PFMI except PFMI 11 and PFMI 24 which are not applicable to CCPs

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## 2. Summary of major changes since the last update of the disclosure

This is the initial version of Eurex Clearing's assessment against and disclosure framework based on the CPSS-IOSCO PFMI. Therefore, this document does not include a summary of major changes. However, it will replace the assessment and disclosure documents from 2008 and 2011 on the compliance of Eurex Clearing with the former CPSS-IOSCO Recommendations for Central Counterparties.

## 3. General background on Eurex Clearing

### General description of the FMI and the markets it serves

Eurex Clearing's aim is to assure the safety and integrity of markets while providing innovation in risk management, clearing technology and client asset protection. Eurex Clearing provides central counterparty clearing services for over-the-counter (OTC) and listed derivatives and equities, for bonds and secured funding as well as securities financing market.

Eurex Clearing offers fully automated and straight-through post trade services to the derivatives markets Eurex Deutschland and Eurex Zürich, the Frankfurt Stock Exchange, the multilateral trading systems of Eurex Bonds GmbH and Eurex Repo GmbH, the Irish Stock Exchange as well as clearing services for OTC interest rate derivatives (EurexOTC Clear). Eurex Clearing offers clearing in transactions in cash equities, bonds, repos, derivatives, secured funding, securities financing and energy transactions. It operates in a number of currencies including Euro, Swiss Francs, US Dollars and Pounds Sterling.

Overview on served markets and product groups:



Figure 1: Eurex Clearing's served markets and product groups

- Eurex Exchange is one of the largest global derivatives exchanges with a product suite comprising the most actively traded and liquid market in EUR-denominated equity index and fixed income derivatives; as well as a broad offering in single equity products, alternative asset classes and commodities.
  - With its service EurexOTC Clear for IRS, Eurex Clearing has fully integrated execution with clearing and collateral management of OTC and listed derivatives in a single clearing
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house within one single legal and operational framework. EurexOTC Clear offers clearing services for a broad range of standardised interest rate OTC derivatives in Euro, US Dollar, British pounds and Swiss Franc.

- Cash equity trading is undertaken via the FWB® Frankfurter Wertpapierbörse (the Frankfurt Stock Exchange) – both Xetra® and floor and the Irish Stock Exchange, cleared by Eurex Clearing as CCP and settled in Clearstream Banking Frankfurt and Euroclear UK & Ireland. Cash transactions are settled in Euro and Swiss Francs via Central Banks and in US Dollars and Pounds Sterling via commercial banks.
- Eurex Bonds is an electronic trading platform off-exchange (MTF) for wholesale cash trading in fixed income securities and treasury discount papers – the leading platform for German Government Bonds. Bond trading is undertaken via Eurex Bonds, cleared by Eurex Clearing as CCP and settled in Clearstream Banking Frankfurt, Clearstream Banking Luxemburg and Euroclear Bank.
- Eurex Repo ranks among the leading electronic markets for secured funding and financing and operates the following markets: GC Pooling, Euro Repo, Swiss Franc Repo as well as SecLending. Repo trading is undertaken via Eurex Repo, cleared by Eurex Clearing as CCP and settled in Clearstream Banking Frankfurt, Clearstream Banking Luxemburg and Euroclear Bank. Eurex Repo operates markets for secured funding and financing. Also, it is the market place for the collateralised money market in Swiss Francs and Euros as well as for the GC Pooling® offering.
- The Lending CCP offers clearing services for loans in equities, ETFs and fixed income securities, initially covering European markets. For the Lending CCP service, cash collateral (EUR and USD) and non-cash collateral are eligible.

Eurex Clearing serves more than 170 Clearing Members located in 16 European countries and manages a collateral pool of approximately EUR 51 billion (monthly average in 2014). In 2014, Eurex Clearing processed approximately 1.5 billion transactions. In particular transaction volumes in the EurexOTC Clear service have steadily increased since launched in late 2012.

in millions	2012	2013	2014
Number of transactions	1,751	1,643	1,586
Value of transactions (EUR)	182,385,404	191,973,394	197,288,706
EurexOTC Clear - Notional Value (EUR)		7,398	117,555
Clearing fund (EUR)	1,416	1,605	2,971
Number of Clearing Members	163	175	176
of which: Foreign Clearing Member	101	112	114

Figure 2: Eurex Clearing volumes

The list of cleared products, descriptions of services offered and a broad range of basic and performance statistics is constantly updated and available on the Eurex Clearing website ([www.eurexclearing.com](http://www.eurexclearing.com)).

Eurex Clearing has documented and established governance arrangements that provide for clear responsibility and accountability for both the Eurex Clearing Executive Board and Supervisory Board. These arrangements are disclosed to relevant stakeholders at different granularity.

The composition of the Supervisory Board, its committees as well as the composition and structure of senior management, represented by the Executive Board, is published on the Eurex Clearing website in the corporate governance section. The roles and responsibilities of the board, the committees and senior management are laid down in arrangements that comply with Part 4, Section 1 and 2 of the Stock Corporation Act (Aktiengesetz, AktG).

### Legal and regulatory framework

Eurex Clearing AG (Eurex Clearing) is a stock corporation (Aktiengesellschaft) formed and incorporated under the laws of Germany and founded on 9 March 1998. It is a wholly owned subsidiary of Eurex Frankfurt AG (Eurex Frankfurt), a German stock corporation which is itself wholly owned by Deutsche Börse AG, a German stock corporation listed at the Frankfurt Stock Exchange.

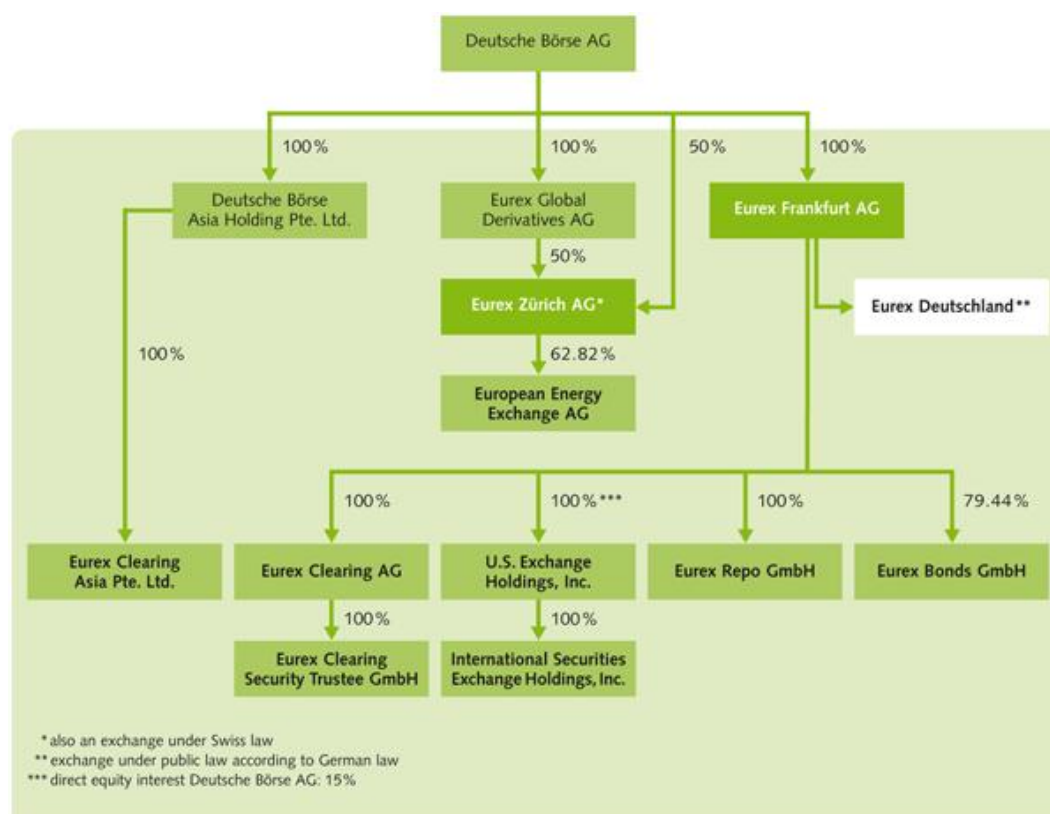


Figure 3: Shareholder structure of Eurex Clearing

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Eurex Clearing's objective is to ensure full compliance with regulatory standards for clearing houses. Methodologies and risk management practices are regularly reviewed.

Eurex Clearing's rules are stipulated in the Clearing Conditions which are part of the general terms and conditions. Eurex Clearing reserves the right to amend the Clearing Conditions at any time; those amendments and additions are announced via electronic circular to the Clearing Members, Non-Clearing Members and Registered Customers at least fifteen (15) Business Days prior to the effective date fixed in the relevant notice. The Clearing Conditions of Eurex Clearing are available to the public via the Eurex Clearing website ([www.eurexclearing.com](http://www.eurexclearing.com)).

Eurex Clearing is a clearing house in accordance with the Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (European Market Infrastructure Regulation, "EMIR") as approved by its national competent authority BaFin (German Federal Financial Supervisory Authority) on the 10 April 2014. Eurex Clearing is listed in the ESMA register of central counterparties authorised to offer services and activities in the European Union in accordance with EMIR (<http://www.esma.europa.eu/page/Central-Counterparties>). On a national level, the legal framework is further based on Section 32 KWG enabling Eurex Clearing to perform its services as a CCP.

### System design and operation

Eurex Clearing safeguards market integrity and also offers the customers ways to streamline their business. The core functions increase overall efficiency and promote standardisation in the clearing and settlement industry. From trade capture to risk management and on to delivery management, Eurex Clearing offers the complete value chain.

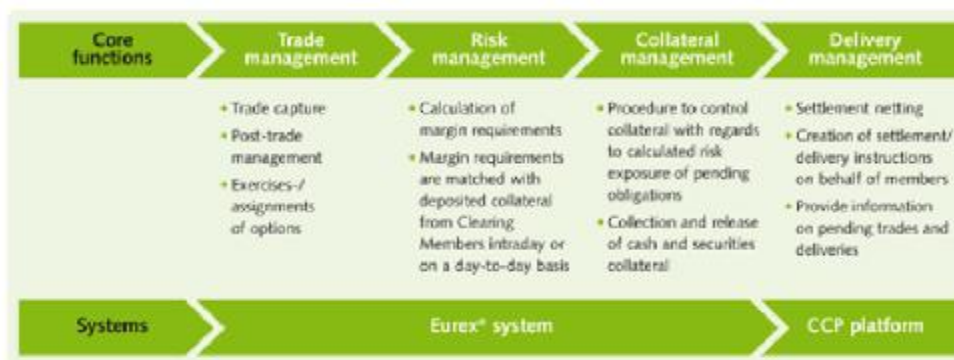


Figure 4: Clearing value chain of Eurex Clearing



#### 4. Principle-by principle summary narrative disclosure

##### 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.*

Summary narrative

Eurex Clearing AG (Eurex Clearing) has a legal basis providing a high degree of certainty for each aspect of its activities.

Eurex Clearing is a clearing house in accordance with the Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (European Market Infrastructure Regulation, EMIR) as approved by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht - "BaFin"*) on the 10 April 2014. Eurex Clearing is listed in the ESMA register of central counterparties authorised to offer services and activities in the European Union in accordance with EMIR (<http://www.esma.europa.eu/page/Central-Counterparties>). Furthermore, Eurex Clearing also holds a German banking licence for the provision of the services as a central counterparty (*zentraler Kontrahent*), deposit business (*Einlagengeschäft*), lending business (*Kreditgeschäft*) and own account trading not relating to a client (*Eigengeschäft*) pursuant to Section 32 of the German Banking Act (*Kreditwesengesetz - "KWG"*).

Eurex Clearing's services are regulated in its clearing conditions (Clearing Conditions). Eurex Clearing participants are required to comply with the Clearing Conditions. The Clearing Conditions are governed by German civil law and are structured as general terms and conditions (*Allgemeine Geschäftsbedingungen*) within the meaning of Sections 305 et seqq. of the German Civil Code (*Bürgerliches Gesetzbuch - BGB*). Chapter 1 of the Clearing Conditions contains general provisions. Chapter II to IX contain the specific provisions which are applicable to the relevant markets. The Clearing Conditions can be downloaded from Eurex Clearing's website.

Eurex Clearing's operations are governed by a clearing agreement and/or the ICM Participation Agreement entered into by Eurex Clearing and its participants. The Clearing Conditions and the clearing agreements (which are attached to the Clearing Conditions as Annexes) are publicly available. The Clearing Conditions form part of the clearing agreements and/or ICM Participation Agreement and regulate all significant features of Eurex Clearing's operations and are enforceable against its participants by virtue of the contractual relationship.

Regarding the clearing services used, all Eurex Clearing members have to submit themselves to German law once they sign the Eurex Clearing's clearing agreement. The Clearing Conditions state that unless provided otherwise, the rights and

obligations – including non-contractual – arising out of, and in connection with, Clearing Conditions shall be governed by the substantive laws of the Federal Republic of Germany (Chapter I, Part 1, Number 17.1.1 and 17.1.2). Thus, in case of any law suits between Eurex Clearing and its members regarding the fulfilment, non-fulfilment, non-performance, etc. of obligations in the context of the clearing services to be provided by Eurex Clearing or arising out of the transactions cleared by Eurex Clearing, German law, which contains conflict of law rules, will primarily apply.

The German legal framework provides a robust basis for the relevant legal issues. The German framework is in line with the European legal framework after the implementation in German law of European directives such as the Settlement Finality Directive and the Collateral Directive. Eurex Clearing has participants from EU member states and Switzerland. The relevant EU directives are directly relevant for participants from the EU area. Switzerland has adopted a similar regime as the EU.

There are two legal structures to act as a central counterparty, namely open offer and novation. Open offer is agreed by the Clearing Conditions for transactions concluded on Frankfurt Stock Exchange, Eurex Deutschland and Eurex Zürich, Eurex Bonds, Eurex Repo and Irish Stock Exchange. OTC transactions as well as securities lending transactions transmitted to Eurex Clearing for clearing will be transferred by novation. The novation-route requires the fulfilment of certain novation criteria set by Eurex Clearing in the Clearing Conditions.

The relevant point of time for the entrance of Eurex Clearing for open offer is the confirmation of the matching of the selling and the buying offer on the trading platform. The novation is confirmed by Eurex Clearing directly.

#### **Netting arrangements**

Netting procedures are included in the Clearing Conditions and are based on the set-off -principles under Sections 387 et seqq. of the German Civil Code (*Bürgerliches Gesetzbuch – BGB*).

#### **Collateral arrangements**

The Clearing Conditions provide for collateral arrangements. One has to differentiate between the different clearing models. Under the Elementary Clearing Model (ECM) and the Net Omnibus Clearing Model (NOCM), the Clearing Member has to fulfil its margin requirement by the delivery of collateral in the form of cash and securities. Collateral in the form of cash is granted in the form of a full title transfer, whereas collateral in the form of securities is provided by way of pledging the securities to Eurex Clearing. Under the Individual Clearing Model (ICM), both, collateral in the form of cash and in the form of securities, are provided on a full-title-transfer-basis.

Regarding the pledge of securities and based on general legal principles (e.g. the *lex rei sitae* principle) German law is applicable regarding pledged securities that are located in Germany as far as the right in rem is concerned. Legislation of the European Union, in particular Directive 98/26/EC of the European Parliament and of

	<p>the Council on settlement finality in payment and securities settlement systems (Settlement Finality Directive) and the Directive 2002/47/EC of the European Parliament and of the Council on financial collateral arrangements (Collateral Directive) increases the degree of legal certainty.</p> <p>Regarding margin and collateral, Eurex Clearing additionally needs to fulfil the requirements stipulated by Article 41 and 49 of EMIR in connection with the applicable provisions under Regulation (EU) No. 153 / 2013.</p> <p><b>Default procedures</b></p> <p>Eurex Clearing’s default rules include rules for the default of a Clearing Member and Eurex Clearing’s default.</p> <p>Eurex Clearing’s default procedures comply with requirements set out by Articles 42 (Default fund), 45 (Default waterfall) and 48 (Default procedures) of EMIR.</p> <p><b>Finality of transfers of funds and financial instruments</b></p> <p>The finality of transfers of funds and financial instruments is ensured by the involved Central Securities Depositories (CSD) and the use of central bank monies for EUR and CHF.</p> <p>Further details on the Settlement finality and on Money settlements can be found in Eurex Clearing’s answer to Principle 8 and 9 respectively.</p> <p>Within the European Union harmonized rules were implemented in each single member state so that <i>"in the event of insolvency proceedings being opened against a participant in a system (e.g. Eurex Clearing), the rights and obligations arising from, or in connection with, the participation of that participant shall be determined by the law governing that system"</i> (EU Directive 98/26/EC "Settlement Finality Directive"). As a result German law applies between Eurex Clearing and it’s Clearing Members pursuant to Section 340 paragraph 1 and 3 of the German Insolvency Code (Insolvenzordnung – InsO). Section 340 paragraph 3 InsO does not differentiate between CCP participants domiciled in EU member states and CCP participants not domiciled in EU member states.</p>
	<p><i>Key Consideration 2:</i></p> <p><i>An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.</i></p>
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) ensures that its rules, procedures and contractual arrangements are clear, comprehensive, in writing and in compliance with EMIR as well as all other applicable regulatory and supervisory requirements. Eurex Clearing’s compliance function has the responsibility to detect any risk of non-compliance with the obligations under EMIR by Eurex Clearing and its employees.</p> <p>Eurex Clearing’s rules, procedures, contractual arrangements and any accompanying material are accurate and up-to-date. The respective policies ensure that where certain expertise, necessary to fulfil the requirements, is not available internally, the compliance function may obtain the expertise or technical means of</p>

	<p>third parties outside the Deutsche Börse Group.</p> <p>Certain documents, applicable to all parties, like the Clearing Conditions are publicly available via the Eurex Clearing's website, others are available for participants only and can be found in the member section on the website. The competent authority has access to all documents.</p> <p>Furthermore, Eurex Clearing identifies and analyses the soundness of the rules, procedures and contractual arrangements of Eurex Clearing on an ongoing basis.</p> <p>Eurex Clearing has in place adequate rules to make amendments to the Clearing Conditions. Each Clearing Member has the right to object to amendments. The steps to be taken after such objection depend on the individual circumstances of the case. In case of an objection, discussions will take place with the respective Clearing Member to get this issue resolved.</p>
	<p><i>Key Consideration 3:</i></p> <p><i>An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.</i></p>
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) has established its documentation in a clear and understandable way. Certain documents, applicable to all parties, like the Clearing Conditions are publicly available via the Eurex Clearing website, others are available for participants only and can be found in the member section on the website. The competent authority has access to all documents.</p> <p>Furthermore, Eurex Clearing provides information on its regulatory framework, business continuity measures, financials, company profile and governance on its website.</p>
	<p><i>Key Consideration 4:</i></p> <p><i>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.</i></p>
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) has rules, procedures and contracts in place that are enforceable in all relevant jurisdictions.</p> <p>Regarding the clearing services used, all Clearing Members of Eurex Clearing submit themselves to German law once they sign the clearing agreements and / or ICM Participation Agreement.</p> <p>The granting of a clearing license requires that Eurex Clearing has obtained all licenses and approvals that are required for the provision of clearing services towards the applicant in the relevant jurisdiction.</p> <p>Furthermore, Eurex Clearing obtained legal opinions from local law firms which confirm the effectiveness of the close-out netting rules and other principles of the relevant Clearing Models as requested by Article 39 para. 3 EMIR. These legal opinions are updated on a regular basis.</p> <p>Before accepting a Clearing Member in a new jurisdiction, Eurex Clearing mandates</p>

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	<p>a local law firm to analyse the enforceability of the key principles of Eurex Clearing's clearing models under national law. Currently, Eurex Clearing had commissioned and reviewed such enforceability opinions for all EU Member States, Switzerland and Singapore. Depending on market demands, Eurex Clearing may commission further enforceability opinions.</p> <p>Only in case of a positive outcome of these legal assessments, Eurex Clearing offers respective clearing services.</p>
<p><i>Key Consideration 5</i></p> <p><i>An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.</i></p>	
Summary narrative	<p>Eurex Clearing AG's (Eurex Clearing) key objective is to ensure safety and integrity of financial markets. As a leading international central counterparty (CCP) conducting business in multiple jurisdictions Eurex Clearing is fully aware of the risks arising from any potential conflict of laws across jurisdictions. Subsequently, Eurex Clearing identifies and mitigates those risks to the extent possible.</p> <p>Furthermore, Eurex Clearing obtained legal opinions from local law firms which confirm the effectiveness of the close-out netting rules and other principles of the relevant clearing models as requested by Article 39 para. 3 EMIR.</p> <p>Before accepting a Clearing Member in a new jurisdiction, Eurex Clearing mandates a local law firm to analyse the enforceability of the key principles of Eurex Clearing's clearing models under national law. Currently, Eurex Clearing had commissioned and reviewed such enforceability opinions for all EU Member States, Switzerland and Singapore. Depending on market demands, Eurex Clearing may commission further enforceability opinions.</p> <p>This mirrors the requirements stipulated by Eurex Clearing's Regulatory Compliance Policy: whenever uncertainty exists regarding the enforceability of the main principles of the Clearing Conditions, the Chief Compliance Officer of Eurex Clearing shall obtain reasoned and independent legal opinions and analysis in order to address properly such uncertainty.</p> <p>When Eurex Clearing receives an indication of potential conflicts of law issues the identified issues will be analysed. If necessary, Eurex Clearing will contact local law firms to provide legal opinions. The Chief Compliance Officer is responsible to monitor and, on a regular basis, assess the adequacy and effectiveness of the measures put in place to identify and analyse potential conflicts of law issues and the developed rules and procedures to mitigate legal risk resulting from such issues.</p>
<p><b>Assessment of principle:</b></p> <p><i>Observed</i></p>	

**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.*

## Summary narrative

Eurex Clearing AG's (Eurex Clearing) aim is to assure the safety and integrity of markets while providing innovation in risk management, clearing technology and client asset protection. Eurex Clearing provides central counterparty clearing services for over-the-counter (OTC) and listed derivatives and equities, for bonds and secured funding as well as securities financing market.

Eurex Clearing's strategic objectives include the effective protection of customer positions and deposited collateral through reductions in counterparty risk and offering cost-efficient risk and trade management. This is achieved via ongoing improvement of services, functionalities and the integrated, comprehensive product range for Clearing Members and their customers.

As a central counterparty (CCP), Eurex Clearing interposes itself between buyer and seller of a transaction, thereby mitigating counterparty risk and maximising the client's operational efficiency. Eurex Clearing supports the financial stability by guaranteeing every transaction made in the markets for which it provides services. Various risk management services benefit both its customers and the greater marketplace by enhancing overall safety.

To foster fair and efficient markets Eurex Clearing's objective is to ensure full compliance with regulatory standards for clearing houses. Furthermore, Eurex Clearing ensures compliance with existing and upcoming regulations.

To ensure the safety and efficiency of its operations Eurex Clearing offers fully automated and straight-through post trade services to the derivatives markets. Furthermore, Eurex Clearing has in place an adequate information technology system and ensures that the information and corresponding facilities are available when needed (availability), the information is accurate and complete when used (integrity), and the information is only accessible to the authorised entities (confidentiality).

Additionally, Eurex Clearing has in place an Internal Control System (ICS) as a key management instrument designed to provide reasonable assurance achieving the corporate objectives regarding effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations.

*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*

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<i>authorities, participants, and, at a more general level, the public.</i>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) has documented governance arrangements that provide for clear responsibility and accountability. These arrangements are disclosed to relevant stakeholders at different granularity.</p> <p>Eurex Clearing is a wholly-owned subsidiary of Eurex Frankfurt AG, which is a wholly-owned subsidiary of Deutsche Börse AG. Details of the shareholder structure are provided in the corporate governance section of the Eurex Clearing website.</p> <p>Governance arrangements that provide for clear responsibility and accountability are established for both the Eurex Clearing Executive Board and Supervisory Board. The composition of the Supervisory Board, its committees as well as the composition and structure of senior management, represented by the Executive Board, is published on the Eurex Clearing website in the corporate governance section. The roles and responsibilities of the board, the committees and senior management are laid down in arrangements that comply with Part 4, Section 1 and 2 of the Stock Corporation Act (Aktiengesetz, AktG), §§ 76 – 116.</p> <p>Within Eurex Clearing responsibilities of each department are clearly defined. Eurex Clearing has nominated a Chief Risk Officer, Chief Compliance Officer and Chief Technology Officer in line with Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (European Market Infrastructure Regulation, EMIR).</p> <p>Eurex Clearing has in place adequate processes for ensuring accountability to stakeholders. First of all, news updates on the Eurex Clearing website (Public and Member Section) complemented by regular reporting of information make sure that stakeholders are well-informed. Furthermore, Eurex Clearing is in continuous dialogue with its customers. To facilitate this, Eurex Clearing hosts a number of committees to inform and integrate members from all market segments. Eurex Clearing has initiated the following committees to inform and integrate members from different market segments into the decision-making process for changes and new developments to the services offered by Eurex Clearing:</p> <ul style="list-style-type: none"><li>· Eurex Clearing has a Risk Committee that is set up in accordance with Article 28 EMIR. The task of the Risk Committee is to advise the Supervisory Board and the Executive Board on any arrangements that may impact the risk management of the central counterparty (CCP), such as a significant change in its risk model, the default procedures, the criteria for accepting Clearing Members, the clearing of new classes of instruments or the outsourcing of functions. It is composed of members of the Supervisory Board of Eurex Clearing AG, representatives of clearing members and representatives of clients. The competent supervisory authorities are entitled to attend meetings of the Risk Committee without voting rights and to be informed about the activities and decisions of the Risk Committee;</li><li>· The Derivatives Clearing Committee has been established to provide Eurex Clearing Members with detailed information regarding potential changes in the</li></ul>

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	<p>area of listed and OTC derivative products including the introduction of new listed or OTC derivative products. Also, amendments to the functional architecture and processes of Eurex Clearing with respect to listed and OTC derivatives are discussed.</p> <ul style="list-style-type: none"><li>· The Securities Clearing and Settlement Committee has been established to provide Eurex Clearing Members with detailed information regarding potential changes in the area of equity, bonds and repo (excl. GC Pooling) products and the introduction of new equity, bonds and repo products. Also, amendments in the area of of delivery management for equity, bonds and repo (excl. GC Pooling) products and the settlement account infrastructure are addressed.</li><li>· The Clearing Collateral Committee has been established to provide Eurex Clearing Members with detailed information regarding potential changes in the area of collateral management, including amongst others the types of accepted currencies or assets, the valuation of collateral, the collateral locations and the collateral account infrastructure. Also, potential amendments in the area of cash management, including e.g. the types of currencies accepted and the cash account infrastructure are discussed.</li><li>· IRS Product Committee - established to consult with and make recommendations to the management board of Eurex Clearing on matters relating to the clearing of interest rate swaps;</li><li>· Eurex Clearing establishes Default Management Committees (DMC) to involve its Clearing Members in and to ensure the availability of the best possible knowledge and expertise in case of a default. The DMC is a panel that is continuously defined, but only temporarily convened, to assist the clearing house with regards to any relevant matter of the default management process (DMP) of one or more liquidation groups. In addition DMCs are participating in the regular default simulation exercises. DMC member institutions are eligible Clearing Members that are actively clearing with Eurex Clearing and each DMC member institution nominates a DMC member and a deputy. Members of the DMC will be traders who will advise on and execute the agreed hedging strategies as coordinated by Eurex Clearing.</li></ul> <p>More detailed information regarding the Eurex Clearing Committees is available on the Eurex Clearing website.</p> <p>Accountability to Clearing Members and customers is further ensured by the Complaints Handling Process. The Complaints Procedure Manual describes how a person who has a complaint arising in connection with the performance of, or failure to perform any of Eurex Clearing's obligations as defined in the Clearing Conditions of Eurex Clearing and/or with the performance, or failure to perform, any regulatory requirements that need to be fulfilled by Eurex Clearing (Complaint) may file the Complaint, and how that Complaint will be investigated and resolved.</p> <p>Eurex Clearing discloses to its Clearing Members and other market participants its rules, procedures, and policies on its website.</p> <p>a) Information regarding its governance arrangements:</p> <ul style="list-style-type: none"><li>(i) On its website, Eurex Clearing publicly discloses the information regarding</li></ul>
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	<p>the corporate governance such as the organisational structure, and annual reports, including objectives and strategies.</p> <p>Furthermore, key elements of the Remuneration Policy are published on the Eurex Clearing website containing amongst others the parameters, composition, total amount of the remuneration, split of fixed and variable remuneration, number of employees receiving a variable remuneration, involvement of external consultants and stakeholders.</p> <p>(ii) Eurex Clearing publishes its key financial information including its most recent audited financial statements.</p> <p>b) Information regarding its rules and procedures:</p> <p>(i) Default management procedures as well as the Investment Policy.</p> <p>(ii) Business Continuity Policy.</p> <p>(iii) In addition, Eurex Clearing discloses information on the risk methodologies used, risk parameters, and other calculations (e.g., detailed risk scenario calculations).</p> <p>Material changes in its governance arrangements, objectives, strategies and key policies as well as in its applicable rules and procedures will be publicly disclosed via the website.</p>
<p><i>Key Consideration 3</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>The roles and responsibilities of Eurex Clearing’s Executive Board and Supervisory Board are clearly specified and documented. As outlined previously the interaction with customers and other stakeholders is properly ensured.</p> <p>With respect to roles and responsibilities the Articles of Incorporation of Eurex Clearing as well as existing rules and procedures define the composition, roles and responsibilities of the Supervisory Board and senior management as well as of any established board committees.</p> <p>The responsibilities of the “Board” are allocated to the Supervisory Board and the Executive Board as appropriate in accordance with Article 3, paragraph 5 of Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 supplementing EMIR.</p> <ul style="list-style-type: none"> <li>· As part of conducting the business of Eurex Clearing in accordance with §76 Stock Corporation Act (Aktiengesetz, AktG) the Executive Board establishes the objectives and strategies for Eurex Clearing. The Supervisory Board approves the company strategy and planning as well as important corporate decisions;</li> <li>· Consistent with §111 AktG, the most important function of the Supervisory Board is to oversee the work of the Executive Board. Furthermore, the Supervisory Board appoints the members of the Executive Board;</li> <li>· The Remuneration Committee, set up by the Executive Board prepares</li> </ul>

	<p>proposals for the design and further development of the remuneration policy with regard to the employees, oversees its implementation and reviews on a regular basis;</p> <ul style="list-style-type: none"><li>· The Executive Board establishes and oversees the risk management and the daily operation of the central counterparty (CCP).</li></ul> <p>The oversight of outsourcing arrangements is ensured by the Executive Board. Appropriate policies are established and reviewed on a regular basis.</p> <p>Consistent with established Policies, EMIR compliance is assessed by the Chief Compliance Officer and is reported to the Eurex Clearing Executive Board.</p> <p>The Supervisory Board has constituted following committees among its members:</p> <ul style="list-style-type: none"><li>· The Audit and Risk Committee – in compliance with CRD IV (Capital Requirements Directive) and EMIR – deals, on the one hand, with audit matters particularly related to the preparation of the annual budget, the accounting process, internal and external audits, compliance and control systems. The committee discusses and examines the annual financial statements and the auditor's report on the annual financial statements in detail and reports the results to the Supervisory Board and recommends e.g. that the Supervisory Board approves the annual financial statements. On the other hand, the Audit and Risk Committee addresses risk matters, inter alia advises the Supervisory Board on the institution's current and future risk appetite and risk strategy and examines whether the incentives provided by the remuneration system take into account the risk, capital and liquidity structure of Eurex Clearing. The Committee consists of three members who are elected by the Supervisory Board;</li><li>· The Compensation Review and Nomination Committee – in compliance with CRD IV, EMIR and the new Remuneration Ordinance – whose core tasks are to supervise the adequate arrangement of the remuneration system for Executive Board members of Eurex Clearing and to prepare the resolutions of the Supervisory Board on the remuneration of the Executive Board, taking into account the implications for the risk and risk management of the institution. Further core competences of the committee are to identify candidates to fill vacancies in the Executive Board and to prepare the proposals for the election of members of the Supervisory Board, as well as to assess the composition and performance of the Executive Board and the Supervisory Board and to assess the knowledge, skills and experience of individual members of the Executive Board and the Supervisory Board periodically, at least annually. The Committee consists of three members who are elected by the Supervisory Board.</li></ul> <p>Eurex Clearing has also implemented effective arrangements for identifying and managing potential conflicts of interest between Eurex Clearing, including its managers, employees, or any person with direct or indirect control or close links on the one hand, and its Clearing Members known to Eurex Clearing on the other hand. In addition, as part of Deutsche Börse Group, Eurex Clearing is also subject to the Deutsche Börse Group Guideline on the Avoidance of Conflicts of Interest. This guideline applies to all employees and external service providers who work</p>
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	<p>for Deutsche Börse Group.</p> <p>Internal Auditing reviews the effectiveness of measures taken in the business areas and also assesses the effective operation of the Internal Control System.</p>
<p><i>Key Consideration 4</i></p> <p><i>The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG's (Eurex Clearing) board members all have long-standing experience in the public and private sector of the financial industry and an international background. The diversity of appropriate skills is well suited to fulfil the various roles in overseeing and conducting the business of one of the largest and most diverse central counterparties (CCPs) globally.</p> <p>The Supervisory Board of Eurex Clearing has more than one third independent board members. Eurex Clearing's Risk Committee according to EMIR Article 28 is chaired by an independent member of the Supervisory Board. Other committees of the Supervisory Board (Audit and Risk Committee and the Compensation Review and Nomination Committee) also comprise independent members of the Supervisory Board. As a European CCP Eurex Clearing is in continuous compliance with the requirements of EMIR, which stipulates high standards on the composition of the boards of a CCP.</p> <p>In addition, the procedures for the appointment of board members and senior management follow and are in compliance with the German Stock Corporation Act.</p> <p>In accordance with §101 (1) 1 Stock Corporation Act (Aktiengesetz, AktG) the shareholders' meeting (Hauptversammlung) appoints the Supervisory Board members of Eurex Clearing. Members of the Supervisory Board must be of good repute, reliable and need to proof their theoretical and practical knowledge in the respective business area to be able to evaluate, to supervise and to control the business of Eurex Clearing. All these legal requirements can be deemed to provide a financial market infrastructure (FMI) with a management with appropriate experience.</p> <p>As provided by §84 (1) 1 Stock Corporation Act (Aktiengesetz, AktG) the Executive Board members of Eurex Clearing are appointed by the Supervisory Board. In the run-up to the appointment by the shareholders' meeting and the Supervisory Board respectively Eurex Clearing applies procedures to ensure the suitability of members of the management body (Executive Board). Members of the Executive Board need to prove their theoretical and practical knowledge as well as their leadership experience in the respective business areas. According to §32 of the German Banking Act (Kreditwesengesetz, KWG) Eurex Clearing is obliged to provide the national competent authority with evidence about the professional qualification of the Executive Board members.</p> <p>The national competent authority has assessed and recognised the trustworthiness and professional qualification of all members of the Executive Board in accordance with the §33 (2) German Banking Act (Kreditwesengesetz,</p>

	<p>KWG).</p> <p>Additionally, the German Stock Corporation Act (Kreditwesengesetz, AktG) provides several rules about the duty of care and the responsibility of the members of the Management Board (§90-93 AktG) which have to be fulfilled.</p> <p>Based on all legal requirements a suitability assessment is performed before a new member takes up his or her new assignment / position in the Supervisory Board or Executive Board. The suitability assessment is also performed on an on-going basis for existing Supervisory and Executive Board members. The Supervisory Board will take the decision on the suitability upon the recommendation of the Compensation Review and Nomination Committee.</p> <p>Furthermore, based on Guidelines established by the European Banking Association (EBA) on the assessment of the suitability of members of the management body and key function holders on the one hand and the requirements of the Capital Requirements Directive IV on the other hand, both the Executive Board and the Supervisory Board approved respective policies for the assessment of the suitability.</p>
<p><i>Key Consideration 5</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>As outlined in Key Consideration 4 of this Principle Eurex Clearing AG (Eurex Clearing) operates under a two-tiered board structure comprising a Supervisory Board and an Executive Board as management body. The Eurex Clearing Executive Board is responsible for the daily business operations and consists of five members. The Eurex Clearing Executive Board developed a business distribution plan to ensure that roles and responsibilities are clearly defined for a properly functioning of the business organisation.</p> <p>Eurex Clearing's Supervisory Board oversees the work of the Executive Board and appoints its members as well as approves important corporate decisions and company planning.</p> <p>The assessment of the suitability of members of the management body follows along the line of the regulatory requirements and the policies and procedures as outlined in Key Consideration 4 of this Principle.</p>
<p><i>Key Consideration 6</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>As a central counterparty clearing house (CCP) authorised under EMIR, Eurex Clearing AG (Eurex Clearing) has a sound framework for the comprehensive management of all material risks. In that regard Eurex Clearing has established</p>

	<p>documented policies, procedures and systems to identify, monitor and manage such risks.</p> <p>The Chief Risk Officer heads the CCP Risk Management Department and is responsible for the implementation and management of the Risk Management Framework. The Risk Management Framework includes the policies and procedures established by the Executive Board. Chief Risk Officer also ensures that the framework is revised annually or if any material change makes it necessary.</p> <p>The Risk Management Framework is based upon Eurex Clearing's business strategy and regulates the extent of risk taken within the various business activities carried out by Eurex Clearing. The risk framework determines the conditions for risk management, control and limitation. Eurex Clearing gives considerable attention to its risk mitigation process and ensures that appropriate measures are taken to avoid, reduce and transfer or intentionally accept risk. It is ensured that the appropriateness of the risk management and controlling systems is reviewed and tested continuously.</p> <p>Eurex Clearing' comprehensive Risk Management Framework is composed of objectives, measures, and tools defined at the level of Eurex Clearing and that of Deutsche Börse Group. The risk framework assigns the Executive Board of Eurex Clearing as the ultimate responsible for managing the risks. The Executive Board ensures that the risk framework is integrated into the business activities throughout Eurex Clearing entirely and that adequate measures are in place to implement the strategies, policies and procedures.</p> <p>The Risk Management Framework of Eurex Clearing provides complete, timely and consistent information about risk. The risk related information enables the risk to be identified, notified, assessed, controlled and reported appropriately. Risks are openly and fully reported to the responsible level of management.</p> <p>Consistent with the German Minimum Requirements for Risk Management (MaRisk), Eurex Clearing makes sure that employees and their deputies have the knowledge and experience required by their duties, competencies and responsibilities. Suitable measures are taken to ensure that the employees have the appropriate qualifications (AT7 MaRisk).</p> <p>The organisational structure is set up so that the segregation of duties between departments offers sufficient independence. The separation of the functions trading / front office and back-office processing &amp; control is ensured through a clear allocation of responsibilities at Executive Board level. The clear separation of responsibilities is also ensured in the event of deputisation.</p> <p>Furthermore, there is a clear separation in the reporting lines between risk management and other operations of Eurex Clearing.</p> <p>Internal Audit is responsible for assessing the organisation's framework of risk management, control and governance processes, and for determining whether:</p> <ul style="list-style-type: none"><li>• risks are adequately identified and mitigated by appropriate controls</li><li>• significant financial and operational information is accurate and reliable</li></ul>
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- resources are used efficiently and are adequately protected
- the organisation is in compliance with internal policies and procedures, as well as applicable laws and regulations

An Internal Audit Policy is in place that defines the role and responsibilities of the internal audit function within Eurex Clearing as well as their relationship with auditees, executive managements and supervisory functions. The policy is reviewed on a regular basis.

Internal Audit is a properly staffed independent function, free of influence by any element in the organisation, including matters of audit area, scope, procedure, frequency, timing or report content. In order to ensure independence, where applicable, the internal audit function reports directly to the Executive Board of Eurex Clearing. As required, Internal Audit also reports to the Audit and Risk Committee of the Eurex Clearing Supervisory Board.

Internal Audit uses a risk-based approach in defining specific areas of the organisation to audit. If necessary, the executive management may request additional audits to be performed as well as ad-hoc assurance services.

The Executive Board of Eurex Clearing is ultimately responsible for the Risk Strategy of Eurex Clearing. The Executive Board ensures that the Risk Strategy is integrated into the business activities throughout the entire Eurex Clearing and that adequate measures are in place to implement the strategies, policies and procedures. Risk awareness and a corresponding risk culture are encouraged, amongst other things, through appropriate organisational structures and responsibilities, adequate processes and the knowledge of the employees. The appropriateness of the risk management and controlling systems are reviewed continuously.

Eurex Clearing regularly reviews and validates its risk models. Therefore, a model validation framework which comprises a documentation of all testing programs, processes and report structures is in place. The processes define clearly the roles and responsibilities, metrics, thresholds and actions.

Eurex Clearing commits itself to the validation of new risk models by an independent party prior to the launch of the new model. For the on-going revision and improvement of the model Eurex Clearing regularly seeks the advice of the Risk Committee. Any major changes and adjustments will be presented to the Risk Committee and approved by the Executive Board of Eurex Clearing.

The annual revision also includes a benchmark analysis where current market standards and common practices are recognised.

All validation results have to be presented appropriately to the management on a regular basis. Moreover, results will be made available for Clearing Members without breaching confidentiality.

Also Eurex Clearing established a Default Management Process. The purpose of the default procedures is to protect the continuing functioning of Eurex Clearing by limiting the potential for the effects of a default to spread beyond the defaulting

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	participant.
<i>Key Consideration 7</i> <i>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 participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.</i>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) continuously strives to enhance its products and services that help create safer markets for all participants. This is done jointly in continuous dialogue with its customers. To facilitate this, Eurex Clearing hosts a number of committees to inform and integrate members from all our market segments into the consultation process. For a detailed description of the committees see Key Consideration 2 of this Principle.</p> <p>Additionally, stakeholders receive important information through the annual report including the management report, strategic objectives of Eurex Clearing, financial statement, etc. The annual report is available on the Eurex Clearing website.</p> <p>Furthermore, news updates on the Eurex Clearing website (Public and Member Section for Members only) complemented by extensive reporting ensures that stakeholders are well-informed.</p> <p>Moreover, Eurex Clearing has set up the Clearing Member and Client Conflicts of Interest Policy that outlines the policy of Eurex Clearing for identifying and managing potential conflicts of interest between Eurex Clearing, including its managers, employees, or, any person with direct or indirect control or close links on the one hand, and its Clearing Members (CMs) and their Non-Clearing Members (NCMs), Registered Customers (RCs) and other customers known to Eurex Clearing on the other hand and includes the procedures aiming to resolve possible conflicts of interest.</p> <p>Also, in order to properly handle complaints Eurex Clearing established a Complaints Procedure Manual, which describes how a person who has a complaint arising in connection with the performance of, or failure to perform any of Eurex Clearing's obligations as defined in the Clearing Conditions of Eurex Clearing (Clearing Conditions of Eurex Clearing) and/or with the performance, or failure to perform, any regulatory requirements that need to be fulfilled by Eurex Clearing (Complaint) may file the Complaint, and how that Complaint will be investigated and resolved. (See also Key Consideration 2 of this Principle)</p> <p>Major decisions made by the Supervisory or Executive Board are disclosed to the relevant stakeholders by publishing circulars, press releases and other information on the Eurex Clearing website.</p>
<b>Assessment of principle:</b> <i>Observed</i>	

**Principle 3: Framework for the comprehensive management of risks**

***An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other 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.*

Summary narrative

As a central counterparty clearing house authorised under EMIR, Eurex Clearing AG (Eurex Clearing) has a sound framework for the comprehensive management of all material risks. In that regard Eurex Clearing has established documented policies, procedures and systems to identify, monitor and manage such risks.

Eurex Clearing takes great care to mitigate risk and ensures that appropriate measures are taken to avoid and reduce or intentionally take on risk. The aim is to make use of suitable safeguards and control measures such as guidelines and procedures, the segregation of functions, the principle of dual control, limit restrictions and also business continuity management to reduce the probability, frequency and level of potential losses from the corresponding risk cases for Eurex Clearing.

The Executive Board of Eurex Clearing is responsible for the company's Risk Management Framework. Specialized departments identify risks and report them in a timely manner to the Chief Risk Officer.

Eurex Clearing uses a standardised approach – value at risk (VaR) – for measuring and reporting all risks. The aim of this concept is to create a comprehensive overview of general risk tolerance and to facilitate the prioritisation of risk measures.

Eurex Clearing calculates risk-bearing capacity as its main risk management tool. It uses VaR to calculate its required economic capital (EC). It calculates its economic capital at a confidence level of 99.98 per cent and compares it to its risk-bearing capacity in order to be able to cover financially even extreme events in the next twelve months. Eurex Clearing uses the regulatory own funds as the risk-bearing capacity for its economic capital. For control purposes, Eurex Clearing regularly calculates the ratio of economic capital to risk-bearing capacity, or "utilisation of risk-bearing capacity", as an indicator.

Eurex Clearing disposes of a Risk Strategy which is based upon Eurex Clearing's business strategy and regulates the extent of risk taken within the various business activities carried out by Eurex Clearing. The Risk Strategy determines conditions for risk management, control and limitation. Eurex Clearing pays considerable attention to its risk mitigation process and ensures that appropriate measures are taken to avoid and reduce or intentionally accept risk. It is defined that the appropriateness of the risk management and controlling systems is to be validated continuously.

The Risk Strategy differentiates between four major risk types that are managed and controlled with distinct methods.



	<p>These risk types are:</p> <ul style="list-style-type: none"> <li>· <i>financial risk,</i></li> <li>· <i>operational risk,</i></li> <li>· <i>project risk and</i></li> <li>· <i>business risk.</i></li> </ul> <p>In its risk management, Eurex Clearing has a holistic approach and considers the risk it bears from its relationship with its Clearing Members, clients or other entities.</p> <p>In this capacity Eurex Clearing uses a comprehensive Risk Management Framework composed of objectives, measures, and tools defined at the level of Eurex Clearing. The Risk Management Framework ensures that all risks are recorded, assessed and controlled, and that a consolidated report on these risks is submitted to the Executive Board of Eurex Clearing.</p> <p>Risks are openly and fully reported to the responsible level of management. The responsible management body is informed fully and timely about Eurex Clearing’s risk profile, relevant risk(s) as well as about relevant losses. The internal reporting and communication is contemplated by external reporting, i.e. interim and annual reports.</p> <p>Risk management policies, procedures and systems are developed by the Risk Management Department of Eurex Clearing, reviewed by internal stakeholders, consulted with the Risk Committee and approved by the Executive Board of Eurex Clearing.</p> <p>Additionally, Internal Audit is responsible for assessing the organisation’s framework of risk management, control and governance processes, and for determining whether:</p> <ul style="list-style-type: none"> <li>· risks are adequately identified and mitigated by appropriate controls</li> <li>· significant financial and operational information is accurate and reliable</li> <li>· resources are used efficiently and are adequately protected</li> <li>· the organization is in compliance with internal policies and procedures, as well as applicable laws and regulations</li> </ul> <p>Risk management policies, procedures and systems are reviewed annually and designed to account for fluctuations in risk intensity. Eurex Clearing’s Risk Management Framework is designed to cope with various stressed market situations and is not a static framework.</p> <p>Changed environments and market practices will be reflected and included in the framework via regular or adhoc review cycles, if necessary.</p>
<p><i>Key Consideration 2</i></p> <p><i>An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) ensures that Clearing Members are able to properly manage and contain the risks they pose to the central counterparty (CCP).</p>

Clearing Members are provided with sufficient information regarding the CCP's risk management methodology. In addition Clearing Members receive nearly real-time information on margin requirements in order to help them to properly manage and contain the risks posed to Eurex Clearing.

Margin requirements adequately protect Eurex Clearing's customers against credit risk without tying up excess capital. Margining encompasses the entire process of measuring, calculating and administering the collateral that must be put up as security for open positions. The provision of collateral is intended to ensure that all financial commitments related to the open positions of a Clearing Member or its clients can be offset within a very short period of time. Eurex Clearing calculates margin requirements in real-time to ensure that it has an overview of the members' current profit and loss situations as well as an estimation of the future risk situation.

Mutualization of risks with the Clearing Fund ensures that participants are incentivized to care about the risk they pose to the CCP. Contributions to the Clearing Fund of non-defaulting Clearing Members may be used as financial resources to absorb losses that go beyond the Margins and Clearing Fund contribution of the defaulter and Eurex Clearing own contribution to the waterfall. Clearing Fund size is validated on a daily and calibrated on a quarterly basis.

Eurex Clearing further provides services to its Clearing Members to ensure an effective intraday control of their own and their client's trading activities, amongst other e.g.

- Real-time order and trade information (via Order and Trade Confirmation Broadcast)
- Stop Button (for CMs and NCMs)
- Partial position transfers
- Incremental Risk Check for IRS

Eurex Clearing has established a Member Compliance Framework to assess Clearing Members' compliance with the participation requirements set out by Eurex Clearing. In addition an important part of Eurex Clearing's Risk Management Framework is the development and monitoring of Clearing Members' creditworthiness through internal and external credit ratings.

Eurex Clearing also assesses the participants' operational capability. Members must provide proof of the technical and functional connection, the use of appropriate technical equipment (back-office facilities) and sufficiently qualified back-office personnel.

In addition, the Clearing Conditions of Eurex Clearing set out various incentive measures to ensure that the Clearing Members monitor and manage the timely fulfilment of their obligations and thus monitoring the risk they pose towards Eurex Clearing.

Eurex Clearing has in place adequate processes for ensuring accountability to its participants. Furthermore, Eurex Clearing helps its Clearing Members in understanding Eurex Clearing's rules and procedures. Eurex Clearing informs and involves its members in designing its policies and systems. This is achieved

	<p>through participation of members and clients in the various Eurex Clearing committees where all changes to services, products, risk management policies and systems are presented and discussed. In addition, members and clients have to be consulted on changes to the Clearing Conditions whenever changes to the risk management shall be implemented.</p> <p>Eurex Clearing has further published a margin calculator which can be downloaded from its website. With this calculator margins can be estimated. In addition, Eurex Clearing publishes model descriptions for the risk management systems Risk Based Margining (RBM) and Portfolio Based Margining (PRISMA). Both ensure that participants can determine which effect their trading behaviour can have on the associated margin requirements.</p> <p>In addition, Eurex Clearing establishes Default Management Committees (DMC) to involve its Clearing Members and to ensure the availability of the best possible knowledge and expertise in case of a default. The DMC is a panel that is continuously defined, but only temporarily convened, to assist the clearing house with regards to any relevant matter of the Default Management Process (DMP) of one or more liquidation groups. In addition, DMCs are participating in the regular default simulation exercises. DMC member institutions are eligible Clearing Members that are actively clearing with Eurex Clearing and each DMC member institution nominates a DMC member and a deputy. Members of the DMC are traders who will advise on and execute the agreed hedging strategies as coordinated by Eurex Clearing.</p>
<p><i>Key Consideration 3</i></p> <p><i>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.</i></p>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) is exposed to risks resulting out of its activities as central counterparty, its treasury activities as well as to exposures arising from nostro accounts (cash balance). To consider these risks on a consolidated basis, Eurex Clearing takes the multiple roles a Clearing Member may have with Eurex Clearing into account and combines the resulting risk to one exposure figure towards the respective counterpart.</p> <p>System interdependencies are considered by defining mission critical units, business functions and related systems for Eurex. Additionally, risk analyses and the Business Continuity Management (BCM) Plans take into account external links and interdependencies with financial infrastructures and functions or services which have been outsourced to third-party providers.</p> <p>In addition, concentration and wrong way risks are monitored daily. Violations and breaches are reported to the Chief Risk Officer and the Executive Board of Eurex Clearing immediately to decide about initiation of mitigating measures like charging supplementary margin or suspending respective members.</p> <p>Collaterals classified as own issue are not eligible as collateral and thus not accepted by Eurex Clearing.</p>

**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.*

**Summary narrative**

As a central counterparty (CCP) Eurex Clearing AG (Eurex Clearing) has established a sound framework of safeguards - lines of defense - to protect our customers, the clearing house and the overall marketplace. The lines of defense to cope with severe market turmoil's, i. e. market driven events are:

- Position close-out of the Clearing Member in default
- Collaterals of the Clearing Member in default
- Clearing Fund contribution of the Clearing Member in default
- Eurex Clearing contribution to the Clearing Fund
- Remaining Clearing Fund
- Eurex Clearing equity capital

Eurex Clearing's admission requirements, margining procedures and risk management result in enhanced robustness of the clearing house.

In order to address the risks of disruption of clearing systems caused by hardware, network, software or even terrorist attack; disruption of services from external providers, including utilities services Eurex Clearing has a Business Continuity Management Plan in place.

In addition, Eurex Clearing takes into account dependencies on external providers, including utilities services, when assessing risks that may potentially prevent it from being able to provide its critical operations and services as a going concern and assesses the effectiveness of a full range of options for recovery or orderly wind-down.

Eurex Clearing determined and documented the potential procedure and time period necessary to wind-down or restructure its business including a description of the underlying assumptions.

Eurex Clearing also prepared a recovery plan in accordance with the Minimum Requirements for the Design of Recovery Plans (Mindestanforderungen an die Ausgestaltung von Sanierungsplänen) and in coordination with the German Supervisory Authorities. The main goal of the plan is to identify recovery options that strengthen the financial and operational robustness of Eurex Clearing in potential stress situations.

The most essential part of restructuring is the application of several recovery tools, since they will protect the soundness of Eurex Clearing in a stressed situation. To identify whether a recovery situation has occurred, Eurex Clearing has stipulated conservative recovery indicators along the following observation dimensions:

	<ul style="list-style-type: none"><li>· Regulatory capital (Pillar I);</li><li>· Risk profile (Pillar II);</li><li>· Liquidity;</li><li>· Operational risk.</li></ul> <p>These observation dimensions capture the impact of financial and operational risk drivers. The recovery indicators are derived for all four relevant observation dimensions. For each indicator a recovery limit is defined indicating that a triggering event has occurred in the respective observation dimension. Additionally, early warning triggers are established and are part of the regular risk management monitoring and reporting.</p>
<b>Assessment of principle:</b> <i>Observed</i>	

**Principle 4: Credit Risk**

***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.***

*Key Consideration 1*

*An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.*

## Summary narrative

Eurex Clearing AG (Eurex Clearing) has established a comprehensive Risk Management Framework which is described in detail in Principle 3 in order to identify, manage and control risks arising from Eurex Clearing's activities. Thereby the framework takes into account the overall risk exposures to individual counterparties from different types of relationships the counterparties may have with Eurex Clearing and consists of several policies outlining Eurex Clearing's approach to manage the risks it faces:

- Counterparty credit risk
- Liquidity risk
- Market risk
- Model risk
- Concentration risk
- Operational risk

Arising credit exposures are collateralised and limits are in place to maintain the credit risk within acceptable parameters. Consistent reporting is in place to monitor Eurex Clearing's exposures. The framework is reviewed annually to reflect changing environments and market practices. Before updates are implemented a review by all effected stakeholders is conducted to include the planned changes in the overall risk framework of Eurex Clearing.

*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.*

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Summary narrative	<p>To safeguard the overall integrity of the clearing house and to protect the mutualising Clearing Fund, Eurex Clearing has implemented a Risk Management Framework to identify sources of credit risk as well as to measure and monitor credit exposures. Thereby the following five dimensions are considered:</p> <ul style="list-style-type: none"><li>· Types of relationships with counterparties</li><li>· Grouping of counterparties to enable e.g. single legal entity view, geographic view</li><li>· Definitions of exposures from each type of relation</li><li>· Duration of the exposure (when the exposure begins and ends)</li><li>· Level of collateralisation (secured or unsecured exposure)</li></ul> <p>Credit risk is generally defined as the loss which Eurex Clearing would suffer if a counterparty failed to meet its contractual obligations also taking into account the probability of default.</p> <p>In the course of its business activities Eurex Clearing is exposed to credit risk arising from a number of different sources which is efficiently managed and mitigated through the robust Risk Management Framework. A counterparty may have different relationships with Eurex Clearing. These relationships result in different exposure categories which are defined as the following:</p> <ul style="list-style-type: none"><li>· CCP activities: credit exposures arising from Clearing Members' portfolios</li><li>· Treasury activities such as:<ul style="list-style-type: none"><li>– Nostro accounts (Cash Balances):<ul style="list-style-type: none"><li>○ Commercial banks and Securities Settlement Systems used for CCP payment infrastructure</li><li>○ Commercial banks used for other purposes</li></ul></li></ul></li></ul> <p>Eurex Clearing's risk management models were developed and are applied to determine appropriate collateral levels and to mitigate and control credit exposures. These models are frequently validated and adjusted, if necessary, to appropriately capture and mitigate the risk Eurex Clearing is facing.</p> <p>Credit risks are mitigated by:</p> <ol style="list-style-type: none"><li>a) Limiting intraday margin credit based on the credit quality of the counterparty.</li><li>b) Using preferably central bank money where possible to settle cash payments. In case where no access to central bank money is available, only counterparties with highest credit quality are acceptable. In addition, placements at these institutions are limited and concentration limits are in place.</li><li>c) Using DvP instructions in order to settle any securities deliveries or FoP instructions for collateralisation purposes.</li><li>d) Monitoring of members' collateral pool as well as its portfolio of transactions outstanding with the CCP with regards to concentration limits.</li></ol> <p>A portfolio or a collateral pool is assumed to be concentrated if the exposure exceeds the aggregated market demand during the anticipated liquidation period.</p>
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	<p>This threshold is related to the market capacity that might be utilised in case of liquidation. Furthermore, different thresholds depending on the credit quality of the underlying security are defined.</p> <p>Eurex Clearing determines concentration limits at the level of:</p> <ul style="list-style-type: none"> <li>· individual issuers;</li> <li>· type of issuer;</li> <li>· type of asset;</li> <li>· each Clearing Member;</li> <li>· Clearing House (sum of all Clearing Members)</li> </ul> <p>Concentration limits are determined in a conservative manner taking into account all relevant criteria including:</p> <ul style="list-style-type: none"> <li>· financial instruments issued by issuers of the same sector or geographic region,</li> <li>· the level of credit risk of the financial instrument or of the issuer based upon an internal assessment by the CCP.</li> </ul> <p>All limits and thresholds are outlined and defined in Eurex Clearing’s Risk Management Framework.</p>
<p><i>Key Consideration 4</i></p> <p><i>A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). 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 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 for 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 for the CCP in extreme but plausible market conditions. In all cases, a CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) guarantees the fulfilment of every transaction in every market for which services are provided. To ensure this commitment, a multi-level security system is set up, called lines of defense or default waterfall. While the mainstay of this safety system is the margin which Clearing Members have deposited as collateral for open positions, the lines of defense consist of several additional layers of safety nets. In the event of a default, these layers are applied in the order that is outlined in the diagram below. These lines of defence are defined in detail in Eurex Clearing’s Risk Management Framework. The order in which the lines of defence are utilised is further documented in the Clearing Conditions Chapter I, Part 1, Number 6.2.</p>



Eurex Clearing maintains a pre-funded Clearing Fund that is calibrated to cover the losses resulting from the default of the two Clearing Members with the largest exposures in extreme but plausible scenarios. Eurex Clearing defines “extreme but plausible” such that in 99.9% of all cases potential losses will be covered with collateral and post-default backings (collateral of defaulting member, Clearing Fund contribution of defaulting Clearing Member/ Clearing Fund contributions of non-defaulting Clearing Members) based on scenario simulation. Scenarios include historical events as well as hypothetical scenarios based on clearing house opinions. In addition, Eurex Clearing has access to further financial resources, namely dedicated own reserves of Eurex Clearing which are utilised after the defaulting Clearing Member’s contribution but before the mutual Clearing Fund and the remaining capital of Eurex Clearing.

Furthermore, Eurex Clearing has the possibility to require Clearing Members to replenish the Clearing Fund two times to their initial requirement (assessment).

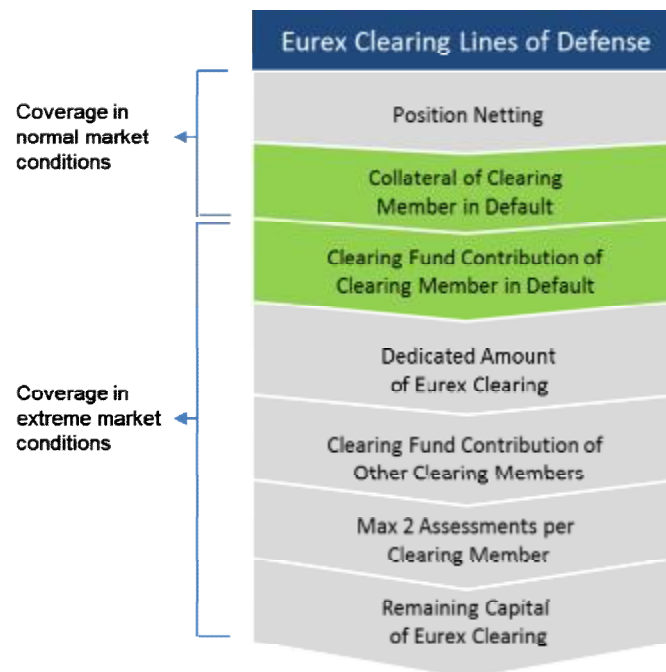


Figure 5: Eurex Clearing Lines of Defence

The Clearing Fund is separated into different Clearing Fund segments (called CFS) and liquidation groups, whereby each liquidation group is assigned to one particular CFS. Products sharing same risk characteristics can therefore be auctioned together in a Clearing Member default and are assigned to the same liquidation group. The size of each CFS depends on the exposure of the Clearing Members active CFS relative to the overall exposure of this member. The CFSs sum-up to the total Clearing Fund of the clearing house.

In determining the adequate size of its Clearing Fund, Eurex Clearing conducts rigorous stress tests. Providing information on risk exposure under stressed market conditions, stress testing plays an important role in the Risk Management

	<p>Framework of Eurex Clearing.</p> <p>Furthermore, margins are updated and monitored intraday whereas the Clearing Fund is recalibrated on a quarterly basis and in extreme market events.</p> <p>Also, stress tests are run on a daily basis and the results are presented to the Board and Risk Committee quarterly.</p>
<p><i>Key Consideration 5</i></p> <p><i>A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be performed at least annually.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG's (Eurex Clearing) foremost objective is to fulfil its obligations as a central counterparty. The Clearing House must perform this role under both normal and extreme but plausible market conditions. Providing information on risk exposure under stressed market conditions, stress testing plays an important role in the Risk Management Framework of Eurex Clearing.</p> <p>Eurex Clearing has a stress test procedure in place that aims to verify that the sum of the collateral posted by an individual defaulting member plus the total amount of the Clearing Fund is sufficient to cover the potential losses of the two Clearing Members and their customers with the largest exposure under extreme but plausible market conditions. The extreme but plausible conditions are defined at a confidence level of 99.9 per cent. Each Clearing Member's risk exposure is stress tested against a comprehensive set of scenarios for all the product groups that it clears. Scenarios include the worst historical observations that have been experienced in each of the product groups as well as hypothetical scenarios representing expectations on worst potential future price movements to ensure that risk management is forward looking. Scenarios based on historical observations are mainly of two types:</p> <ul style="list-style-type: none"> <li>· Price movements across all product groups on specific crisis days</li> <li>· Historically largest moves per product group independent of the observation day</li> </ul> <p>The stress test is performed on the risk exposure of each Clearing Member. Potential losses based on stress scenarios are compared to each member's additional margin. Losses beyond additional margin are then compared to the Clearing Fund. How much of the Clearing Fund is consumed by the theoretical</p>

stress test calculations is identified and analysed on a daily basis. Intraday stress tests are performed by Eurex Clearing in extraordinary market situations.

In the stress tests the segregation structure is respected by assuming that also clients default. Therefore, Eurex Clearing makes following assumptions in its stress tests:

- the default of the two largest Clearing Members
- that all clients that are segregated in a Net Omnibus Account as well as the two largest individually segregated clients are also in default and are not able to find a new Clearing Member and consequently get liquidated together with their Clearing Member

Extreme but plausible market scenarios used for stress testing take into account the risk profile of Eurex Clearing. It identifies all the market risks, credit risks and liquidity risks to which Eurex Clearing is exposed, following the default of multiple Clearing Members.

Moreover, the stress tests apply stressed parameters, assumptions and scenarios to the models used for the estimation of risk exposures to make sure its financial resources are sufficient to cover those exposures under extreme but plausible market conditions:

- Simultaneous insolvency of multiple market participants
- Conduct stress tests that considers Eurex Clearing's product mix and all elements of its models and their methodologies
- Uses defined stress testing scenarios, on both past and hypothetical extreme but plausible market conditions
- Time horizons for the liquidation period taking into account the characteristics of the financial instrument cleared and the period for the calculation and collection of the margins
- Considers the following: correlations, factors corresponding to the implied and historical volatility of the contract being cleared, concentration risks, interdependencies and multiple relationships, relevant risks including foreign exchange risks and reflect wrong-way risks

The stress test results are incorporated in the reporting to senior management to make sure that the outcomes are considered in the overall risk management and that senior management's attention is focused on the sources of potential stresses in the decision making process. Furthermore, senior management is involved in determining the scope of the specific stress tests.

Stress test results are reported periodically to the Risk Committee in a way that does not breach confidentiality, to discuss the results and the implications on the model framework. Reporting of stress test results to the Risk Committee is done quarterly; a review of the stress testing framework including the set of historical and hypothetical market scenarios used by Eurex Clearing to dimension the Clearing Fund size in consultation with the Risk Committee, is done at least annually and more frequently when market developments or material changes to the set of

contracts cleared by Eurex Clearing may necessitate an adjustment to the scenarios.

In addition, a comprehensive stress testing report is provided to the Chief Risk Officer and to the Executive Board of Eurex Clearing on a monthly basis.

Stress test results are also reported to Clearing Members and clients. There are two types of external reports available:

- Anonymous stress testing reports on clearing house level, giving the recipient information about potential risks of the clearing house without breaking confidentiality;
- Detailed stress testing reports available for Clearing Members and clients providing detailed results for their portfolios only, which help the recipient to understand its risk profile and exposure.

Eurex Clearing regularly reviews and validates its risk models. Therefore, the Risk Management Framework comprises a documentation of all testing programs, processes and report structures which are in place. Eurex Clearing validates new risk models by an independent party prior to the launch of the new model. The processes clearly define the roles and responsibilities, metrics, thresholds and actions. For the on-going revision and improvement of the model Eurex Clearing regularly seeks the advice of the Risk Committee. Any major changes and adjustments will be presented to the Risk Committee and approved by the Executive Board of Eurex Clearing.

In general each risk model is validated on an on-going basis. Therefore, during the model development or change process the validation metrics is defined for the whole model and its parameters.

The basic instrument for evaluating the performance of the whole models is to look at back testing results. Back testing is used to test the accuracy and applicability of the risk model. Back testing is seeking to verify the reliability and practicability of the model and to identify if the model systematically understates or overstates risk. During this risk model validation Eurex Clearing regularly compares actual return performance (computed using realised and unrealised gains and losses) with modelled estimates to be able to demonstrate that such returns are within the expected range for the portfolio and individual holdings. Model parameter sensitivities are used to investigate the responsiveness of the margin model to changes of these model parameters.

Basic assumptions as well as the model as a whole are reviewed annually. The annual revision also includes a benchmark analysis where current market standards and common practices are recognised. Some model components are validated more frequently.

Back tests are conducted on a daily basis. Furthermore, detailed reports and monthly or ad-hoc management reports are generated. Stress tests are performed on a daily basis.

Stress tests of Eurex Clearing's liquid financial resources are done on a daily basis.

	<p>A regular sensitivity analysis is performed as a daily monitoring and monthly validation of Eurex Clearing's haircuts and the factors on which they are based. In addition, intraday analyses are performed by Eurex Clearing in extraordinary market situations.</p> <p>The default procedures are tested by realistic default simulations. In a default simulation the procedures and infrastructure of Eurex Clearing and the Clearing Members are tested. The test and review of the default procedures (no simulation) are performed quarterly.</p>
<p><i>Key Consideration 6</i></p> <p><i>In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. 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.</i></p>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) identifies and measures relevant risk factors specific to the contracts it clears and takes these risk factors into account in its Stress Testing Framework. Following examples of risk factors are outlined which are considered in the tests:</p> <ul style="list-style-type: none"><li>· Number of defaulting Clearing Members or Clearing Member groups</li><li>· Interrelatedness between Clearing Members (e.g. country, sector, affiliation, common clearer for one client)</li><li>· Options implied volatilities</li><li>· Interest rates</li><li>· Correlations</li><li>· Value of instruments issued by Clearing Members</li><li>· Equity prices</li><li>· Bond prices</li><li>· FX rates</li></ul> <p>In the Risk Management Framework it is outlined in detail which specific aspects are considered in the stress tests. Examples of scenarios and specific aspects which are considered in the tests are:</p> <ul style="list-style-type: none"><li>· Historical market scenarios: Eurex Clearing considers historical scenarios, including periods of extreme market movements observed in the past that would have exposed Eurex Clearing to greatest financial risk.</li><li>· Hypothetical market scenarios: Combinations of extreme but plausible market risk factor moves (underlying price, volatility or interest rates).</li><li>· Special risk factor scenarios: For further analysis purposes.</li><li>· Correlation Stress: correlations can massively break down during periods of severe market stress with the result that cross product diversification and macro hedging strategies can fail. To model the correlation stress, extreme</li></ul>

	<p>but plausible spread move scenarios are defined. These spread moves are incorporated in the hypothetical market scenarios.</p>
<p><i>Key Consideration 7</i></p> <p><i>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 participants 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.</i></p>	
<p>Summary narrative</p>	<p>As one of the world’s leading clearing houses, Eurex Clearing AG’s (Eurex Clearing) aim is to maintain stability in financial markets. Eurex Clearing recognises its responsibility to help mitigating systemic risks should the default of one or more Clearing Member(s) occur. Eurex Clearing manages stress situations effectively, not least because it has robust procedures in place to deal with a Clearing Member default and is prepared to act when the need arises.</p> <p>When a Clearing Member goes into default, one of Eurex Clearing’s principle objectives is to protect customers and to minimise harm to clients and their positions. With its Client Asset Protection service, it provides segregation and timely portability of client positions and collateral (both cash and securities). Eurex Clearing service allows Clearing Members and their clients to choose between different, optional protection solutions - depending on the level of protection they require. For further details on the Client Asset Protection services of Eurex Clearing please see Principle 14.</p> <p>Aware that each default scenario is unique, Eurex Clearing maintains flexibility in its procedures in order to accommodate the individual factors of each default. Eurex Clearing’s procedures provide an adaptable framework that is applied depending on the circumstances of the scenario at hand. Despite the individual nature of every situation, the legal triggers that set a given Clearing Member into default are the same regardless of product or market cleared.</p> <p>Eurex Clearing’s default management process is comprised of a set of procedures, designed to facilitate the orderly liquidation process of large and complex portfolios. The margin approach considers the expected duration of the default management process in its methodology so as to reflect actual risk throughout an actual default situation.</p> <p>The following briefly describes key components of the default management process, which comes into effect for remaining positions now maintained by the clearing house, after Eurex Clearing has successfully completed the porting of open client positions to a new, solvent Clearing Member (under certain Client Asset Protection models):</p> <ul style="list-style-type: none"> <li>· Default Management Committees: Each Default Management Committee (DMC) consists of representatives of Clearing Members with sufficient trading and risk expertise in products belonging to the respective liquidation group(s) for which the Default Management Committee is convened. They</li> </ul>

	<p>assist Eurex Clearing with regards to any relevant matter of the default management process, especially hedging and auctioning. The Default Management Committees will be convened in case of a Clearing Member default situation and for regular default simulations.</p> <ul style="list-style-type: none"><li>· Hedging: The purpose of hedging within the default management process is to enable the clearing house to reduce the risk of a liquidation group and therefore reduce the risk for Eurex Clearing. Furthermore, it reduces the portfolio sensitivity to market moves and stabilises it for auctions.</li><li>· Independent sale: In order to grant sufficient flexibility during a default situation, liquidation groups can be sold independently, i.e., positions of the defaulted Clearing Member are then closed by the clearing house and subsequently opened in the position account of the Clearing Member that overtook the position.</li><li>· Auction process: The liquidation group-specific auction process is the main component of the default management process. An auction enables Eurex Clearing to rapidly transfer risk in bulk to willing absorbers establishing a fair market price for the particular portfolio. Auctions are mandatory for those Clearing Members active in the liquidation group affected by the default.</li><li>· Residual Settlement: If an auction results in remaining positions, Eurex Clearing charges any losses resulting from such positions to parties who didn't participate in the auction, or such parties agree to enter into respective transactions with Eurex Clearing (residual settlement). In case no Clearing Member participated in a particular auction, Eurex Clearing terminates corresponding transactions with Clearing Members not participating in the auction.</li><li>· Eurex Clearing guarantees the fulfilment of every transaction in every market for which services are provided. To ensure this commitment, a multi-level security system is set up, called "lines of defence" or default waterfall. Details regarding the default waterfall are outlined in Eurex Clearing's assessment against Key Consideration 4 of this Principle.</li></ul>
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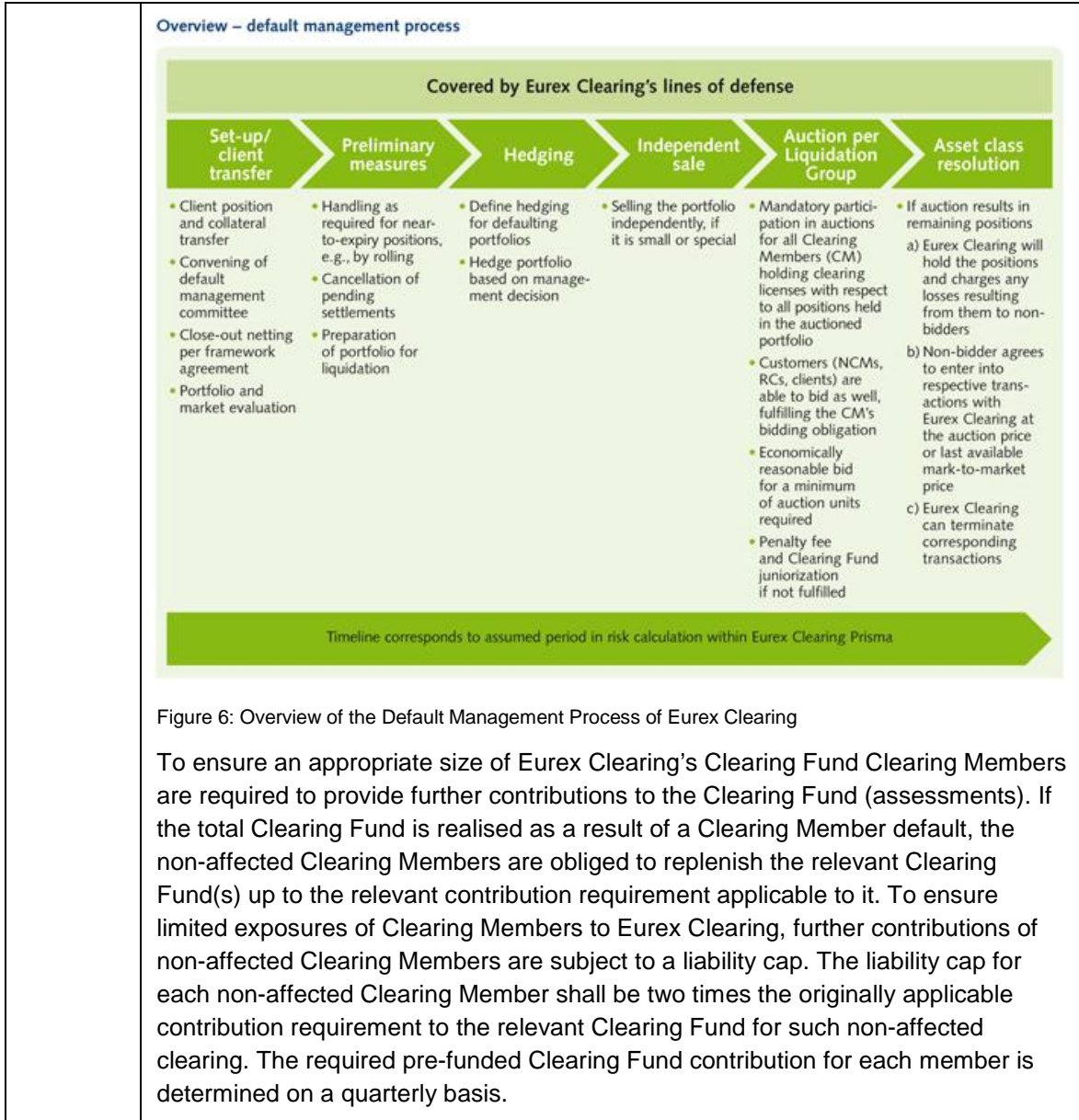


Figure 6: Overview of the Default Management Process of Eurex Clearing

To ensure an appropriate size of Eurex Clearing's Clearing Fund Clearing Members are required to provide further contributions to the Clearing Fund (assessments). If the total Clearing Fund is realised as a result of a Clearing Member default, the non-affected Clearing Members are obliged to replenish the relevant Clearing Fund(s) up to the relevant contribution requirement applicable to it. To ensure limited exposures of Clearing Members to Eurex Clearing, further contributions of non-affected Clearing Members are subject to a liability cap. The liability cap for each non-affected Clearing Member shall be two times the originally applicable contribution requirement to the relevant Clearing Fund for such non-affected clearing. The required pre-funded Clearing Fund contribution for each member is determined on a quarterly basis.

**Assessment of principle:**

*Observed*



**Principle 5: Collateral**

***An FMI that requires collateral to manage its or its participants' 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.*

**Summary narrative**

Eurex Clearing AG (Eurex Clearing) accepts a wide spectrum of eligible collateral. In order to accept financial instruments as eligible collateral, they must satisfy a number of collateral acceptance criteria: high credit quality, minimum market risk, high liquidity, immediate accessibility and valuation. Clearing Members can satisfy margin and Clearing Fund requirements by depositing cash or securities.

Eurex Clearing accepts four currencies as cash collateral. These are EUR, CHF, USD and GBP. In general, overnight margin calls will only take place in EUR and CHF. For covering intraday margin calls members may use all four currencies.

EUR and CHF may be deposited in central bank accounts at the Deutsche Bundesbank or Schweizerische Nationalbank (SNB). In the case of GBP and USD international payment banks are used.

Eurex Clearing stipulates and publishes which currencies are permitted for the deposit of cash collateral and also which securities are eligible for deposit of non-cash collateral. Accepted securities are validated on a daily basis.

Eurex Clearing accepts fixed income securities denominated in EUR, CHF as well as other currencies. In addition, it accepts equities denominated in EUR and CHF.

In the case of variation margin (i.e. the daily settlement of profits and losses) and margin calls, overnight payments must be made in cash. In addition, the payment of premiums on traditional options and options on futures must always be made in cash.

Eurex Clearing does not accept own issues due to pro-cyclical effects (wrong-way risk) as well as close link securities as eligible collateral. Eurex Clearing defines a close link as a direct relationship between members (Clearing Members, segregated Non-Clearing Members or segregated Registered Customers) and issuers of a security. A member is directly linked with an issuer by participation, i.e. by ownership, directly or by way of control, of 50 percent or more of the voting rights or capital of a company or by control, i.e. by the relationship between a parent company and a subsidiary, or a similar relationship between the member and a company. Debt securities that have a remaining term of 15 calendar days or less are not accepted as well.

Eurex Clearing does not accept commercial bank guarantees or central bank guarantees. There is no collateral type which is accepted on an exceptional basis. In order to keep the collateral pool value stable on clearing house level also in extreme market conditions, the high quality of security collateral is in a first

instance defined by combining an acceptable credit risk of the issuer and minimum market risk of the issue. The operationalisation of minimum market risk is captured within the credit quality category by regularly monitoring the reference data of the instrument and the issuer; as well the volatility of the yield for fixed income instruments and the volatility of the price for equities deemed to be a valid proxy for market risk. Eurex Clearing regularly performs methodically objective credit risk assessments of the instrument's issuer based on external and internal rating information. Eurex Clearing monitors the credit ratings of issuers on a continuous basis. The internal credit assessment including approximations considers also the classification of the issuer's home country. Only if the internal credit quality considerations result in an issuer's "Investment Grade" the instrument is acceptable.

Referring to cash collateral, it is preferably accepted via access to central bank liquidity (EUR, CHF) due to the finality of bookings and for reasons of counterparty risk and credit risk reduction. Commercial bank money (USD, GBP) is acceptable via payment banks if they fulfil regularly assessed creditworthy and reliability criteria.

Further, as security collateral might be liquidated, e.g. in the event of a default under potentially stressed market conditions, within a short period of time, eligibility is depending on the availability of markets where Eurex Clearing has liquidation procedures in place. Hence, only bond assets that can be converted into cash via e.g. Eurex Clearing's access to a central bank's repo facility and that can be sold over-the-counter (OTC) to Eurex Clearing customers or other market participants are classified liquid and thus eligible. Therefore, Eurex Clearing monitors the central bank eligibility (market liquidity) daily in order to exclude instruments from the admissible securities list in case the required eligibility is revoked. Equity instruments must be tradable at any time in a market at an exchange or OTC.

Precondition of liquidation is Eurex Clearing's prompt access to the collateral by means of first ranking within the respective legal or regulatory framework. This comprises the home jurisdiction of the collateral location and of the participant and the legal concept (pledge / title transfer) in which the collateral is held.

In addition, accurate collateral valuation including confidence factors is essential for assessing a clearing house's current risk exposure. Eurex Clearing's valuation is based on the clean prices (mark-to-market) used from reliable and continuous data sources and haircuts.

In order to avoid pro-cyclicality Eurex Clearing reviews the processes including impact analyses and reserves the right to gradually increase haircuts until the instrument is no longer eligible. This leads to naturally decreased allocated volumes in these particular instruments.

Eurex Clearing validates and monitors the parameters of the respective criterion (haircuts, confidence factors, ratings etc.) for the admissible securities on a regular basis. Once a certain threshold is breached the eligibility of this security is reviewed.

	<p>In addition, Eurex Clearing reserves the right to exclude all instruments of issuers that are regarded as not sufficiently sound, i.e. such individual assessment overrules the automatic functional and technical validations of the security master data.</p> <p>Eurex Clearing publishes a list with the admissible collateral securities on a regular basis. Only securities which meet Eurex Clearing's stringent eligibility criteria will be included in the list.</p>
<p><b>Key Consideration 2</b></p> <p><i>An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.</i></p>	
<p>Summary narrative</p>	<p>Consistent with market standards, Eurex Clearing AG (Eurex Clearing) is valuing its collateral on a daily basis. Eurex Clearing manages the risks with regard to the valuation of collateral on an adequate basis by additionally marking-to-model when marking-to-market is not possible due to a lack of current market price data.</p> <p>Eurex Clearing calculates theoretical prices for all bonds in its central collateral database. The theoretical pricing is based on mathematical valuation models which determine the present value of all expected cash flows of the security. The present values of the cash flows are computed by applying the bond specific discount curve.</p> <p>Those calculated prices will be used for valuation in the Eurex Clearing systems where no current market prices are available for bond assets. However, if a current market price is available, this price is preferred. Eurex Clearing applies a haircut methodology distinguishing the collateral type of the deposited collateral (bond, equity, cash currency). In addition, Eurex Clearing maintains currency haircuts for foreign currency (FX) collateral (securities and cash).</p> <p>Haircuts applied by Eurex Clearing recognize the fact that collateral may need to be liquidated in stressed market conditions. Therefore, market risk, credit risk and liquidity risk are important components while determining the appropriate haircuts. In addition, the haircuts are calibrated on a very high and therefore conservative confidence level (99.9 per cent) for extreme market conditions. Furthermore, haircuts are calibrated to ensure sufficient coverage over a five day liquidation period even in stressed market conditions. The dynamic haircut methodology reflects the individual risk and the inherent risk profiles of different collateral assets and takes into account actual volatility of the respective instrument. Prudent minimum haircuts are an appropriate measure to prevent and control pro-cyclical effects of haircuts to the extent that Eurex Clearing's soundness and financial security is not negatively affected.</p> <p>Applied haircuts are back tested on a continuous basis to provide an up-to-date picture of the accuracy of model parameters.</p>
<p><b>Key Consideration 3</b></p> <p><i>In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the</i></p>	

<i>extent practicable and prudent.</i>	
Summary narrative	<p>Haircuts applied by Eurex Clearing AG (Eurex Clearing) recognise the fact that collateral may need to be liquidated in stressed market conditions. The haircuts are calibrated to achieve a very high and therefore conservative confidence level (99.9%) for extreme market conditions, i.e. 99.9% of the expected price changes are below the applied haircut.</p> <p>Furthermore, haircuts are calibrated to ensure sufficient coverage over a five-day liquidation period even in stressed market conditions. The dynamic haircut methodology reflects the individual risk and the inherent risk profiles of different collateral assets and takes into account actual volatility of the respective instrument. The configurable parameters of the collateral haircut determination formulas are to be validated regularly and adjusted, if necessary. Moreover, prudent minimum haircuts are an appropriate measure to prevent and control pro-cyclical effects of haircuts to the extent that Eurex Clearing's soundness and financial security is not negatively affected.</p>
<p>Key Consideration 4</p> <p><i>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.</i></p>	
Summary narrative	<p>To safeguard the overall integrity of the clearing house and to protect the mutualising Clearing Fund, Eurex Clearing AG (Eurex Clearing) conducts an internal credit assessment of all counterparties and performs continuous monitoring of credit, concentration and wrong-way risks. This enables Eurex Clearing to guarantee fulfilment of all obligations towards counterparties even under extreme market conditions. Therefore, it is essential for Eurex Clearing to monitor all risks arising from the trading portfolios of counterparties on the one hand, and from the collateral deposited to secure such portfolios, on the other hand.</p> <p>The collateral deposited by a counterparty is aggregated in a so-called collateral pool, which contains all instruments in order to fulfil the counterparty's</p> <ul style="list-style-type: none"> <li>· margin requirement,</li> <li>· Clearing Fund contribution and</li> <li>· company capital requirement.</li> </ul> <p>Eurex Clearing assumes a portfolio or collateral pool to be concentrated if the exposure of a particular position exceeds the aggregated market demand during the anticipated liquidation period. Hereby, market demand depends on market capacity and on the credit quality of the particular security or instrument.</p> <p>If a counterparty has defaulted, Eurex Clearing guarantees a safe and smooth wind-down of such counterparty's portfolio - with the lowest possible market impact.</p> <p>If, as a consequence of a counterparty's default, Eurex Clearing has to liquidate large positions of collateral, such liquidation may cause losses due to a lack in liquidity. Similar losses can arise if the portfolio of the defaulted counterparty is concentrated in certain instruments, and Eurex Clearing is confronted with a lack in liquidity when winding down the respective portfolio. To avoid such losses, Eurex</p>

	<p>Clearing defined dedicated concentration risk thresholds which are applicable to all counterparties. The concentration risk thresholds are available at Eurex Clearing's website: <a href="http://www.eurexclearing.com/clearing-en/risk-management/credit-concentration-wrong-way-risk">http://www.eurexclearing.com/clearing-en/risk-management/credit-concentration-wrong-way-risk</a>.</p> <p>In order to avoid wrong-way risk Eurex Clearing does not allow counterparties to deposit own issues (or issues of closely linked entities) as collateral. Moreover, counterparties are not entitled to use such instruments as collateral for repo transaction or securities lending transactions.</p> <p>By defining dedicated wrong-way risk thresholds, Eurex Clearing is taking additional steps to minimise such risk. These thresholds are applicable to a counterparty's collateral pool and the counterparty's notional exposure.</p> <p>In this context, Eurex Clearing sets thresholds that consider the home country of the counterparty and the home country of the issuers within the counterparty's collateral pool and portfolio. In addition, Eurex Clearing has introduced an automatic ex-post check to identify close link securities in order to exclude these collaterals from being provided as margin, Clearing Fund contributions and substitutes for company equity capital collateral. As outlined above Eurex Clearing defines a close link as a direct relationship between members (Clearing Members, segregated Non-Clearing Members or segregated Registered Customers) and issuers of a security. A member is directly linked with an issuer by participation, i.e. by ownership, directly or by way of control, of 50 per cent or more of the voting rights or capital of a company or by control, i.e. by the relationship between a parent company and a subsidiary, or a similar relationship between the member and a company.</p>
<p>Key Consideration 5</p> <p><i>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.</i></p>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) offers direct provisioning of security collateral in designated Securities Settlement Systems (SSS), ideally with access to the European System of Central Bank (ESCB) facilities. These SSSs provide the necessary collateral management and custody services for Eurex Clearing and its participants. Security collateral is provided through the security collateral locations, i.e. the German Central Securities Depository (CSD) Clearstream Banking Frankfurt (CBF), the International Central Securities Depository (ICSD) Clearstream Banking Luxembourg (CBL) and the Swiss CSD SIX SIS.</p> <p>Cash collateral is provided through Eurex Clearing's correspondent banks, i.e. the margin amount is deposited at the respective cash collateral location as announced by Eurex Clearing to the participant: Euro in central bank money at the central bank in TARGET2, Swiss francs in central bank money at Swiss National Bank (SNB), as well as US Dollar and Great British Pound (GBP) in commercial bank money at selected payment banks in their payment infrastructure as in these currencies currently no central bank access is available.</p> <p>Collateral processing takes place in a straightforward manner via standardised</p>

	<p>interfaces, which mitigates operational and market risks.</p> <p>Moreover, Eurex Clearing's risk management requirements towards the respective collateral locations / systems ensure that the allocation of securities is in line with eligibility and non-eligibility criteria of collateral, with the valuation parameters, concentration limits and wrong-way risk considerations.</p> <p>Any collateral location has to ensure legal certainty based on dedicated jurisdictions (e.g. Financial Collateral Directive<sup>3</sup>, German Safe Custody Act) regarding the first ranking of legal rights of Eurex Clearing to immediately access the collateral at any time given. Legal certainty is given for any of these aspects under the German Insolvency Code (InsO) and is required for foreign insolvency laws, in each case to be confirmed by legal counsels. The legal certainty of any collateral location needs to provide the possibility for Eurex Clearing to freeze all allocated collateral in a dedicated account at any time, in particular in the event of a participant defaulting or deeming insolvent. This secure mechanism for the safety of the clearing house ensures that collateral cannot be moved by the participants starting at the decision point in time until Eurex Clearing releases the collateral for the collateral provider or third parties.</p>
<p><i>Key Consideration 6</i></p> <p><i>An FMI should use a collateral management system that is well-designed and operationally flexible.</i></p>	
Summary narrative	<p>The scope of Eurex Clearing AG's (Eurex Clearing) collateral management service comprises the connection of designated collateral locations, the acceptance of a broad range of eligible collateral, timely validation of margin requirements, collateral valuation and composition for the Eurex Clearing standard collateral pools (i.e. margin, Clearing Fund, company capital) across all relevant systems, transparency through intraday reports and monitoring functionalities, as well as highest protection through asset segregation and portability in line with regulatory requirements. These services are provided by the dedicated collateral management system infrastructure of Eurex Clearing and by the respective collateral locations' applications.</p> <p>Eurex Clearing aims to provide best in class, diversified collateral management services that create maximum value for its customers and simultaneously ensure the integrity of the clearing house. For that matter Eurex Clearing regularly adjusts its collateral management practices and procedures including the services developed by and requested from the CMS service providers (Clearstream Banking Frankfurt, Clearstream Banking Luxembourg).</p> <p>The collateral management function is sufficiently staffed to ensure smooth operations even during times of market stress.</p>

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<sup>3</sup> Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on financial collateral arrangements

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**Assessment of principle:***Observed***Principle 6: Margin*****A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.****Key Consideration 1**A CCP should have a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio, and market it serves.*

## Summary narrative

Eurex Clearing AG (Eurex Clearing) has a margin system in place and imposes margin calls and collects margins to limit its credit exposure from its Clearing Members.

In general, margining encompasses the entire process of measuring and calculating a Clearing Member's risk exposure. The provision of collateral is intended to ensure that all financial commitments related to the open positions of a Clearing Member can be offset within a very short period of time.

Eurex Clearing currently offers two different margin methodologies: Risk Based Margining (RBM) and Portfolio Based Margining (PRISMA). RBM is based on product-specific Margin Classes. Margin offsets between Margin Classes are granted if the correlations between different Margin Classes are stable and have a minimum value of 50 per cent. In the course of the next years it is planned to replace RBM with Eurex Clearing's new portfolio-based risk management methodology PRISMA. Eurex Clearing PRISMA is being introduced in a stepwise approach. During 2015, RBM and PRISMA will continue to run in parallel, allowing members to migrate to the new risk method at their own pace. The main product group's equity derivatives, equity index derivatives and fixed income derivatives including over-the-counter (OTC) Interest Rate Swaps (IRS) are already available in PRISMA. Further products will be added in the course of 2015. Eurex Clearing plans to decommission RBM in two major steps as follows:

First step (planned for end of 2015):

- Decommissioning of RBM for all exchange-traded derivatives (ETDs) assigned to liquidation groups in Eurex Clearing PRISMA by the end of 2015.

Second step (planned for end of 2016):

- Full decommissioning of RBM for all remaining products cleared by Eurex Clearing (equities, bonds, repos etc.).

PRISMA is an advanced Value-at-Risk based model which considers each member's entire portfolio and has the advantage of accounting for hedging and cross-correlation effects through determining the margin requirement on a portfolio level as opposed to a product-by-product view. The various model components are

designed for the risk calculation to be adequate and stable, ensuring that the concept withstands new shocks and changes to the financial markets and flexibly adapts to changes in the risk environment.

A member's total margin requirement, whether parts of it have been calculated with RBM or PRISMA, is the amount that is equivalent to such member's risk exposure. Since members must provide collateral for their margin requirements, the counterparty risk exposure decreases by the value of the collateral provided. Consequently, Eurex Clearing is not exposed to any credit risk as long as all Clearing Members meet their margin requirement in time.

The margin requirement provides a transparent view of the Exposure at Default (EaD) with a high level of confidence and represents the anticipated liquidation costs. Overstating the margin requirement would unnecessarily tie up liquidity of the Clearing Member, while an under secured position represents a potential threat to the contract fulfilment and the integrity of the clearing house and the Clearing Member community.

The margin requirements of each Clearing Member are calculated intraday on a near to real-time basis. If the potential future price risks of a Clearing Member increases above the amount of collateral that is provided then Eurex Clearing issues an intraday margin call towards that Clearing Member that has to be covered within one hour. The calculation of the future risk exposure assumes worst case price changes within the assumed liquidation period on a given confidence level.

Further to the forward looking component also the backward looking component (current exposure) is measured. This includes Variation Margin which applies to future styled derivatives and Interest Rate Swaps (IRS). Variation Margin can be covered by eligible collateral intraday and is settled in cash in the product currency end of day. Premium Margin and current Liquidating Margin reflects the value of traditional options and spot market products as well as Repos respectively. Premium Margin and current Liquidating Margin can be covered by eligible margin collateral. If a Clearing Member holds a position that results in a Premium Margin or current Liquidating Margin Credit (e.g. long option positions) this credit can be used to offset margin requirements of other positions but is not paid out otherwise.

Margin requirements are recalculated intraday and end of day. Shortfalls are covered by margin calls. If a Clearing Member has a surplus end of day then excess cash collateral can be refunded to this Clearing Member upon request of this Clearing Member.

The margin methodology is designed to avoid potential pro-cyclical effects. RBM uses minimum margin parameters to ensure the stability. PRISMA uses scenarios that ensure prudent forward looking properties and stability of the model. The model effectively captures substantial history through the economic cycle. Eurex Clearing introduces a stabilising component in the model by including stress periods into scenarios and using volatility floors.

Eurex Clearing ensures that Clearing Members are able to properly manage and contain the risks associated with their cleared business: Firstly, by providing Clearing Members with sufficient information regarding the CCP's risk management



(Please refer to the website: <http://www.eurexclearing.com/clearing-en/risk-management/>).

Secondly, the margin requirements help Clearing Members to properly manage and contain the risks associated with their cleared business. The provision of collateral is intended to ensure that all financial commitments related to the open positions of a Clearing Member or its clients can be offset with-in a very short period of time. Eurex Clearing calculates margin requirements near to real-time to ensure that it has an overview of the members' current profit and loss situations as well as an estimation of the future risk situation.

And thirdly, tools such as the Eurex MarginCalculator are publicly available and designed to help members to calculate and simulate their Eurex Clearing margin requirements.

As outlined above, Eurex Clearing currently applies two margin methodologies, Risk Based Margining (RBM) and Portfolio Based Margining (PRISMA).

#### **RBM**

When determining the margin requirement with RBM, the exposure is calculated by margin parameters that measure price fluctuations over time. Price fluctuations are measured by the return volatility of the underlying closing prices for equity or equity-like products and by changes in yields for fixed income instruments. All other instruments (such as dividend futures, commodity derivatives, etc.) are also based on the return volatility of the price of the underlying. For options, vega risk is included into the risk calculation via respective shocks to the implied volatility conditional on the underlying returns as well as conditional on the moneyness and time to maturity of the options.

The risk resulting from low or illiquid products is considered by the application of a liquidity factor. Eurex Clearing reviews the liquidity of products on a regular basis.

Additionally, Eurex Clearing considers risk reducing effects by its concept of margin classes and margin groups. Derivative contracts based on the same underlying instrument are grouped together into so-called "margin classes". All futures and options with the same underlying security are put together in the same margin class. Risks from futures and options within the same margin class are offset against each other.

Furthermore, two or more margin classes whose underlying instruments exhibit a stable and high correlation (minimum 50 per cent) can be combined in a margin group. Within a given margin group, cross margining is again possible, i.e. the offsetting of equal but opposite risks.

#### **PRISMA**

Eurex Clearing PRISMA calculates combined risks across all markets cleared by Eurex Clearing. Cleared products that share similar risk characteristics will be assigned to so-called liquidation groups, which result in more accurate risk calculations.

Eurex Clearing has introduced the concept of liquidation groups since Clearing

Members portfolios typically feature heterogeneous structures, sizes and/or complexities. Given the complexity, and due to the general handling principles laid out in our default management process, it is assumed to be suboptimal to liquidate an entire member portfolio in one single transaction.

These groups can be dealt with efficiently and quickly, simplifying the offsetting of risk in a Clearing Member default situation. Liquidation groups, however, can be hedged by Eurex Clearing, priced by Clearing Members and be auctioned within a reasonable period of time. The composition of liquidation groups is reviewed on a regular basis and can be adjusted due to market requirements. Eurex Clearing decides on the composition of liquidation groups after a consultation with its Clearing Members. General principles are:

- liquidation groups are pre-defined (they exist irrespective of a Clearing Member's default).
- Portfolio risk margin offsets are only granted within these pre-defined liquidation groups.
- Each liquidation group has a fixed holding period that reflects the time estimated to analyse, hedge and auction the respective products.

As the Initial Margin is a forward-looking margin component, it quantifies an estimate of future potential losses over the holding period of all Clearing Members' liquidation groups at a pre-defined and appropriate confidence level. Initial Margin is calculated by taking into account potential correlation and netting effects for positions within a liquidation group. Initial margin figures for different liquidation groups and Clearing Member position accounts are then aggregated to a single margin call. The Initial Margin consists of two main subcomponents:

- The market risk component covers potential losses from market movements during the liquidation period. A risk factor based simulation approach to calculate the VaR of the market risk component is chosen.
- The liquidity risk adjustment covers potential losses from realizing bid ask spreads and adverse price movements, connected in particular with the liquidation of large positions.

The market risk component further includes a correlation break adjustment to account for subperiod variations in correlations.

Margin requirements together with Eurex Clearing's Clearing Fund are designed to ensure a confidence level of 99.9 per cent.

*Key Consideration 2*

*A CCP should have a reliable source of timely price data for its margin system. A CCP should also have procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.*

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<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) only uses reliable sources like information provided by regulated markets to obtain timely price data. Therefore, to determine margin requirements futures are priced mark-to-market. To price options mark-to-marked is also the preferred solution. However, when market prices are not available, theoretical prices based on standard option pricing models are used.</p> <p>Theoretical pricing models are more relevant for cleared over-the-counter (OTC) products. For Eurex Clearing relevant products are OTC Interest Rate Swaps (IRS) as well as repurchase agreements and securities lending transactions.</p> <p>For the latter theoretical bond prices are used, however, market prices will be preferred.</p> <p>For OTC derivative contracts an own model is in place to determine theoretical prices based on bootstrapped discounting and forward curves.</p> <p>Models and the Risk Management Framework of Eurex Clearing are subject to yearly independent validations.</p>
<p><i>Key Consideration 3</i></p> <p><i>A CCP should adopt initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio’s distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement must be met for the corresponding distributions of future exposure. The model should (a) use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the CCP (including in stressed market conditions), (b) have an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limit the need for destabilising, procyclical changes.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG’s (Eurex Clearing’s) margining process is a multifaceted and time critical process that takes into account a variety of factors in order to calculate margins that adequately protect Clearing Members, their customers, the clearing house and therefore the marketplace as a whole. Simultaneously Eurex Clearing sets appropriate levels that do not tie up excess capital.</p> <p>The amount of collateral which must be deposited is calculated on the basis of the total risk exposure of all accounts the Clearing Member is responsible for. The total risk exposure is determined from the price risk of the derivative, repo, securities lending and cash positions held in the accounts. The risk reducing effect of combinations of positions is taken into consideration in this calculation, in which equal but opposite risks within each account are offset against each other.</p> <p>Eurex Clearing aims to have sufficient margin collateral to cover a member’s default loss in all but the most extreme market circumstances.</p> <p>Eurex Clearing defines “all but extreme market circumstances” such that for a given</p>

confidence level potential loss in case of a member default will not exceed margin requirements, except for OTC derivatives for which a confidence level of 99.5 per cent is applied. This confidence level is set to 99 per cent for listed derivatives and to 99.5 per cent for OTC derivatives. The potential loss will be covered by collateral provided for margin requirements from the defaulting Clearing Member. Losses beyond the margin requirement will be absorbed by the other lines of defense, such as Clearing Members Clearing Fund contributions.

A risk model should not be focused on margining only, but also consider the impact on the additional protective mechanisms like admission criteria, intra-day margining, model validation, stress testing, clearing and default management. Additionally, risk must be measurable and chargeable within appropriate timeframes, to prevent losses accumulating.

The following points summarise the guidelines for Eurex Clearing's margining methodology:

- The risk model must be in line with the Risk Management Framework, including appropriate inclusion into the lines of defense.
- The first priority in a risk model is the financial integrity and security of the clearing house, granting offsets or adherences to market practice are important, but secondary considerations.
- The model must be transparent, comprehensible and replicable given the respective input parameters.
- The methodology must be technically and operationally feasible.
- The calculation results need to be considerably stable in order to avoid potential pro-cyclical effects.

In case any of the aforementioned conditions fail, the launch of the product in question will not be proceeded with.

Risk Based Margining (RBM) is a systematic risk-oriented model to estimate future losses. While the methodology may vary between products, applied methods will satisfy a number of criteria to ensure objectives of security and efficiency as well as consistency across products. The following assumptions apply:

- A statistical confidence level of 99 per cent is assumed for all products margined with RBM.
- The standard time to liquidate a portfolio is assumed to be 2 days.
- Eurex Clearing applies a product-specific liquidity factor.

The Eurex Clearing PRISMA margin methodology is based on a complete view of each Clearing Member's portfolio that takes into account hedging, and as a result, risk offsetting effects. In this way, it determines the Initial Margin requirement on a portfolio level as opposed to a product-by-product view.

The methodology is designed for the adequate and stable computation of Initial Margin figures, thus creating a forward-looking risk model that is able to cope with a high degree of uncertainty in the financial markets and yet at the same time is sufficiently flexible to be able to adapt to changes in the risk environment.

Eurex Clearing PRISMA calculates combined risks across all markets cleared by Eurex Clearing. Cleared products that share similar risk characteristics will be assigned to so-called liquidation groups, which result in more accurate risk calculations.

The following assumptions apply:

- A statistical confidence level of 99 per cent for listed and 99.5 per cent for OTC products is assumed
- The clearing house standard time to liquidate the portfolio is assumed to be between 2 and 5 days
- liquidation groups are introduced containing products sharing same risk characteristics and thus can be auctioned together
- Portfolio margining is possible within liquidation groups; Margin offsets across liquidation groups is not possible
- Eurex Clearing applies a portfolio specific liquidity risk adjustment
- Position changes and volatility of prices are monitored near-to-real time.

The liquidation period is the assumed maximum time frame that is needed for the execution of the default management process. The assumption is product dependent and must be covered by the margin requirement calculated. Only if a product with a shorter liquidation period is cross margined with a product with a longer liquidation period, the longer liquidation period of the two products is assumed for both.

PRISMA accounts for market risk and changing correlations between products in the portfolio margining process. Liquidity risk is considered by the liquidity risk adjustment. For both margin methodologies the liquidation period is determined following the below described steps.

The holding period is the number of days Eurex Clearing assumes to need for liquidating a respective liquidation group. In general, the holding period is set between 2 and 5 days. The number of days has been established by the guidance of two sources. The first source is an internal estimation of the overall CCP Risk Management Department. Every single step of the default management process has been analysed with respect to how time consuming it is.

1. After a default is legally confirmed (end of grace period / automatic trigger), the positions are transferred to an Eurex Clearing account.
2. Furthermore, preliminary measures are applied by DMP team and supporting interfaces (e.g. sensitivity calculations or identifying portfolio concentrations). Besides it may be necessary to convene a Default Management Committee for assisting Eurex Clearing in developing a hedging strategy.
3. In any case (with or without advice of the DMC), Eurex Clearing might execute hedges. It is possible that hedges are adjusted later on in order to adapt to changing market conditions.
4. Independent sale can be started after hedging and should be finished within

	<p>one day.</p> <p>5. The auction starts after hedging and should be finished within one day (equity liquidation group) respectively two days (fixed income liquidation group) including pricing and is anticipated to take one day (equity liquidation group) respectively two days (fixed income liquidation group) at maximum.</p> <p>An asset class resolution is triggered if the auction fails and takes at maximum one day. All described process steps lead to the determination of the holding period per liquidation group.</p> <p>The second estimation source is taken directly from the market (i.e. involvement of the Risk Committee) and aligned with regulatory requirements. As the proposal has already been validated by the Risk Committee the chosen holding periods are reasonable.</p> <p>Eurex Clearing conducted several default simulations in which the time frame for the Default Management process was challenged and has proven to be sufficient. In addition the historic Clearing Member defaults that have been managed by Eurex Clearing proved that the liquidation period assumed is realistic.</p> <p>In RBM the margin requirement is determined through a margin parameter. Therefore historical volatility is used to estimate future volatility. The estimate of future volatility is referenced to historical market parameter paths/patterns. The reference period defines the number of past market parameter observations that are taken into account to estimate future volatility.</p> <p>The margin parameter is set equal to the maximum value resulting from the exponentially weighted moving average (EWMA) volatilities or the un-weighted volatilities multiplied by a risk factor for fixed income derivatives and cash equity products based on the below reference periods:</p> <ul style="list-style-type: none"><li>· 30 days</li><li>· 250 days</li><li>· full observation period since inception of the product (equally weighted).</li></ul> <p>These periods also take into account the full observation period since inception of the product. This ensures that a full range of market conditions, including periods of stress are captured.</p> <p>The PRISMA methodology uses a risk-factor-based simulation approach to calculate the value at risk for the market risk component. For this approach, instrument price scenarios are attained by simulating risk factor scenarios that are subsequently used for theoretical pricing.</p> <p>Two sets of risk factor scenarios are simulated:</p> <ul style="list-style-type: none"><li>· Filtered historical scenarios are simulated based on historically observed risk factor returns that are normalized and subsequently adapted to the most recent volatility regime.</li><li>· Stress period scenarios are simulated by taking historical returns from periods of significant financial distress.</li></ul>
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	<p>Eurex Clearing will review liquidity of products on a regular basis.</p> <p>In PRISMA a liquidity risk adjustment is applied. The liquidity risk adjustment is designed to account for the widening of bid-ask spreads and the adverse price movements that might occur in the liquidation of potentially very large positions after the default of a Clearing Member.</p> <p>In general, Eurex Clearing's margin calculations are designed to be considerably stable in order to avoid potential pro-cyclical effects. In case Eurex Clearing will revise the parameters of its margin model it will take into account any potential pro-cyclical effects of such revision.</p> <p>For RBM an appropriate counter cyclical component is ensured through setting a minimum margin parameter. The minimum margin parameters are based on long-term histories of respective products or benchmark instruments and are complemented by expert judgement.</p> <p>Wrong-way risks may arise if there is an unfavourable interrelatedness between Clearing Member's credit risk (Clearing Member as issuer), its portfolio value (portfolio) and/or the value of its collateral pool (collateral).</p> <p>Wrong-way risks are addressed by the exclusion or the restricted usage of certain issues for a specific member to post as margin collateral (Clearing Member as issuer vs. collateral) or to use it to securitize SFTs (Clearing Member as issuer vs. portfolio).</p>
	<p><i>Key Consideration 4</i></p> <p><i>A CCP should mark participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.</i></p>
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) has the authority and capability to request and to pay-out variation margin as well as to conduct intraday margin calls. First of all it is important to distinguish between the purpose of variation margin payments and margin calls. Using variation margin, profits and losses that arise due to the price fluctuations of open positions are offset daily. When options positions are mark-to-market, calculation of the appropriate credits and debits depends on how the value of a call or put position changed during the trading day. The mark-to-market procedure ensures that each position is re-valued at the daily settlement price. The difference between today's and the previous day's settlement price is offset by daily compensating payments. Therefore, the essential effect of marking positions to market is the "extraction" of potential liquidation profits or losses, so that on the last trading day only the difference between the daily settlement price of the previous day and the final settlement price of all open positions has to be calculated. In the case of options on futures, the final valuation is made at the final settlement price of either the expiration date of the option or the day on which it was exercised.</p> <p>Margin calls, however, are issued when during the continuous intraday monitoring of positions an under-collateralization is discovered. This can in general be caused by adverse market movements which translate into an increase of the margin</p>

	<p>requirement.</p> <p>Eurex Clearing’s authority to conduct intraday margin calls is stipulated in the Clearing Conditions, Chapter I, Part 1, Number 3.3. The right to demand supplementary margin is outlined in the Clearing Conditions Chapter I, Part 1, Number 3.5.</p> <p>Market movements are continuously monitored by Eurex Clearing’s Risk Management department which issues intraday margin calls or demands supplementary margin, if necessary.</p> <p>Eurex Clearing has sufficient operational capacities to make and complete intraday margin calls.</p>
<p><i>Key Consideration 5</i></p> <p><i>In calculating margin requirements, a CCP may allow offsets or reductions in required margin across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorised to offer cross-margining, they must have appropriate safeguards and harmonised overall risk-management systems.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) allows for offsets in its margining systems Risk Based Margining (RBM) and Portfolio Based Margining (PRISMA).</p> <p>In RBM Investors can reduce their exposure to individual asset risk by holding a diversified portfolio of assets. Diversification may allow for the same portfolio return with reduced risk.</p> <p>Eurex Clearing considers risk reducing effects by its concept of margin classes and margin groups. Derivative contracts based on the same underlying instrument are grouped together into so-called “margin classes”. For example, all DAX® options, together with the DAX futures, comprise the DAX margin class. Similarly, there is a separate class for every other type of equity index and interest rate future. In the case of equity options, all contracts with the same underlying security are grouped together. Unrealized profits and losses on futures contracts within the same margin class are offset against each other.</p> <p>Furthermore two or more margin classes whose underlying instruments are (positively) correlated with respect to their risk structure are combined in a “margin group”. Within a given margin group, cross margining is again possible, i.e. the offsetting of equal but opposite risks. An overview about all Margin Groups currently set up can be found in the document ‘CorrelationList_MarginGroups’ which is published on Eurex Clearing’s website.</p> <p>The correlation is also validated through stress periods. Correlations can massively break down during periods of severe market stress with the result that cross product diversification and macro hedging strategies can fail.</p> <p>The narrow definition of margin groups in which margin offsets are allowed further ensures that Eurex Clearing is not exposed to any additional risk by granting margin reductions (only instruments whose underlyings are correlated with respect to their risk structure are assigned to one margin group).</p>



With Eurex Clearing PRISMA, Eurex Clearing only grants margin offsets within predefined groups of products. This is firstly to avoid any risk of margin shortfalls during the liquidation procedure due to previously granted offsets on portfolio level and secondly to ensure that cross-product offsets are not out-weighted by additional liquidity margins. With the introduction of Eurex Clearing PRISMA the default management process is on (sub-) portfolio level rather than on position level.

These sub-portfolios are called "liquidation groups" and comprise products that are anticipated to be auctioned together in case of a Clearing Member default. Portfolio margining is only possible for products which are assigned to the same liquidation group. However, assignment of certain products to the same liquidation group alone does not suffice to grant offsets between these products. Only restricted offsets are granted within one liquidation group, whereas 'restriction' is achieved by the inclusion of model adjustments especially correlation break adjustments. Through this procedure PRISMA ensures that Eurex Clearing is not exposed to any potential risk from the margin reduction by incorporating into the margining only the offsets which are consistent with the Default Management Process. The set of liquidation groups is equally defined for all members on CCP level and is therefore unrelated to the size, the trading strategy or the positions of a particular Clearing Member to be liquidated. Liquidation groups are fixed over time unless the composition is adjusted in the framework of regular reviews. The definition of liquidation groups is based on the following considerations

- Standard liquidation process: Products that follow the standard liquidation process with an auction as central element can be assigned to the same liquidation group. Products that utilize a different liquidation process cannot be assigned to one liquidation group.
- Proximity of products: Products within one liquidation group allow for objective proximity. Proximate products own a set of common risk factors. This criterion represents market standard and business understanding including the consideration of required clearing licenses and settlement infrastructures. The correlations of common risk factors implicitly link the products within one liquidation group.
- Hedge-ability: Dependency to other products in the liquidation group can be quantifiably proven and is stable. The Hedge-ability is based on quantitative metrics. Products are assigned to the same liquidation group only if they can be hedged together.
- Price-ability: The liquidation group can be priced by Clearing Members in a limited period of time. The price-ability is verified during the regular default simulations. Furthermore, it is subject to the auction format and hedging strategy.

The liquidation group composition will be reviewed internally and in default simulations on a regular basis. However, to ensure the integrity of the clearing house the final decision regarding the definition of liquidation groups remains with Eurex Clearing as the responsible CCP in case of a Clearing Member default.

	<p>The Eurex Clearing Executive Board will decide on the assignment of new products to already existent liquidation groups or whether a new liquidation group will be set up.</p> <p>In addition, Eurex Clearing monitors the cases where portfolio margin requirements result in an offset of 80 per cent or more compared to the gross margin requirement on product level. Such findings serve as input to the risk reporting and management process.</p> <p>Margin reductions related to portfolio margining are subject to a sound stress test program.</p> <p>Eurex Clearing does not have cross margin arrangements with other CCPs.</p> <p>The margin procedure is subject to daily stress tests. Also back tests are conducted daily to ensure that the margin requirement meets the applicable confidence level (99 per cent for listed and 99.5 per cent for OTC products).</p>
<p><i>Key Consideration 6</i></p> <p><i>A CCP should analyse and monitor its model performance and overall margin coverage by conducting rigorous daily back testing – and at least monthly, and more-frequent where appropriate, sensitivity analysis. A CCP should regularly conduct an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model’s coverage, a CCP should take into account a wide range of parameters and assumptions that reflect possible market conditions, including the most-volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG’s (Eurex Clearing) Model Validation Framework is designed for the validation of the overall margin figure based on back testing analyses and the validation and calibration of separate subcomponents of the model. The validation framework consists of three building blocks:</p> <ul style="list-style-type: none"> <li>· analyses,</li> <li>· thresholds and</li> <li>· actions.</li> </ul> <p>In the analysis step metrics are calculated and subsequently compared to pre-defined thresholds. Depending on the outcome necessary actions are conducted.</p> <p>The model validation framework comprises two main elements:</p> <ul style="list-style-type: none"> <li>· Validation of the adequacy of the overall margin methodology on a portfolio level by back testing several market risk figures for clearing member portfolios on different levels of the portfolio hierarchy</li> <li>· Validation of the adequacy of the methods and parameter configurations used for the derivation of the initial margin figure and its subcomponents.</li> </ul> <p>Both elements validate the ongoing adequacy of the utilized models and their parameter configurations and aim to give an indication about the potential economic implication of model inaccuracies, e.g. by comparing the potential impact to the</p>

<p>volume of the Clearing Fund.</p> <p>The validation of the overall initial margin figure is conducted based on back testing techniques for various risk figures.</p> <p>The assessment of the adequacy of the overall initial margin, a model for a margin subcomponent or the parameterization utilized to derive such margin figures or its subcomponents are based on regular reports or analyses. The results of those reports are compared to predefined thresholds or historically observed parameter values.</p> <p>Regular meetings facilitate the discussions on validation outcomes and potential problems at an early stage, so that any required enhancements or fixes can be implemented in good time.</p> <p>Back testing is conducted on a daily basis. Results are reported to the Eurex Clearing management monthly or ad-hoc, if deemed necessary.</p> <p>Eurex Clearing takes into account a long data history for its back testing program to ensure that the observation window used is sufficient to mitigate any detrimental effect on the statistical significance. Back testing results and analysis are periodically reported in a form that does not breach confidentiality to the Risk Committee in order to seek advice in the review of the margin models.</p> <p>If the validation would reveal a severe deficit and a major adjustment is required, the adjusted model needs to go through the normal approval process and - if applicable – needs to be approved by the relevant external authorities (i.e. Eurex Clearing Risk Committee, the Competent National Authority / Federal Financial Supervisory Authority (BaFin) as well as European Securities and Markets Authority (ESMA) / College if necessary) before the changes are implemented. Minor changes such as parameter updates do only need to be approved by the Chief Risk Officer (CRO) of Eurex Clearing. The back testing results are made available to Clearing Members without breaching confidentiality.</p> <p>The Eurex Clearing margining models contain a number of model parameters (e.g. the Margin Parameter in RBM, the liquidity factors in PRISMA, etc.) The parameters are periodically determined by calibration to e.g. observed market risk factors or by fundamental analysis.</p> <p>Model parameter sensitivities are used to investigate the response of the margin model to changes in model parameters. The parameter sensitivities are calculated for all member portfolios. Based on the resulting sensitivities a representative set of member portfolios is determined and reported to the management.</p> <p>For the regular validation, sensitivity simulations are performed for all parameters in scope and for all Clearing Member portfolios, resulting in a sensitivity decomposition across all member portfolios.</p> <p>Sensitivities are analysed for single model parameters or combinations of them. This is performed under various market conditions and for a number of confidence levels.</p> <p>For the ongoing revision and improvement of the model Eurex Clearing regularly</p>
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	seeks the advice of the Risk Committee. Any major changes and adjustments will be presented to the Risk Committee and approved by the Executive Board of Eurex Clearing.
<i>Key Consideration 7</i> <i>A CCP should regularly review and validate its margin system.</i>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) regularly reviews and validates its risk models. Therefore, a Model Validation Framework which comprises a documentation of all testing programs, processes and report structures is in place. Eurex Clearing commits itself to the validation of new risk models by an independent party prior to the launch of the new model. The processes clearly define the roles and responsibilities, metrics, thresholds and actions. For the ongoing revision and improvement of the model Eurex Clearing regularly seeks the advice of the Risk Committee. Any major changes and adjustments will be presented to the Risk Committee and approved by the Executive Board of Eurex Clearing.</p> <p>In general, each risk model is validated on an ongoing basis. Therefore, during the model development or change process the validation metrics is defined for the whole model and its parameters.</p> <p>The basic instrument for evaluating the performance of the whole models is to look at back testing results. Back testing is used to test the accuracy and applicability of the risk model. Back testing is seeking to verify the reliability and practicability of the model and to identify if the model systematically understates or overstates risk. If necessary the reviews of back testing exceptions are performed down to detailed aggregation levels. During this risk model validation Eurex Clearing regularly compares actual return performance (computed using realised and unrealised gains and losses) with modelled estimates to be able to demonstrate that such returns are within the expected range for the portfolio. Such comparisons make use of historical data that ensures statistical significance of the testing results. The methods and data used in such comparisons are clearly documented. The results are reported to senior management on a monthly basis. Documentation is updated at least annually.</p> <p>Model parameter sensitivities are used to investigate the response of the margin model to changes of the model parameters. The deviations are caused, either by normal market scenarios as well as stressed historical and hypothetical market scenarios. Furthermore, the stressed market scenarios cover the most volatile periods observed by Eurex Clearing. The parameter sensitivities are calculated for all member portfolios. The resulting sensitivities are reported to senior management on a monthly basis.</p>
<b>Assessment of principle:</b> <i>Observed</i>	

**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 participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.***

***Key Consideration 1***

*An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.*

**Summary narrative**

Eurex Clearing AG (Eurex Clearing) measures, monitors, and manages its liquidity risk according to its Liquidity Risk Management Framework. The Framework is set up in accordance and compliance with Articles 43 (other financial resources) and 44 (Liquidity risk controls) EMIR and Articles 32 – 34 of Chapter VIII (Liquidity risk controls) of the associated regulatory technical standards<sup>4</sup>. The framework was approved by the Board after consultation with the Risk Committee and is updated on a regular basis involving the Risk Committee and the Board.

Eurex Clearing's Liquidity Risk Management framework is designed to cover all payment obligations at any time in order to avoid a potential liquidity shortfall. It addresses potential sources of liquidity risk and describes measures for mitigation. Requirements for monitoring, managing and reporting liquidity are outlined; moreover the framework gives guidance on defined stress tests and describes the coverage of liquidity shortage in contingency events. Furthermore, within the framework settlement and funding flows are analysed in all relevant currencies.

For Eurex Clearing, liquidity risks mainly stem from its function as a central counterparty (CCP) and related pre-financing activities conducted to ensure settlement efficiency.

A further source of liquidity risk is related to a default of one or more clearing members. For the daily monitoring of the liquidity requirement caused by a simultaneous default of the two largest clearing members (EMIR), a Management Information System has been established. Available liquidity sources are being compared to required financing needs on a daily basis. Within this analysis, multiple roles of clearing are taken into account when analysing liquidity exposure per clearing member.

***Key Consideration 2***

*An FMI should have effective operational and analytical tools to identify, measure, and monitor*

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<sup>4</sup> Commission delegated regulation (EU) No 153/2013 of 19 December 2012 supplementing EMIR

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<i>its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.</i>	
Summary narrative	<p>Within the Liquidity Risk Management Framework settlement and funding flows are analysed in all relevant currencies on an ongoing and timely basis.</p> <p>Operational online tools, e.g. online banking tools, SWIFT confirmations, Cascade and Creation settlement are part of the process of monitoring settlement and funding flows throughout the business day.</p> <p>Furthermore, as described above, on a daily basis the liquidity required to cover the simultaneous default of the two largest clearing members is being monitored to ensure the availability of sufficient liquidity sources.</p>
<p><i>Key Consideration 3</i></p> <p><i>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 participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.</i></p>	
<p><i>Not applicable</i></p>	
<p><i>Key Consideration 4</i></p> <p><i>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 participant 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 participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.</i></p>	
Summary narrative	<p>Eurex Clearing AG’s (Eurex Clearing) Liquidity Risk Management Framework is designed to cover all payment obligations at any time in order to avoid a potential liquidity shortfall. Eurex Clearing, within this framework, applies a wide range of stress scenarios focussing on liquidity risks stemming from the CCP business “business-as-usual” as well as from a potential default of customers.</p> <ol style="list-style-type: none"> <li>1) For the business-as-usual stress tests, the Liquidity Risk Management Framework governs the performance of three defined liquidity stress scenarios.</li> <li>2) For the potential liquidity requirement caused by the default of a clearing member, the Liquidity Risk Management Framework describes the performance of a Management Information System. The aggregated payment obligation</li> </ol>

	<p>caused by the simultaneous default of the two largest clearing members is being compared to the available qualifying liquidity sources.</p> <p>Sufficient liquidity is required to be available to cover all different liquidity stress test scenarios.</p> <p>Eurex Clearing only clears plain vanilla products which do not have complex risk profiles. Furthermore, Eurex Clearing is systemically important in European jurisdictions only.</p>
<p><b>Key Consideration 5</b></p> <p><i>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 creditworthy 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.</i></p>	
<p><b>Summary narrative</b></p>	<p>As a central counterparty Eurex Clearing AG's (Eurex Clearing) aim is to fulfil its payment obligation at all times. Therefore, Eurex Clearing has several sources of qualifying liquid resources available. The liquid resources of Eurex Clearing are compliant with Article 33 of the regulatory technical standards<sup>5</sup> and composed of (a) cash deposited at a central bank of issue, (b) cash deposited at authorised credit institutions, (c) committed lines of credit and (d) committed repurchase agreements.</p> <p>In order to safeguard the Clearing House and its Clearing Members, Eurex Clearing follows a restrictive investment policy for cash investments:</p> <ul style="list-style-type: none"> <li>· Cash investments mainly take place on a short-term basis (overnight)</li> <li>· Cash is placed on a secured basis to the extend possible</li> <li>· Securities received in repo transactions are required to have a first class credit rating and, in addition, to be central bank eligible</li> <li>· Cash investments only takes place at counterparts with high creditworthiness</li> </ul> <p>In addition, Eurex Clearing has established committed credit facilities with several, investment grade rated commercial banks. To ensure availability, credit facilities are drawn on a regular basis.</p>
<p><b>Key Consideration 6</b></p> <p><i>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</i></p>	

<sup>5</sup> Commission delegated regulation (EU) No 153/2013 of 19 December 2012 supplementing EMIR

*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.*

Summary narrative	<p>In general, Eurex Clearing AG (Eurex Clearing) has a wide range of qualifying liquid resources at its disposal, such as own funds, cash margins as well as several committed commercial bank credit facilities. Furthermore, central bank access has been granted.</p> <p>Eurex Clearing's liquidity needs are sufficiently covered by these qualifying liquid resources.</p> <p>In addition, Eurex Clearing's own funds are available as supplemental liquid resources.</p> <p>Eurex Clearing's liquidity risk management framework requires collateral received via reverse repo transactions to be central bank eligible. Thus, supplemental assets would always qualify as being central bank eligible.</p> <p>Supplemental liquid resources in the form of uncommitted credit lines are used in the cause of the day-to-day business.</p>
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**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 participant 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.*

Summary narrative	<p>As already outlined, Eurex Clearing AG (Eurex Clearing) has access to adequate liquidity to perform its services and activities. Eurex Clearing takes appropriate measures (e.g.: liquidity stress tests) to anticipate and avoid potential liquidity shortfalls. In case further funding sources are required, Eurex Clearing has contractual relationships with several, well rated commercial banks to provide committed credit facilities to Eurex Clearing.</p> <p>Eurex Clearing performs due diligences of its liquidity providers in the form of a credit assessment. The assessment is made annually and event-driven. Committed credit facilities are only maintained with banks that hold a minimum rating of A-/A3.</p> <p>All credit facilities of Eurex Clearing are drawn on a regular basis to ensure their availability.</p> <p>As only financial institutions are providing Eurex Clearing's credit facilities, central bank access by those liquidity providers should be assumed.</p>
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<p><b>Key Consideration 8</b></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) has access to the central bank facilities of the Eurosystem and uses central bank accounts for its relevant clearing currencies, EUR and CHF.</p> <p>Therefore, clearing business related payments and settlement is being conducted in central bank money.</p> <p>Eurex Clearing has access to EUR intraday and overnight credit facilities provided by Deutsche Bundesbank. Furthermore, cash that is not being placed secured, through reverse repo transactions, can be deposited with central banks.</p> <p>For other currencies, e.g. US Dollar and British Pound, Eurex Clearing uses commercial payment bank services.</p>
<p><b>Key Consideration 9</b></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG's (Eurex Clearing) Liquidity Risk Management Framework intends to ensure availability of sufficient financial resources at any time in order to cover either liquidity needs stemming from the CCP settlement business itself ("Business-as-usual") or from a potential clearing member default ("Cover 2 Default"). For all potential sources of liquidity risk, stress tests applying different scenarios are being performed. For all liquidity stress test scenarios, the liquidity requirements are compared to available liquidity resources.</p> <p>The liquidity stress tests framework is defined, regularly reviewed and validated by CCP Risk Management. The stress testing results are regularly reported to the Eurex Clearing Executive Board. In this process, all figures and assumptions are discussed and revised internally to adjust to changed conditions, if necessary.</p>
<p><b>Key Consideration 10</b></p> <p><i>An FMI should establish explicit rules and procedures that enable the FMI to effect same-day</i></p>	

<p><i>and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. 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.</i></p>	
<p>Summary narrative</p>	<p>As outlined in other Key Considerations of this Principle the goal of Eurex Clearing AG’s (Eurex Clearing) liquidity risk management is designed to meet all payment obligations at any time while ensuring settlement efficiency of CCP transactions. Additionally, a potential default of one or more Clearing Members needs to be considered as potential liquidity risk and has to be covered with sufficient financial resources. As part of the day-to-day liquidity management, a liquidity buffer is maintained in order to cover additional liquidity needs in times of market disruption. Early warning and contingency event triggers are in place. If such predefined thresholds are exceeded, options to strengthen the liquidity position are outlined in Eurex Clearing’s procedures on liquidity risk management.</p>
<p><b>Assessment of principle:</b></p> <p><i>Observed</i></p>	

**Principle 8: Settlement**

<p><b><i>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.</i></b></p>	
<p><i>Key Consideration 1</i></p> <p><i>An FMI’s rules and procedures should clearly define the point at which settlement is final.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) as a central counterparty provides the same model for all markets it clears via industry leading technology and innovative risk management processes. As part of Eurex Clearing’s complete service offering, Eurex Clearing maintains links with a number of central depositories offering innovative post-trade services.</p> <p>Eurex Clearing is responsible for the clearing of transactions and forwards transfer instructions (settlement instructions) to Central Securities Depositories (CSD), also for its Clearing Members for the purpose of settlement. The settlement of transactions is further treated by the settlement systems which have contractual business relationships with Eurex Clearing. In the moment the CSD settled the transaction Eurex Clearing will receive the respective information. Once the CSD reports back settlement, Eurex Clearing considers the instruction as settled / final. Thereafter, Eurex Clearing sends a report / confirmation (SWIFT message) to its Clearing Members that the settlement is final and the transaction cannot be revoked. In case the instructions could not be settled by the CSD, Eurex Clearing cancels the instruction. In that case finality is not reached and Eurex Clearing</p>

considers those transactions as still pending. Pending transactions will be forwarded for settlement on the next business day.

From a legal point of view, the settlement of delivery obligations takes place when the counterparties to a securities transaction have performed their entire obligations (such as the transfer of rights to a security or effecting a cash payment) so that all reciprocal claims arising from the transaction have been satisfied in full and are consequently extinguished. The Settlement Finality Directive<sup>6</sup> stipulates that finality as the legal enforceability and irrevocability of instructions occurs when transfer orders are entered into a system.

Eurex Clearing has at all times detailed information on the settlement of open payments, transfer instructions or other obligations. The processing of settlements is performed with SWIFT messages that contain clear references to the beneficiary. This way the key steps are documented using a system that sets the internationally recognised industry standards for settlement.

The central source for information to the exchange participants, Clearing Members and software vendors on the settlement of transactions is the Common Report Engine, which is Eurex Group's central solution for trading and clearing report retrieval. In particular the needs of today on trading level have resulted in the development of a high-tech tool that has also improved Eurex Clearing's capabilities to meet the customers' increasing demand for the latest risk information on clearing level and settlement level.

Detailed information regarding the settlement of transactions can be found in the Clearing Conditions. The Clearing Conditions as well as other more general information on the settlement processes can be found on the website of Eurex Clearing (<http://www.eurexclearing.com/clearing-en/transaction-management/>).

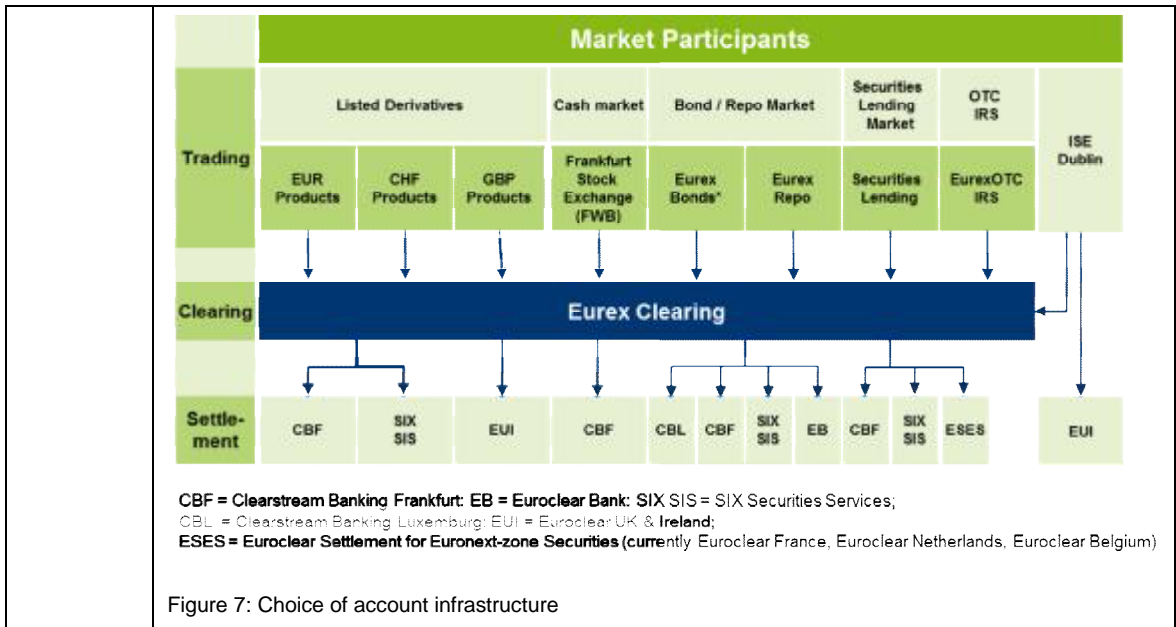
Eurex Clearing maintains settlement accounts at multiple Settlement Locations and settles transactions at the location chosen by the respective Clearing Member in the trading location giving rise to the trades. As an example, a member could specify one Settlement Location for German government bonds and another for Swiss government bonds.

Eurex Clearing gives its customers a broad choice when setting up their account infrastructures. Eurex Clearing supports a variety of Central Security Depositories as can be seen from the following picture.

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<sup>6</sup> Settlement Finality Directive (98/26/EC) - Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems

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**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.*

**Summary narrative**

Eurex Clearing AG (Eurex Clearing) ensures settlement finality on the value date as it creates instructions technically to observe the Intended Settlement Day (ISD), thereby using Central Securities Depositories (CSDs) batch processing cycles. The settlement Finality is reported via a dedicated settled delivery report.

The delivery obligation in the case of novation or open offer where the participant A sells to or buys from the central counterparty is to be fulfilled on the value date, regardless of whether the CCP is being delivered by or delivering to participant B.

The Clearing Conditions of Eurex Clearing oblige Clearing Members to fulfil their delivery and payment obligations resulting from transactions in accordance with the instructions of Eurex Clearing. This also means that each Clearing Member and Eurex Clearing shall ensure, through appropriate instruction of the respective Settlement Location, that transactions can be processed at the time specified in the relevant Special Clearing Provisions, on the delivery days agreed, respectively.

The Clearing Members authorise Eurex Clearing, by providing the appropriate power of attorney vis-à-vis the respective Settlement Location, to give, release and transmit all delivery instructions and to supplement, change or cancel the delivery instructions as required for the timely and correct fulfilment of its delivery and payment obligations against Eurex Clearing arising from transactions in the name of and binding for and against such Clearing Member. The same applies with regard to the corresponding payment instructions.

In the event of a failure by a Clearing Member to deliver securities to Eurex Clearing on the applicable delivery date, Eurex Clearing is entitled at the cost of the defaulting Clearing Member to enter into a replacement purchase by way of a

	transaction with a third party or by way of a buy-in auction. Depending on the cleared market and the asset class, a different fail process applies. Generally fines for late deliveries will be charged.
<i>Key Consideration 3</i>	
<i>An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.</i>	
Summary narrative	<p>The Clearing Conditions do not stipulate a certain point in time at which payments and instructions or other obligations cannot be revoked by any participant. Under German law, an express determination of such point in time is not needed. Rather, the irrevocability of declarations of intent is regulated by general principles under German civil law. Pursuant to Section 130 of the German Civil Code (Bürgerliches Gesetzbuch), a declaration of intent becomes effective at the point in time when this declaration is received by the counterparty. However, it does not become effective if a revocation of the declaration of intent is received by the counterparty previously or at the same time (Section 130 para. 1 sentence 2 of the German Civil Code).</p> <p>Based on these principles, Clearing Members are generally not entitled to revoke instructions unilaterally (notwithstanding system functionalities) once entered into the clearing system. The aforementioned principles are supported by the restrictions enlisted in the Clearing Conditions.</p>
<b>Assessment of principle:</b>	
<i>Observed</i>	

**Principle 9: Money settlement**

<b><i>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 risks arising from the use of commercial bank money.</i></b>	
<i>Key Consideration 1</i>	
<i>An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.</i>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) ensures that members' cash liabilities are settled as quickly and securely as possible, bearing in mind the currency mix of its business. Money settlement risk is kept at a minimum. Cash is deposited only with selected banks and subject to appropriate limits.</p> <p>Eurex Clearing uses both central bank and commercial bank connectivity for the settlement of cash transactions. The central bank model is used, where access to the central bank is available to Eurex Clearing, i.e. for Euro (EUR) and Swiss Francs (CHF) (EUR TARGET2 account at Deutsche Bundesbank and CHF account at Swiss National Bank), as well as EuroSIC, Clearstream Banking Luxembourg (CBL), EuroClear Bank, and other commercial payment banks.</p> <p>Eurex Clearing offers its members an attractive payment infrastructure. The broad</p>

payment network offers members a high degree of flexibility in terms of payment locations for multiple currencies. Eurex Clearing holds accounts with multiple commercial and central banks allowing the choice of where to pay and receive funds.

For all obligations that arise from the clearing process, such as fees, margin requirements, cash settlements and other cash obligations, Eurex Clearing manages the internal cash accounts in multiple currencies. However, initial margin and default fund contributions are collected in clearing currencies, EUR and CHF.



Figure 8: Eurex Clearing’s payment infrastructure / network

For currencies other than EUR and CHF, Eurex Clearing does not have access to central bank money.

*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.*

Summary narrative

If central bank money is not used, Eurex Clearing AG (Eurex Clearing) uses commercial bank money for money settlement.

The selection of commercial banks for cash settlement is based on a strict process checking credit quality and operational robustness and must be approved by the Eurex Clearing Executive Board.

When using commercial banks, Eurex Clearing monitors the credit rating of the entity.

As also outlined under Key Consideration 1 of this Principle Eurex Clearing, as part of the clearing process, needs to pay and receive payments to and from the Clearing Members. Other than for payments in Euro and Swiss Franc, Eurex Clearing uses a network of payment and correspondent Banks (“together called Banks”) to assist with the process. Given Eurex Clearing’s reliance on these Banks for the efficient working of the clearing processes, Eurex Clearing has developed criteria for the assessment of new banks.

These criteria will be used to evaluate the Banks before going live and then on a regular basis to ensure compliance of these criteria at all times. This process is in line with the requirement to ‘strictly limit cash settlement risks’ as stipulated in Article 50 EMIR.

	<p>Overall Eurex Clearing assessment and evaluation of Banks for new currencies are based on criteria covering creditworthiness, technical and operational capabilities.</p> <p>The Payment Banks are required to provide credit lines to Eurex Clearing to ensure settlement in case of a Clearing Member default.</p>
<p><i>Key Consideration 3</i></p> <p><i>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.</i></p>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) is authorised as a central counterparty (CCP) under EMIR and therefore is fully compliant with the requirements of EMIR as well as the associated technical and implementing standards. The regulation requires a CCP to measure daily the liquidity risk generated by the default of at least the two clearing members to which it has the largest exposure. Eurex Clearing monitors this requirement through a Management Information System (MIS).</p> <p>In order to assess and monitor commercial settlement banks Eurex Clearing uses qualitative factors and quantitative factors. Qualitative factors include the operating environment, market position, business model and transparency aspects. Quantitative factors include aspects of liquidity, capitalisation, asset quality and profitability. After the initial assessment the fulfilment of the criteria is monitored regularly.</p> <p>Eurex Clearing has a Framework in place whose objective it is to ensure adequate controls over credit risk arising from Eurex Clearing activities. Thereby, Eurex Clearing takes into account its overall credit risk exposures to individual counterparties from different types of relationships the counterparties may have with Eurex Clearing to monitor the exposures. To maintain the credit risk exposure within acceptable parameters, credit exposure limits can be set at the counterparty level. Exposures to connected counterparties are treated in consolidated way. General thresholds are defined based on the rating of the counterparty. Review of the credit limits is undertaken at least yearly or on demand.</p> <p>Also, as a result of its clearing business, Eurex Clearing's liquidity risk management is based on an analysis of the settlement and funding flows of the clearing process.</p> <p>For the major clearing currencies Euro and Swiss Francs central bank access is being granted. For currencies without access to central bank money, Eurex Clearing conducts settlement using commercial bank money.</p> <p>Settlement bank accounts per currency are monitored throughout the day. Cash inflows to the account are intended to be placed on a secured basis via reverse repo transactions backed with high quality collateral. As a result, this concept does not foresee significant unsecured overnight exposures. In order to avoid undue risk concentration in a currency, Eurex Clearing regularly monitors settlement volumes</p>

	<p>in each currency.</p> <p>Furthermore, as outlined in Principle 7 the Liquidity Risk Management Framework foresees coverage of multiple relationships that an entity may have with Eurex Clearing. Relevant relationships that shall be captured by the Liquidity Risk Management Framework are for example: Clearing Member, settlement bank, group of companies belonging to the same legal entity.</p> <p>The Management Information System (MIS) includes all exposures towards a defaulting Clearing Member (CM) in all relevant relationships with Eurex Clearing, i.e. as Clearing Member, settlement bank or nostro agent.</p> <p>In that respect a settlement bank is a bank that a Clearing Member uses to perform securities settlement. The liquidity risk is calculated by adding all liquidity risks of the Clearing Members using that particular settlement bank in the respective market, applying netting between the Clearing Members using that settlement bank.</p> <p>A nostro agent is a bank that Eurex Clearing holds a cash account with to perform CCP settlement. The associated liquidity risk is the positive end-of-day account balance held at the nostro agent.</p>
<p><i>Key Consideration 4</i></p> <p><i>If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) does not conduct any money settlement on its own books.</p> <p>For Euro and Swiss Francs Eurex Clearing conducts money settlement in central bank money. GBP and USD are being settled in commercial bank money.</p>
<p><i>Key Consideration 5</i></p> <p><i>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 participants to manage credit and liquidity risks.</i></p>	
<p>Summary narrative</p>	<p>Legal agreements with settlement banks are in place and the laws of the relevant jurisdictions support the provisions of transfers and finality (Settlement Finality Directive, German Insolvency Law (InsO, Section 116)).</p> <p>Eurex Clearing AG (Eurex Clearing) has various contracts with payment banks in place to ensure the cash settlement.</p> <p>Eurex Clearing's timing for debit and credit instructions differs per currency, acknowledging the business hours of the involved payment location. Credit instructions always take place on the same day. The general approach requires debit instructions to be met prior to releasing credit instructions, except Japanese Yen (JPY) being exempt from this requirement due to time difference. The credit instructions generally take place shortly after the debit instructions are met, e.g.</p>



within one hour for EUR, CHF, GBP and USD.

Eurex Clearing’s timing for debit and credit instructions looks as follows:

	Debit instructions released	Debit instructions met	Credit instructions released
<b>Euro</b>	Around 06:00 CET	07:00 CET same day	Around 08:00 CET (after confirmation that debit instructions are met)
<b>CHF</b>	Around 06:00 CET	07:00 CET same day	Around 08:00 CET (after confirmation that debit instructions are met)
<b>GBP</b>	Around 06:00 CET	09:00 CET same day	Around 09:10 CET (after confirmation that debit instructions are met)
<b>USD</b>	Around 06:00 CET	08:00 CET same day	Around 08:10 CET (after confirmation that debit instructions are met)
<b>JPY</b>	Around 07:00 CET (after FXYCS system is closed)	08:00 CET the following day due to time difference	15:30 CET on same day as debit instructions (before the confirmation that debit instructions are met)
<b>KRW</b>	Around 03:10 CET	07:00 CET (08:00 CEST) same day	07:00 CET (08:00 CET CEST) same day (after confirmation that debit instructions are met)

Figure 9: Eurex Clearing’s timetable for debit and credit instructions

**Assessment of principle:**

*Observed*

**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.*

*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.*

**Summary narrative**

Physical Delivery as mentioned in Principle 10 concerns the delivery of an asset, such as an instrument or a commodity, in physical form. For example, the settlement of futures contracts cleared by a central counterparty may allow or require the physical delivery of an underlying financial instrument or commodity.

*“Examples of physical instruments that may be covered under this principle [10] include securities, commercial paper, and other debt instruments that are issued in*

	<p><i>paper form.” (p. 70, 2012 CPSS IOSCO PFMI)</i></p> <p>In its Clearing Conditions, Eurex Clearing AG (Eurex Clearing) also mentions physical deliveries. Eurex Clearing's assumption is that deliveries of "physical" instruments in this context are to be understood as deliveries of securities held in book-entry form (immobilised or dematerialised) and delivery obligations are fulfilled via book transfer. One example can be found in Chapter II, Part 2, Number 2.7.1 of the Clearing Conditions:</p> <p><i>“(2) In case of Share Futures contracts to be fulfilled by physical delivery (Number 1.6.2 Paragraph 2 of the Contract Specifications for Futures Contracts and Options Contracts at Eurex Deutschland and Eurex Zürich), physical deliveries and payments are made directly between the Clearing Members and Eurex Clearing AG on the third Business Day after the last trading day (Number 1.6.2 Paragraph 1 of the Contract Specifications for Futures Contracts and Options Contracts at Eurex Deutschland and Eurex Zürich).</i></p> <p><i>The physical deliveries are made via a Settlement Location and the payment is made via the account defined by the respective Settlement Location.</i></p> <p><i>All Clearing Members shall ensure their ability to deliver and pay by having adequate positions in the deposit of the respective Settlement Location and credit on the according cash accounts.”</i></p> <p>The CPSS IOSCO PFMI however explicitly exclude these deliveries as being physical in the sense of Principle 10:</p> <p><i>“Immobilised and dematerialised securities, which represent the normal market practice, are covered in Principle 11 on CSDs.”</i></p> <p>Even in the case of the "Xetra Gold bond", where the physical delivery of gold is a possibility, Eurex Clearing does not itself ensure the physical delivery. It is Clearstream Banking Frankfurt (CBF), a Deutsche Börse subsidiary that stores the gold in its vault. The physical gold is supplied, monitored and processed by industry partner Umicore AG &amp; Co. KG. Nonetheless, the safe custody of the gold reserves at Clearstream meets high security standards and saves investors the costs of transporting and physically storing the gold. Private investors can obtain the underlying gold in physical form from their bank if desired.</p> <p>This means, that physical deliveries as mentioned by Principle 10 are not performed by Eurex Clearing. Therefore, Eurex Clearing deems Principle 10 as not applicable.</p>
<b>Assessment of principle:</b>	<i>Observed</i>

**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.*

**Summary narrative**

Eurex Clearing AG (Eurex Clearing) itself is not an exchange-of-value settlement system. However, Eurex Clearing has mechanisms in place that ensure the elimination of principal risk.

Eurex Clearing as a central counterparty (CCP) enters into the trade and becomes the buyer for the seller and the seller to the buyer. The seller needs to deliver the securities to the CCP and the CCP delivers the securities to the buyer. The process is supported by a delivery-versus-payment/receipt-versus-payment (DvP/RvP) settlement eliminating principal risk as stated in the Clearing Conditions. The booking is performed end of day independent of the chosen Central Securities Depository (CSD). The use of these mechanisms ensures that principal risk is eliminated. These settlement mechanisms are based on standard (SWIFT) message types, which ensure the timely and appropriate documentation for the availability of both securities and cash at the same time.

The final settlement of corresponding transactions based on linked obligations is ensured because Eurex Clearing issues delivery instructions in the delivery-versus-payment (DvP) mode. In order to get accepted any settlement institution has to meet Eurex Clearing's prerequisites. Selected settlement institutions are equipped with the technical capabilities to fully and timely receive Eurex Clearing's instructions and to accordingly perform the delivery of securities versus payment. At all times Eurex Clearing requires that all settlement institutions must have such an essential mechanism installed. All CSDs to which Eurex Clearing instructs a delivery-versus-payment (DvP) mode have been verified to be able to process DvP instructions. The Clearing Conditions provide the adequate legal framework in Chapter I, Part 1, Number 1.4.2 (Settlement of Transactions in Securities). Furthermore, the Clearing Members provide Eurex Clearing with the appropriate power of attorney and so authorises Eurex Clearing to give delivery instructions in order to facilitate the settlement of the obligations.

Owing to the fact that Eurex Clearing must continue operating and fulfilling its contractual obligations to non-defaulting participants on schedule all financial transactions are subject to margin (please see Principle 6 for further details on margining) until their settlement has been achieved.

Eurex Clearing offers both gross and net settlement options to its members.

	<p>Members can mark transactions either for gross or for net processing. This functionality is available for both sell and buy transactions. Transactions can be marked by a gross flag for gross processing either by default or on a single transactions basis providing the members with further flexibility. Transactions marked for gross processing are therefore not considered in the settlement netting process.</p>
<p><b>Assessment of principle:</b> <i>Observed</i></p>	

**Principle 13: Participant-default rules and procedures**

<p><b><i>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.</i></b></p>	
<p><i>Key Consideration 1</i></p> <p><i>An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing guarantees the fulfilment of every transaction in every market for which services are provided. To ensure this, a multi-level security system is set up, called “Lines of Defence” or “Default Waterfall”. While the mainstay of this safety system is the margin which Clearing Members have deposited as collateral for open positions, the Lines of Defence consist of several additional layers of safety nets. In the event of a default, these layers are applied in the order that is outlined in the diagram below. The order in which the Lines of Defence are utilised is documented in the Clearing Conditions Chapter.</p> <p>In case of a Clearing Member’s default, all proprietary positions held in the Clearing Member’s proprietary accounts will be liquidated by Eurex Clearing, in line with its default management procedures. With respect to client positions, Eurex Clearing supports porting wherever possible. All client positions are segregated at Eurex Clearing, either individually or as part of an Omnibus Client Pool. Individual segregation is available for Non-Clearing Members and Registered Customers, who enter into a Clearing Agreement with Eurex Clearing and their respective Clearing Member. An individually segregated Non-Clearing Member / Registered Customer can choose (i) to directly port its positions and collateral to a non-defaulted back-up Clearing Member, (ii) to become a Clearing Member itself for a limited period of 5 days (to find a replacement Clearing Member to whom it can port), or (iii) for Eurex Clearing to liquidate its positions. In the Elementary Clearing Model (ECM) and the Net Omnibus Clearing Model (NOCM), client porting is only possible if all clients within a respective Omnibus Client Pool jointly agree to be transferred to one non-defaulted replacement Clearing Member, and such replacement Clearing Member accepts all clients and their respective positions within the Omnibus Client Pool. In</p>

	<p>an Omnibus Clearing Model, the possibility for a client to become a temporary Clearing Member itself does not exist.</p> <p>Moreover, non-defaulting participants will participate in Default Management Committees which are established in accordance with the DMC Rules with respect to one or more groups of abstract transactions cleared pursuant to the Clearing Conditions and relating to one or more transaction types or parts thereof, as determined and published in accordance with the Clearing Conditions. Each DMC constitutes an internal Advisory Committee of Eurex Clearing (but not an independent legal person) and its members are subject to Eurex Clearing’s direction rights.</p> <p>Eurex Clearing has the right to convene a meeting of one or more DMCs upon the occurrence of a Termination Event or Insolvency Termination Event or to obtain advice on any DMC matters as deemed appropriate by Eurex Clearing.</p> <p>Each DMC will advise and make proposals to Eurex Clearing with respect to the relevant DMC Matters. However, Eurex Clearing shall at all times maintain the ultimate decision on whether and under what terms and conditions the DMC proposals are implemented or not.</p> <p>Further non-defaulting members are required to participate in aforementioned auctions and have to replenish the Clearing Fund two times (so called assessments) in case the posted margin and Clearing Fund contribution of the defaulted member as well as Eurex Clearings own contribution to the Clearing Fund are not sufficient to cover losses associated with the default.</p> <p>Eurex Clearing has robust default rules that have demonstrated to be effective in significant clearing participant insolvencies.</p>
<p><i>Key Consideration 2</i></p> <p><i>An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.</i></p>	
<p>Summary narrative</p>	<p>The purpose of default procedures is to protect the continuing functioning of Eurex Clearing AG (Eurex Clearing) by limiting the potential for the effects of a default to spread beyond the defaulting participant. Key objectives of default procedures include minimizing further losses at the defaulting participant, allowing for client porting wherever possible, winding down its positions in an orderly way, enabling the CCP to continue performing its obligations and preserving other participants’ and users’ ability to manage their portfolios.</p> <p>The Default Management Process (DMP) will be conducted on liquidation group level. Liquidation groups compile products which can be liquidated jointly at the same point in time. The following briefly describes key components of the DMP, which comes into effect for remaining positions now maintained by Eurex Clearing:</p>

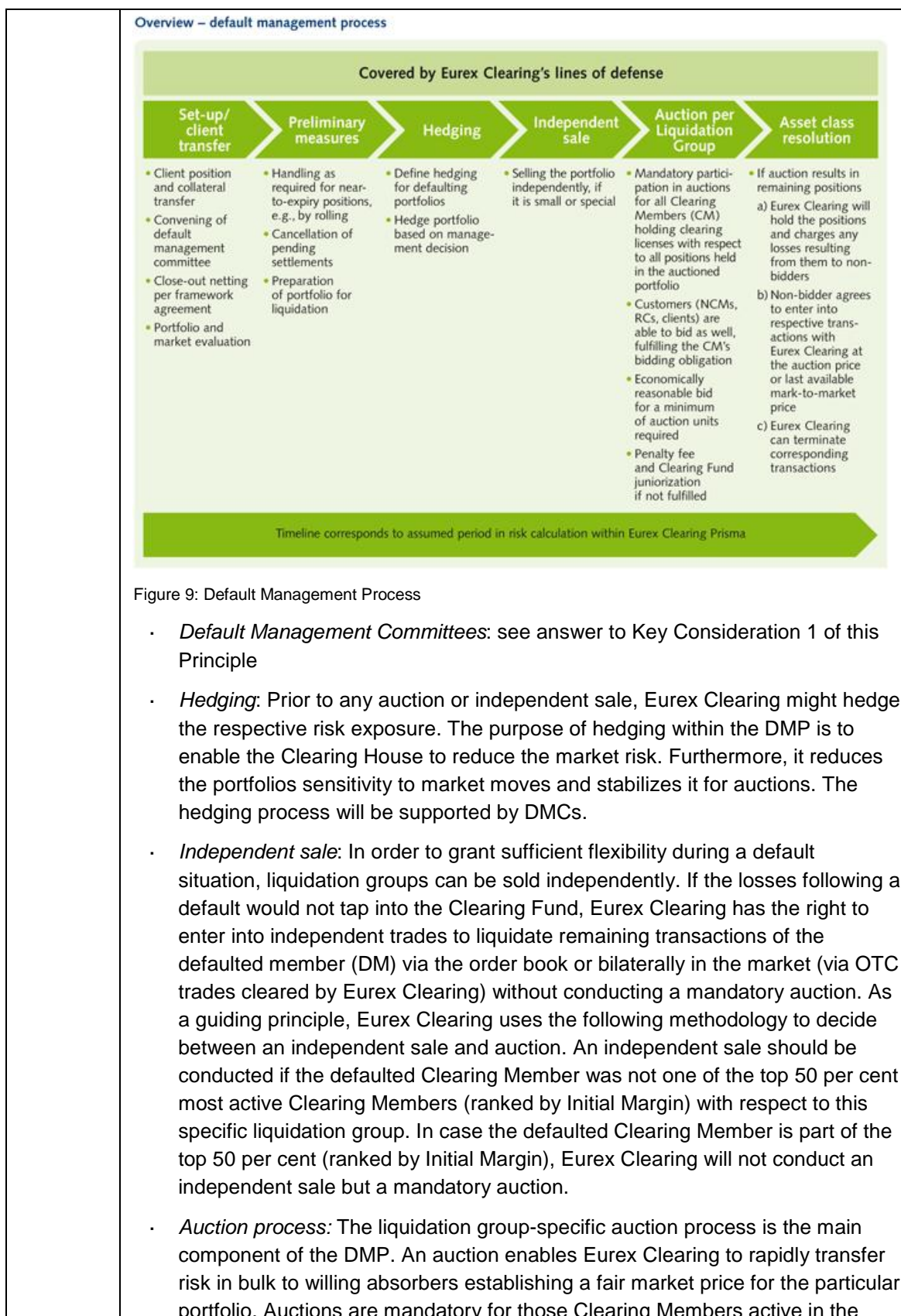


Figure 9: Default Management Process

- **Default Management Committees:** see answer to Key Consideration 1 of this Principle
- **Hedging:** Prior to any auction or independent sale, Eurex Clearing might hedge the respective risk exposure. The purpose of hedging within the DMP is to enable the Clearing House to reduce the market risk. Furthermore, it reduces the portfolios sensitivity to market moves and stabilizes it for auctions. The hedging process will be supported by DMCs.
- **Independent sale:** In order to grant sufficient flexibility during a default situation, liquidation groups can be sold independently. If the losses following a default would not tap into the Clearing Fund, Eurex Clearing has the right to enter into independent trades to liquidate remaining transactions of the defaulted member (DM) via the order book or bilaterally in the market (via OTC trades cleared by Eurex Clearing) without conducting a mandatory auction. As a guiding principle, Eurex Clearing uses the following methodology to decide between an independent sale and auction. An independent sale should be conducted if the defaulted Clearing Member was not one of the top 50 per cent most active Clearing Members (ranked by Initial Margin) with respect to this specific liquidation group. In case the defaulted Clearing Member is part of the top 50 per cent (ranked by Initial Margin), Eurex Clearing will not conduct an independent sale but a mandatory auction.
- **Auction process:** The liquidation group-specific auction process is the main component of the DMP. An auction enables Eurex Clearing to rapidly transfer risk in bulk to willing absorbers establishing a fair market price for the particular portfolio. Auctions are mandatory for those Clearing Members active in the

	<p>liquidation group affected by the default.</p> <ul style="list-style-type: none"> <li>· <i>Asset Class Resolution</i>: If an auction fails, Eurex Clearing provides all non-defaulted Clearing Members with a last look opportunity, i.e. a final opportunity to enter into respective transactions with Eurex Clearing. If the last look is unsuccessful, Eurex Clearing has the right to terminate transactions with non-defaulted Clearing Members, to ultimately rebalance itself. If an auction is only partly successful, Eurex Clearing ensures that any remaining risk is covered by those Clearing Members who failed to comply with their bidding obligation in the relevant auction.</li> </ul> <p>The event of a Clearing Member’s default is assumed to be highly correlated to market stress and may be subject to further endogenous disruptions of the market. Given the impossibility of predicting the nature of future crises and potential defaults, the DMP is designed to be sufficiently flexible to take different default scenarios into account.</p> <p>Eurex Clearing conducts regular default simulations to ensure the best level of preparation for any default situation among its Clearing Members. Clearing Members are obliged to support Eurex Clearing when any such simulation takes place. Upon request of Eurex Clearing, each Clearing Member active in the respective liquidation group needs to be able to act as a potential counterparty for hedging positions and shall support testing of the auction process. Hence, Eurex Clearing ensures that members have the necessary procedures and infrastructure in place to provide prices during a real default. Eurex Clearing conducts at least one default simulations per year which will be announced in advance by Eurex Clearing.</p>
<p><i>Key Consideration 3</i></p> <p><i>An FMI should publicly disclose key aspects of its default rules and procedures.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) publicly discloses key aspects of its default procedure which can be found on the Eurex Clearing website as they are part of the Clearing Conditions.</p>
<p><i>Key Consideration 4</i></p> <p><i>An FMI should involve its participants 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.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) simulates member defaults in various liquidation groups and convenes the Default Management Committees (DMCs for the respective groups). Each DMC consists of representatives of Clearing Members with sufficient trading and risk expertise in products belonging to the respective liquidation group(s) for which the DMC is convened. They assist Eurex Clearing with regards to any relevant matter of the default management process, especially hedging and auctioning. The DMCs will be convened in case of a Clearing Member default situation and for regular default simulations.</p>

**Assessment of principle:***Observed***Principle 14: Segregation and portability**

***A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.***

*Key Consideration 1*

*A CCP should, at a minimum, have segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.*

**Summary narrative**

Eurex Clearing AG (Eurex Clearing) offers a comprehensive service that complies with the regulatory initiatives and also effectively meets the requirements for Client Asset Protection. Stepwise Eurex Clearing established a comprehensive legal framework to set market standards enabling segregation and portability of positions and collaterals of clients at Clearing Members as well as to comply with European and national regulatory prerequisites for the protection of these client assets.

Client Asset Protection ensures highest protection by providing segregation and timely portability. Clients will have the option as to how their positions and margin collateral is held and posted by their Clearing Member at Eurex Clearing, depending on each individual client's needs.

Eurex Clearing offers additional protection to customers to protect their positions and collateral against the concurrent default of the Clearing Member and a fellow customer by offering the Individual Clearing Model (ICM).

The ICM is an individual client segregation model within the meaning of Article 39(3) EMIR. It provides for the segregation of client-related positions of the Clearing Member with respect to each Non-Clearing Members (NCM) and Registered Customers (RC) that is an ICM Client.

ICM Clients neither bear the risk of losses relating to proprietary transactions of their Clearing Member nor the risk of losses relating to other client-related transactions of the Clearing Member.

The contractual rights and obligations of a Clearing Member towards Eurex Clearing with respect to a certain ICM Client are legally segregated from all other rights and obligations between such Clearing Member and Eurex Clearing. This is ensured by an allocation of the respective positions to a separate standard agreement per ICM Client, the ICM Standard Agreement. Accordingly, one separate ICM Standard Agreement per ICM Client exists between the Clearing Member and Eurex Clearing.



The occurrence of a Termination Event with respect to a Clearing Member will, at the election of the ICM Client, initiate a porting process by which the ICM Client positions are re-established with (and the corresponding margin is re-dedicated to) a new Clearing Member. Porting may either occur following an Interim Participation of the ICM Client in a direct clearing capacity or, subject to certain further conditions, immediately with a replacement Clearing Member. If the ICM Client chooses not to port or if the conditions for an Interim Participation or an immediate re-establishment are not met within the applicable cut-off times, a close-out netting will take place.

If close-out netting occurs, all payment and delivery obligations under the ICM Standard Agreement between Eurex Clearing and the Clearing Member, including any Redelivery Claims in respect of margin, will be combined into a separate Difference Claim. At the same time, close-out netting will occur between the Clearing Member and the ICM Client and result in a separate Difference Claim between those parties.

The close-out netting is processed between Eurex Clearing and the Clearing Member and equally between Clearing Member and NCM/RC as described in the following illustration.



Figure 10: Eurex Clearing's close-out netting process

The Clearing Member grants certain security interests for the benefit of the ICM Client over its Difference Claim against Eurex Clearing under the ICM Standard Agreement. The purpose of such security interests is to secure the Difference Claim of the ICM Client against the Clearing Member under their corresponding ICM Standard Agreement.

Eurex Clearing has implemented detailed measures to ensure a smooth processing of the above explained options. Detailed information can be found in the information memorandum "Client Asset Protection - Client Porting in the Individual Clearing Model (ICM)", available on Eurex Clearing's website.

In the illustration below the different combinations of Eurex Clearing's customer relationships with the Clearing Members and their clients are structured. For example a Clearing Member domiciled in the EU may offer the Individual Clearing Model to the NCM or RC that is also registered in the EU without any constraints. Hence, the assets of the NCM or RC are fully protected and can be ported in the event of a default of a Clearing Member.

CM jurisdiction		NCM/RC jurisdiction		
		EU	EEA	Non-EU <sup>2,3</sup>
EU <sup>1</sup>		Permitted	Permitted	Permitted
Non-EU	Switzerland	ICM modified	ICM modified	ICM modified
	Singapore			

<sup>1</sup> Eurex Clearing offers the Individual Clearing Model (ICM) to all Clearing Member jurisdictions within the European Union in which clearing services are currently offered: Austria, Belgium, Denmark, England/Wales, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Malta, Netherlands, Portugal, Scotland, Spain and Sweden.

<sup>2</sup> For listed business jurisdictions other than Australia, Bermuda, British Virgin Islands, Canada, Cayman Islands, Gibraltar, Guernsey, Hong Kong, Israel, Japan, Mauritius, Singapore, South Korea, Switzerland, Taiwan, Turkey, UAE, USA, please contact your Key Account Manager for further clarification.

<sup>3</sup> For off-book business jurisdictions other than Cayman Islands and Switzerland please contact your Key Account Manager for further clarification.

Figure 11: Different combinations of customer relationships with Clearing Members

Furthermore, Eurex Clearing offers the ICM to all Clearing Member jurisdictions (as of December 2014) within the European Union in which clearing services are currently offered: Austria, Belgium, Denmark, England/Wales, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Malta, Netherlands, Portugal, Scotland, Spain and Sweden.

For listed business jurisdictions other than Australia, Bermuda, British Virgin Islands, Canada, Cayman Islands, Gibraltar, Guernsey, Hong Kong, Israel, Japan, Mauritius, Singapore, South Korea, Switzerland, Taiwan, Turkey, UAE, USA and for off-book business jurisdictions other than Cayman Islands and Switzerland further participation requirements may arise during application process of a Clearing Member, NCM or RC.

In the illustration below the different combinations of Eurex Clearing's customer relationships with the Clearing Members and their clients are structured. For example a Clearing Member domiciled in the EU may offer the Elementary Clearing Model (ECM) to the NCM or RC that is also registered in the EU without any constraints. Hence, the assets of the NCM or RC are fully protected and can be ported in the event of a default of a Clearing Member.

CM jurisdiction		NCM/RC jurisdiction		
		EU	EEA	Non-EU <sup>2,3</sup>
EU <sup>1</sup>		Permitted	Permitted	Permitted
Non-EU	Switzerland	Permitted <sup>4</sup>	Permitted <sup>4</sup>	Permitted <sup>4</sup>
	Singapore	Permitted <sup>4</sup>	Permitted <sup>4</sup>	Permitted <sup>4</sup>

<sup>1</sup> Eurex Clearing offers the Elementary Clearing Model (ECM) to all Clearing Member jurisdictions within the European Union in which clearing services are currently offered: Austria, Belgium, Denmark, England/Wales, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Malta, Netherlands, Portugal, Scotland, Spain and Sweden.

<sup>2</sup> For listed business jurisdictions other than Australia, Bermuda, British Virgin Islands, Canada, Cayman Islands, Gibraltar, Guernsey, Hong Kong, Israel, Japan, Mauritius, Singapore, South Korea, Switzerland, Taiwan, Turkey, UAE, USA, please contact your Key Account Manager for further clarification.

<sup>3</sup> For off-book business jurisdictions other than Cayman Islands and Switzerland please contact your Key Account Manager for further clarification.

<sup>4</sup> Porting mechanism currently does not apply.

Figure 12: Different combinations of customer relationships with Clearing Members and their clients

Furthermore, Eurex Clearing offers the ECM to all Clearing Member jurisdictions (as of December 2014) within the European Union in which clearing services are currently offered: Austria, Belgium, Denmark, England/Wales, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Malta, Netherlands, Portugal,

Scotland, Spain and Sweden.

For listed business jurisdictions other than Australia, Bermuda, British Virgin Islands, Canada, Cayman Islands, Gibraltar, Guernsey, Hong Kong, Israel, Japan, Mauritius, Singapore, South Korea, Switzerland, Taiwan, Turkey, UAE, USA and for off-book business jurisdictions other than Cayman Islands and Switzerland further participation requirements may arise during application process of a Clearing Member, NCM or RC.

However, the porting mechanism currently does not apply for Clearing Members registered in jurisdictions of Singapore and Switzerland.

Concluding the figure below provides an overview of all levels of Client Asset Protection models.

Eurex Clearing Model	EMIR	Solution	Market scope
Elementary Clearing Model (ECM)	Omnibus client segregation	Asset Based Allocation Method: Collateral of the CM and its clients will be held separate from each other on CSD level. The Clearing Member may opt to set-up a maximum of five omnibus collateral pools.  Value Based Allocation Method: Collateral of the CM and its clients are segregated on clearing house level.	Across all markets cleared
UK CASS compliant Net Omnibus Clearing Model	Omnibus client segregation	Ensures CASS compliance by holding collateral of the CM and its clients separate from each other on CSD level. The Clearing Member may opt to set-up a maximum of five omnibus collateral pools.	Eurex Exchange, IRS
Individual Clearing Model (ICM)	Individual client segregation*	Individually segregated NCMs	Eurex Exchange, Eurex Bonds, Eurex Repo, Frankfurt Stock Exchange, Irish Stock Exchange
		Individually segregated RCs	Eurex Exchange, EurexOTC Clear for IRS
		Individually segregated funds/ flexible account structure	EurexOTC Clear for IRS

Figure 13: Overview of Eurex Clearing’s Client Asset Protection models

Also, Eurex Clearing’s Omnibus (ECM) and Individual Segregation (ICM) models were adapted to offer them to Clearing Members and customers located outside the European Union as well. The strict requirements in the European Market Infrastructure Regulation (EMIR, see also answer to KC 2) for Omnibus or Individual Segregation of clients’ positions and assets is obligatory for central counterparties (CCPs) and Clearing Members located within the EU, however these EMIR requirements and the related legal framework that ensures the validity of the segregation arrangements may not be mirrored in all non-EU jurisdictions. Therefore, Eurex Clearing offers a modified form of its Omnibus and Individual Segregation models to non-EU Clearing Members in jurisdictions where local law might interfere with its standard Clearing Models. Therefore, Eurex Clearing introduced a modified Clearing Model in November 2014.

In case of any changes to the Clearing Models a prior consultation phase ensures the adequate participation of affected customers. For essential modifications of the Client Asset Protection models an advice of the Eurex Clearing Risk Committee is sought beforehand as well.

Main features	Individual Clearing Model	UK CASS compliant Net Omnibus Clearing Model	Elementary Clearing Model
<b>Clients</b>	Clients are disclosed to Eurex Clearing.	Clients are not disclosed to Eurex Clearing, but apply for segregation with their CMs. Clients can also be NCMs.	Clients can be undisclosed in the Agency account or NCMs/RCs.
<b>Legal agreement</b>	<ul style="list-style-type: none"> <li>• Tripartite agreement for ICM (Eurex Clearing – CM – NCM/RC).</li> <li>• In case of ICM for funds (flexible account structure): Segregation applies on individual fund level.</li> </ul>	<ul style="list-style-type: none"> <li>• Agreement on CM level with client(s) required.</li> <li>• Separate framework agreement between Eurex Clearing and CM.</li> </ul>	<ul style="list-style-type: none"> <li>• Agreement on CM level with client(s) required.</li> <li>• NCM/RC (for EurexOTC Clear) to conclude a tripartite agreement for ECM.</li> </ul>
<b>Legal structure/provision of collateral</b>	Double title transfer.	Title transfer of cash and a pledge of non-cash collateral to Eurex Clearing.	Collateral is allocated as proprietary or client collateral. Title transfer of cash and pledge of non-cash collateral to Eurex Clearing.
<b>Portability</b>	Full portability of positions and collateral; Upon fulfillment of prerequisites: 1) Interim Participation (NCM/RC) or 2) Immediate transfer via re-establishment under a new solvent CM.	Portability is available if all clients of an omnibus collateral pool agree to be ported to the same new Clearing Member and if the Clearing Member accepts to take over the respective omnibus collateral pool.	Available if all clients of an omnibus collateral pool agree to be ported to the same new Clearing Member and if the Clearing Member accepts to take over the respective omnibus collateral pool.
<b>Protection</b>	Maximum protection of positions and collateral for clients under a robust legal construct.	The UK CASS omnibus net collateral is protected at the CCP level.	CMs provide collateral to cover client and proprietary positions. Omnibus net collateral is protected at CCP level.
<b>General set-up</b>	<ul style="list-style-type: none"> <li>• Positions and collateral held on individual segregated accounts.</li> <li>• The margin requirement of a segregated client is covered by a dedicated collateral pool, which only holds collateral for the purpose of this client.</li> <li>• Collateral is segregated from the proprietary collateral of the CM.</li> <li>• The securities collateral account remains within the account structure of the CM from an operational perspective and is clearly labelled to hold collateral for the purpose of the segregated client.</li> <li>• Cash collateral is paid from the account of the CM. There is a unique identifier indicating the respective client displayed on the reports.</li> </ul>	<ul style="list-style-type: none"> <li>• Positions and collateral held on UK CASS omnibus net account.</li> <li>• Collateral is designated to a specific omnibus collateral pool.</li> <li>• Overall Eurex Clearing margin requirement in the Net Omnibus Clearing Model is calculated on a net basis for each omnibus collateral pool and covered by one dedicated collateral pool or via asset tagging.</li> </ul>	<ul style="list-style-type: none"> <li>• Collateral is allocated to proprietary and client positions.</li> <li>• Collateral is held for the group of clients constituting an omnibus collateral pool, i.e. cannot be assigned to individual clients.</li> <li>• CM can choose between two technical alternatives: value based allocation or asset based allocation.</li> <li>• In both alternatives, the securities will remain within the account structure of the CM.</li> </ul>
<b>System access for the client</b>	NCM: Full access required RC: Optional access, but Common Report Engine mandatory.	NCM: Full access required	NCM: Full access required

Figure 14: Main features of Eurex Clearing’s Client Asset Protection models

The Individual Clearing Model (ICM) offers the segregation of individual clients and ensures portability of clients’ positions. In this model each client’s positions and collateral are segregated from the Clearing Member and from other clients’ positions and collateral. The Clearing Member can create Collateral Pools for each client either with multiple accounts at the Central Security Depository (CSD) or using asset tagging.

The transfer of collateral is based on a double Title Transfer, which supports the porting mechanism in case of a default.

Porting under any Omnibus Clearing Model structure (Net Omnibus Clearing Model and Elementary Clearing Model) is possible only if all clients in the same Net Omnibus Client Collateral Pool or in the same Elementary Clearing Model Client Collateral Pool port to a single replacement Clearing Member (Transferee Clearing Member) and Eurex Clearing receives this confirmation by the close of the porting period. If a Termination Event has occurred, the porting period runs from the occurrence of the Termination Event until (and including) 13.00 CET on the immediately following business day.

Porting will be offered if Eurex Clearing has determined based on legal circumstances in the jurisdiction where the defaulted CM is domiciled that the porting mechanism is applicable. The Net Omnibus Clearing Model is in addition to

	<p>compliance with EMIR also compliant with the UK Client Asset Sourcebook (CASS rules), and therefore an attractive choice for UK-based Clearing Members.</p> <p>Eurex Clearing verifies the enforceability of each of its Clearing Models, including the arrangements to protect and transfer the positions and collateral related to customers of a Clearing Member, for each jurisdiction from which Clearing Members are admitted on the basis of comprehensive legal opinions from leading well reputed law firms in the relevant jurisdictions.</p>
<p><i>Key Consideration 2</i></p> <p><i>A CCP should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer accounts or in omnibus customer accounts.</i></p>	
Summary narrative	<p>According to Article 39 EMIR, Eurex Clearing AG (Eurex Clearing) as a central counterparty (CCP) keeps separate records and accounts that shall enable to distinguish in accounts with the CCP the assets and positions held for the account of one Clearing Member from the assets and positions held for the account of any other Clearing Member and from its own assets.</p> <p>Therefore, Eurex Clearing establishes and maintains accounts for each Clearing Member (CM Account), in which transactions, cash amounts and margins (i.e. collateral in various forms) of such Clearing Member are recorded. Clearing Members are provided with reports reflecting the account status on a daily basis.</p> <p>The assets and positions of one Clearing Member will not be recorded in a CM Account dedicated to another Clearing Member. Eurex Clearing's own assets will not be recorded in CM Accounts.</p> <p>The netting of positions related to different Clearing Members and therefore recorded in different CM Accounts is legally not possible under German law as the debtor and the creditor in such scenario would not be identical (see Section 387 of the German Civil Code (Bürgerliches Gesetzbuch, BGB)).</p> <p>The assets covering the positions recorded in one CM Account are not exposed to losses connected to positions recorded in another CM Account. Legally this is ensured through respective provisions regarding the security purpose of the provided margin.</p> <p>The information memoranda for Individual Clearing Model (ICM) and Elementary Clearing Model (ECM) provide a detailed overview of the account structure of each segregation model, which Eurex Clearing offers. Details on the segregation models can also be found in the Clearing Conditions in Chapter 1.</p> <p>The parties to a Standard Agreement are required to provide Elementary Proprietary Margin, Elementary Omnibus Margin, Segregated Margin or Net Omnibus Margin as applicable.</p> <p>The applicable margin requirement consists of the sum of all relevant margin requirements separately calculated by Eurex Clearing in accordance with the relevant applicable Margin Methodology subject to and in accordance with the relevant segregation model.</p>

	<p>Eurex Clearing determines separate margin requirements and requires the delivery of separate cover in respect of margin for each ICM Standard Agreement. The amount of required margin is calculated in line with the general Margin Calculation Methods set out in the General Clearing Conditions. Whenever the Clearing Member is subject to a Margin Call by Eurex Clearing under an ICM Standard Agreement, the Clearing Member is required to provide cover in an amount not less than the Default Margin Requirement. Cover provided by the Clearing Member in excess of the Default Margin Requirement will also form part of the segregated margin held for the account of the ICM Client. The Clearing Member is required to request equivalent cover from its ICM Client. All payments and deliveries by the Clearing Member to Eurex Clearing in respect of margin are made on the basis of a full Title Transfer. The Clearing Member is obliged to promptly forward any margin assets received from either the ICM Client or Eurex Clearing with respect to a specific ICM Standard Agreement in the same amount to the respective other party under the corresponding ICM Standard Agreement.</p> <p>The different types of margin requirements are defined in Chapter I of the Clearing Conditions: Current Liquidation Margin, Premium Margin, Spread Margin, Additional Margin and Initial Margin.</p> <p>Asset segregation for individual customers is achieved by a Transfer Title Mechanism, where the NCM/RC either directly or via its Clearing Member passes through collateral to Eurex Clearing. The Dedicated Amount of collateral for the ICM clients are mapped to corresponding Collateral Pools in the system of Eurex Clearing. In addition positions of ICM clients are held on segregated accounts at the clearing house level. By constantly monitoring the systems Eurex Clearing ensures access to the information.</p>
	<p><i>Key Consideration 3</i></p> <p><i>A CCP should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.</i></p>
Summary narrative	<p>After a Termination Event or Insolvency Event occurs the Clearing Members' transactions shall be suspended and / or terminated. Eurex Clearing AG (Eurex Clearing) however does not transfer positions and collateral directly. In accordance with German Insolvency Code (Section 104), Eurex Clearing closes out the positions and then re-opens them at the same price with an alternative participant when additional prerequisites are fulfilled. This achieves porting, in accordance with domestic law.</p> <p>Portability, essentially, depends on the level of segregation chosen by the client and information available on CCP side.</p> <p>The replacement of Clearing Members is outlined in the Clearing Conditions regarding the Elementary Clearing Model in Chapter I, Part 2, Number 9 and for the Individual Clearing Model in Chapter I, Part 3, Subpart B Number 7.</p> <p>Furthermore, the different Clearing Models are described in Key Consideration 1 of this Principle and a detailed description of the respective porting procedures is</p>

	published in information memoranda on Eurex Clearing's website.
<i>Key Consideration 4</i> <i>A CCP should disclose its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the CCP should disclose whether customer collateral is protected on an individual or omnibus basis. In addition, a CCP should disclose any constraints, such as legal or operational constraints, that may impair its ability to segregate or port a participant's customers' positions and related collateral.</i>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) published on its website the EMIR Disclosure Document that sets out the information required to be disclosed under Article 39 (7) EMIR. It provides a summary description of each of the three Clearing Models currently offered by Eurex Clearing, including information on the main legal implications of the respective levels of segregation and applicable insolvency law.</p> <p>In addition, on the Eurex Clearing website the Clearing Conditions are publically available. These contain the rules and regulations as well as Model Clearing Agreements.</p> <p>The abovementioned document as well as the website further specifies that Eurex Clearing does not charge costs that specifically relate to the use of a certain Clearing Model. Instead the price list of Eurex Clearing applies. This price list is also publically available via the Eurex Clearing website.</p>
<b>Assessment of principle:</b> <i>Observed</i>	

**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.*

**Summary narrative**

As a central counterparty clearing house (CCP) authorised under EMIR, Eurex Clearing AG (Eurex Clearing) has a sound framework for the comprehensive management of all material risks. In that regard Eurex Clearing has established documented policies, procedures and systems to identify, monitor and manage such risks.

Eurex Clearing takes great care to mitigate risk and ensures that appropriate measures are taken to avoid and reduce or intentionally take on risk. The aim is to make use of suitable safeguards and control measures such as guidelines and procedures, the segregation of functions, the principle of dual control, limit restrictions and also business continuity management to reduce the probability, frequency and level of potential losses from the corresponding risk cases for Eurex Clearing.

The Executive Board of Eurex Clearing is responsible for the company's risk management system. Specialized departments identify risks and report them in a timely manner to the Chief Risk Officer.

Eurex Clearing uses a standardised approach – value-at-risk (VaR) – for measuring and reporting all risks. The aim of this concept is to create a comprehensive overview of general risk tolerance and to facilitate the prioritisation of risk measures.

Eurex Clearing calculates risk-bearing capacity as its main risk management tool. It uses VaR to calculate its required economic capital (EC). It calculates its EC at a confidence level of 99.98 per cent and compares it to its risk-bearing capacity in order to be able to cover financially even extreme events in the next twelve months. Eurex Clearing uses the equity on its balance sheet as the risk-bearing capacity for its economic capital. For control purposes, Eurex Clearing regularly calculates the ratio of EC to risk-bearing capacity, or "utilisation of risk-bearing capacity", as an indicator.

Eurex Clearing disposes of a Risk Strategy which is based upon Eurex Clearing's business strategy and regulates the extent of risk taken within the various business activities carried out by Eurex Clearing. The Risk Strategy determines conditions for risk management, control and limitation. Eurex Clearing pays considerable attention



	<p>to its risk mitigation process and ensures that appropriate measures are taken to avoid, reduce and transfer or intentionally accept risk. It is defined that the appropriateness of the risk management and controlling systems is to be validated continuously.</p> <p>The Risk Strategy differentiates between four major risk types that are managed and controlled with distinct methods. These risk types are<sup>7</sup>:</p> <ul style="list-style-type: none"><li>· financial risk,</li><li>· operational risk</li><li>· project risk</li><li>· and business risk</li></ul>
	<p><i>Key Consideration 2</i></p> <p><i>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.</i></p>
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) is an authorised central counterparty (CCP) under EMIR. Article 16 EMIR and corresponding EBA technical standards<sup>8</sup>, demand a specific capital base for CCPs. Capital consists of capital, retained earnings and reserves. EMIR and EBA technical standards define deductions to be taken into account when defining the capital base:</p> <ul style="list-style-type: none"><li>· Dedicated own resources to the default fund, according to Article 43 EMIR, cannot be considered as own funds, including contributions to the default fund which are beyond the minimum requirements and therefore paid-in voluntarily.</li><li>· Further, own funds which are not invested in line with Article 47 EMIR do not qualify as own funds under EMIR and EBA technical standards.</li></ul> <p>The EBA technical standards demand own funds for winding down/restructuring, operational/legal risk, credit risk, counterparty risk, market risk and business risk. On top of that, Article 1 paragraph 3 EBA technical standards set a notification threshold in case capital is lower than 110per cent of minimum capital required. In case the notification threshold is breached a notification is made to the competent national authority.</p> <p>According to Article 1 paragraph 2 EBA technical standards a CCP shall have procedures in place to identify all sources of risks that may impact its ongoing</p>

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<sup>7</sup> For details please refer to Principle 3

<sup>8</sup> Delegated Regulation (EU) No 152/2013 of 19 December 2012 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on capital requirements for central counterparties (EBA technical standards)

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	<p>functions and shall consider the likelihood of potential adverse effects on its revenues or expenses and its level of capital. To fulfil Article 1 paragraph 2 EBA technical standards, Eurex Clearing identifies all sources of risk that may impact its ongoing functions. To this end, all potential losses must be identified in good time, captured centrally, assessed (i.e. quantified in financial terms as far as possible), reported to the Executive Board together with recommendations, and controlled.</p> <p>When determining the time period necessary for winding down or restructuring Eurex Clearing takes into account whether the services of Eurex Clearing have to be closed/terminated (wind down) or whether a continuing of the business is still feasible (recovery). The decision about which strategy to take (winding down or recovery) depends on the situation at hand. Whereas in the vast majority of cases a recovery would be the most feasible solution, a winding down always serves as last solution. In addition, the decision whether a wind down or recovery shall be triggered might not be immediately possible. It might be the case that an initiated restructuring process fails and a wind down would become necessary. For both cases Eurex Clearing has documented procedures and policies in place. Next to the Recovery Plan which was established in cooperation with the German Financial Supervisory Authority procedures for a wind-down are approved.</p>
	<p><i>Key Consideration 3</i></p> <p><i>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 participant 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.</i></p>
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) prepared a Recovery Plan following the legal requirement stipulated in the Act on Ringfencing and Recovery and Resolution Planning for Credit Institutions and Financial Groups (“Gesetz zur Abschirmung von Risiken und zur Planung der Sanierung und Abwicklung von Kreditinstituten und Finanzgruppen”) which itself entails the “Key Attributes of Effective Resolution Regimes for Financial Institutions” by the Financial Stability Board from October 2011 and is in compliance with § 47 German Banking Act (KWG). The detailed content and structure of the Recovery Plan is based on the consultation document regarding the “draft of minimum requirements for the design of recovery plans” (Mindestanforderungen an die Ausgestaltung von Sanierungsplänen: MaSan draft) published by German Federal Financial Supervisory Authority (BaFin) as of November 2012. The main goal of the plan is to identify recovery options that strengthen the financial and operational robustness of Eurex Clearing in potential stress situations.</p> <p>As an authorised central counterparty (CCP) under EMIR, Eurex Clearing is obliged to have sufficient own funds for a winding down or the recovery of its own business. Therefore an appropriate time period for winding down / the recovery of its own business was estimated. For that purpose Eurex Clearing determined documentation outlining how a recovery or an orderly wind down can be achieved.</p>

	<p>Eurex Clearing's capital base for winding down / recovery is calculated according to Article 2 paragraph 1 EBA technical standards. According to Article 2 paragraph 2 EBA technical standards, the winding down / restructuring period of Eurex Clearing is no longer than 6 months. Nevertheless, for calculation of capital requirements, the minimum of 6 months as winding down / restructuring period, defined in Article 2 paragraph 2 EBA technical standards, are set.</p> <p>The recovery and wind-down documentation will be reviewed regularly. Within the review it will be verified if the time periods expected are still valid.</p>
<p><i>Key Consideration 4</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>As outlined in Key Consideration 3 of this Principle, Eurex Clearing AG (Eurex Clearing) manages its general business risk and holds sufficient liquid resources to cover potential business losses.</p> <p>Eurex Clearing will only invest in cash or in highly liquid financial instruments with minimal market and credit risk that are capable of being liquidated rapidly with minimal adverse price effect.</p> <p>As a principle, the own funds of Eurex Clearing shall be invested applying the same mechanisms as the placement of Clearing Member funds. Eurex Clearing may invest part of its own funds through direct securities purchases in correspondence to the criteria and limits as mentioned in Eurex Clearing's Investment Policy.</p>
<p><i>Key Consideration 5</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>Eurex Frankfurt AG (Eurex Frankfurt) which is the 100 per cent parent of Eurex Clearing AG (Eurex Clearing) can increase Eurex Clearing's equity through a payment into Eurex Clearing's capital reserve. In case Eurex Clearing needs to raise additional equity, the Eurex Clearing Executive Board will address the Eurex Frankfurt Executive Board. As Eurex Clearing and Eurex Frankfurt are stock corporations formed and incorporated under German law equity can only be raised pursuant to the German Companies Act (AktG).</p> <p>In addition, agreements and decisions of the Executive Board of Eurex Clearing and the Supervisory Board of Eurex Clearing and Eurex Frankfurt are necessary. The German Supervisory Authorities are notified on the capital increase as well.</p> <p>Furthermore, Eurex Clearing established triggers to monitor its capital needs. Approved predefined measures are in place to increase capital.</p>
<p><b>Assessment of principle:</b></p> <p><i>Observed</i></p>	

**Principle 16: Custody and investment risks**

***An FMI should safeguard its own and its participants' 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 Consideration 1*

*An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.*

Summary narrative

Eurex Clearing AG (Eurex Clearing) applies strict criteria and principles when selecting collateral locations in order to protect its own and its participant's assets.

A main criterion in selecting a collateral location is the designation of a collateral location as operator of a regulated Securities Settlement System (SSS), ideally with access to the European System of Central Bank (ESCB) facilities.

Based on these selection criteria and principles, Eurex Clearing deposits financial instruments posted by the Clearing Members with the Securities Settlement Systems Clearstream Banking AG, Frankfurt/Germany (CBF) and Clearstream Banking S.A., Luxembourg (CBL) – both notified according to Article 10 of the Settlement Finality Directive (98/26/EC), as well as with SIX SIS Ltd., Zurich/Switzerland, which is the operator of one of the systemically important payment and settlement systems (SECOM) in Switzerland and as such is overseen by the Swiss National Bank (SNB). SIX SIS Ltd. is licensed as bank by the Swiss Financial Market Supervisory Authority (FINMA) and therefore has to comply with the respective regulatory requirements, which together ensures the full protection of the financial instruments.

CBF, CBL and SIX SIS are market infrastructure providers which have prudential requirements to ensure availability of their systems.

In general, Eurex Clearing distinguishes three types of collateral requirements which are to be collateralised:

- the complete margin requirement, solely determined by the Clearing Members' risk exposures resulting from their clearing activities
- the shortfall in required own funds / equivalent regulatory capital
- the complete contributions to the clearing fund

Eurex Clearing accepts securities (bonds and equities) and cash as collateral.

The Clearing Members need efficient allocation of the securities eligible collateral, either through a dedicated securities settlement and position holding on specific accounts, or through exposure management via tri-party collateral management services.

The services to be provided by a non-cash collateral location comprise safe

keeping, collateral eligibility checks and valuation, restricted access to and protection of the assets posted in favour of the clearing house, as well as custody (incl. tax) processing and supporting Eurex Clearing's models based on the legal concepts of pledge or transfer of title. Especially for any event of a default / bankruptcy Eurex Clearing requires legal certainty in terms of first ranking access rights including collateral portability in each respective jurisdiction of the involved parties.

Hence, the range of services must be provided fulfilling regulatory, legal and contractual requirements, in addition to functional, operational and technical requirements.

Cash collateral should preferably be provided in central bank money due to the finality of bookings within a protected payment system. Hence, the access to central bank liquidity mitigates counterparty, liquidity and credit risk. Eurex Clearing accepts four currencies as cash collateral; these are EUR and CHF in central bank money, and USD and GBP in commercial bank money at payment banks. Each payment bank is required to meet specified criteria to get connected to the clearing house and will be regularly assessed against creditworthiness and reliability.

Member cash deposits are placed to the extent possible through highly secured arrangements with authorised financial institutions or, alternatively, with central banks.

Robustness and soundness of the collateral location's accounting practices, administration and operation incl. safekeeping facilities are ensured during the verification process of the respective selection criteria as well as by the regular assessment of Eurex Clearing's processes with the connected collateral location or payment bank.

Eurex Clearing's and its participant's assets are always protected, i.e. in the event of a participant's default, irrespective of the legal concept (pledge or transfer of title). Eurex Clearing has legal certainty regarding the home country jurisdiction of the Clearing Member and of the location where the collateral is held, in connection with the German jurisdiction applying to Eurex Clearing.

In addition, Eurex Clearing offers both omnibus and individual segregation to Clearing Members and clients at the collateral location CBF. Safety and efficiency are key principles of the models, as well as flexibility in terms of available position and collateral account set-ups. Whilst the securities collateral of a segregated NCM / Registered Customer is legally owned by Eurex Clearing, each clearing model serves different levels of protection:

- Individual Clearing Model: Individual Segregated Accounts
- Elementary Clearing Model: Multiple / Standard Omnibus Segregated Accounts (incl. CASS Net Omnibus Segregated Accounts)

For further details on client asset protection please see Principle 14 and please refer to Eurex Clearing's website on the link <http://www.eurexclearing.com/clearing-en/risk-management/client-asset-protection>.

**Key Consideration 2**

*An FMI should have prompt access to its assets and the assets provided by participants, when required.*

**Summary narrative**

Eurex Clearing AG (Eurex Clearing) ensures a sound legal basis by legal analyses and opinions through legal counsels based on dedicated legislation (e.g. Financial Collateral Directive, Custody Act of CSD) and laws (e.g. the German Insolvency Code (InsO)). The legal certainties include the foreign insolvency laws, i.e. home country jurisdictions of non-German Clearing Members as well as of each location where the collateral is held, in connection with the German jurisdiction of Eurex Clearing.

Accordingly, the regulations provide an appropriate legal environment to ensure access not only in normal cases, but as well as in the case of a Clearing Member's insolvency in order to liquidate the collateral.

Hence, Eurex Clearing has prompt access to the financial instruments when required. I.e. Eurex Clearing has first ranking in terms of legal rights and immediate access to the posted collateral of any type at any time.

Regardless of the collateral type, in case of a participant's insolvency or default, Eurex Clearing must have first ranking in terms of legal rights and immediate access to the collateral at any time, either pledged by the Clearing Members in favour of Eurex Clearing, or transferred by the Non-Clearing Members or Registered Customers to Eurex Clearing. Therefore, legal certainty regarding the jurisdiction, in particular the insolvency procedures in the country where the participant is domiciled and regarding the location in the country where the collateral is held in favour of Eurex Clearing, must be obtained.

Security collateral is to be pledged in favour of Eurex Clearing in a dedicated securities account within the respective collateral location (operators of security settlement systems). As an optional service for the Clearing Member's client, collateral can also be posted via transfer of title in segregated accounts to be protected against the Clearing Member's default or insolvency. The standard service for Clearing Member's clients is to pledge securities using omnibus segregation. Thereby positions and collateral will be separated from the Clearing Member's proprietary positions and will be held in a segregated omnibus client account. Therefore, when Eurex Clearing deposits assets with third parties, the participants' securities are held in dedicated accounts allowing for a separate identification of the assets belonging to Eurex Clearing and the assets belonging to that third party.

The enforceable rights of appropriation of Eurex Clearing with regard to the securities held at a CSD are explicitly described in the Clearing Conditions of Eurex Clearing.

Currently Eurex Clearing is not connected with a collateral location in another time zone than Central European Time (CET).

**Key Consideration 3**

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*An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.*

Summary narrative	<p>For securities collateral Eurex Clearing AG (Eurex Clearing) exclusively uses operators of Securities Settlement Systems which are under prudent regulation and supervision. Custodian banks are currently not connected in order to provide exposure management services.</p> <p>For cash collateral the access to central bank liquidity is preferred; this is applicable for EUR and CHF. Commercial bank money (USD and GBP) is only accepted via selected payment banks that fulfil the requirements set by Eurex Clearing.</p> <p>For the purpose of investments of own liquidity and received cash collateral Eurex Clearing has established relationships with a variety of counterparts to avoid concentration risk and considering placement limits. The assessment of counterparts takes into account both the creditworthiness of market counterparts as well as the total exposure towards counterparties in order to avoid any concentration of credit risk.</p> <p>Eurex Clearing takes into account its overall credit risk exposures to individual counterparties from different types of relationships the counterparties may have with Eurex Clearing. Credit exposure limits are in place to maintain the credit risk within acceptable parameters. Furthermore, consistent reporting is in place to monitor Eurex Clearing exposures.</p>
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*Key Consideration 4*

*An FMI’s investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, 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.*

Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) maintains a Treasury Policy which was approved by the Eurex Clearing Executive Board.</p> <p>The Treasury Policy outlines the objectives and general conditions of the treasury management of Eurex Clearing. Specifically, the investment of Clearing Members’ cash collaterals and Eurex Clearing’s own funds are outlined, as well as the approved instruments and constraints of treasury management. The primary goal of treasury management is to ensure Eurex Clearing’s ability to satisfy payment obligations at all times as well as minimising counterparty risk in placements. In order to safeguard the clearing house and its Clearing Members, Eurex Clearing follows a restrictive investment policy for cash deposits. Therefore, Eurex Clearing will only invest in cash or in highly liquid financial instruments with minimal market and credit risk that</p> <ol style="list-style-type: none"> <li>1) are capable of being liquidated rapidly with minimal adverse price effect and</li> <li>2) can quickly be pledged to the Central Bank to obtain liquidity.</li> </ol> <p>Eurex Clearing places cash on a secured basis via reverse repo transactions to the largest extent possible. Not less than 95 per cent of available cash that is not placed</p>
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	<p>with a central bank shall be collateralised with highly liquid financial instruments meeting all requirements of Article 45 of the Regulation No 648/2012 of the European Parliament and of the Council in conjunction with Annex II of the Commission’s Delegated Regulation No 153/2013.</p> <p>Strict eligibility criteria for securities eligible as collateral under the reverse repo transactions are therefore stipulated in the Treasury Policy. Eligible securities need at least carry an external rating of AA- (S&amp;P / Fitch) / Aa3 (Moody’s). Only well rated, highly liquid financial instruments, bearing minimal credit and market risk are eligible as collateral. Additionally, since securities need to be issued or guaranteed by central or regional governments, central banks, multilateral development banks (e.g. IBRD, EBRD, EIF, EIB), the European Financial Stability Fund (EFSF) or the European Stability Mechanism (ESM).</p> <p>As a principle, the own funds of Eurex Clearing are invested applying similar security mechanisms as the placement of Clearing Members’ funds, preferring reverse repos. In accordance with Regulation No 648/2012, Eurex Clearing does not invest participants’ assets in the participants’ own securities or those of its affiliates.</p>
<p><b>Assessment of principle:</b></p> <p><i>Observed</i></p>	

**Principle 17: Operational risk**

<p><b><i>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 fulfilment of the FMI’s obligations, including in the event of a wide-scale or major disruption.</i></b></p>	
<p><i>Key Consideration 1</i></p> <p><i>An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) takes great care to mitigate risk and ensures that appropriate measures are taken to avoid, reduce and transfer – or intentionally take on – risk.</p> <p>As a central counterparty clearing house authorised under EMIR Eurex Clearing has a sound framework for the comprehensive management of all material risks. Eurex Clearing has established documented policies, procedures and systems to identify monitor and manage such risks. The Risk Management Framework is coordinated by a central risk management function under the supervision of Eurex Clearing’s Chief Risk Officer reporting to the Eurex Clearing Executive Board. Adequate monitoring is ensured through the quarterly Risk Report to the Eurex</p>



	<p>Clearing Executive Board and a yearly operational risk review.</p> <p>Eurex Clearing's Risk Management Framework differentiates between four major risk types that are managed and controlled with distinct methods. These risk types are financial risk, operational risk, project risk and business risk. Operational risk is defined as the risk of loss resulting from inadequate or defective systems and internal processes, from human or technical failure, from inadequate or defective external processes and from legal risks.</p> <p>The established risk management process covers the following five key phases: Risk Identification, Risk Notification, Risk Assessment, Risk Control and Risk Reporting.</p> <p>In addition, Eurex Clearing, together with Deutsche Börse Group (DBG), has implemented a group-wide incident and crisis management process and Eurex Clearing's business continuity plan will support a co-ordinated and rapid reaction to incidents in a controlled and effective manner.</p> <p>Eurex Clearing's Business Continuity Plan is integrated into the overall Risk Management Framework. It comprises information, guidelines and procedures, including the loss of IT, workspace and staff — in order to maintain the continuity of critical services. Eurex Clearing's business continuity arrangements are tested on a regular basis and in a comprehensive manner.</p> <p>In the risk analyses based on the Business Continuity Management Plan, Eurex Clearing takes into consideration external links and interdependencies within the financial infrastructure and functions or services which have been outsourced to third-party providers.</p> <p>Eurex Clearing currently uses scenario based risk analysis as part of the operational risk process, aligned with the Deutsche Börse Group's overall risk management framework into which Eurex Clearing's risk processes are embedded. The scenario risk analysis includes, for example, disruption of clearing systems caused by hardware, network, software or even terrorist attack; disruption of services from external providers, including utilities services; internal human errors and omissions related to calculation of settlement prices and delivery of securities. The results of the scenario risk analysis are assessed and taken into account during the regular reviews of the Eurex Clearing Business Continuity Management Plan.</p> <p>Furthermore, in accordance to Section 25a German Banking Act and Sections AT 5 and AT 6 of the "Minimum Requirements for Risk Management Rules" (MaRisk) issued by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, "BaFin") Eurex Clearing defined and maintains standards and work flows for documentation, procedures and policies. The standards are regularly audited by Internal Audit as well as external auditors.</p> <p>As far as Operational Risk is concerned, the key preventive measures consist in strong internal control processes, which are performed and documented in the framework of the ISAE 3402 certification, and ongoing initiatives to further reduce errors and omissions.</p>
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	<p>Eurex Clearing ensures that employees and their deputies have the knowledge and experience required by their duties, competencies and responsibilities. Suitable measures are taken to ensure that the employees have the appropriate qualifications. In addition, the employees have the opportunity for further education and training to maintain their qualification.</p> <p>With respect to fraud prevention Eurex Clearing applies the anti-fraud guideline of DBAG. The guideline intends to prevent so-called fraud within DBAG in order to guarantee the protection of Group assets. To prevent fraud, all employees must comply with the established rules of conduct, and suitable, group-wide structures are maintained.</p> <p>Eurex Clearing has processes for Change Management in place that can cover changes to hardware, system software, 'live' applications software, and all documentation or procedures that are relevant to the running, support and maintenance of live systems, excluding Development.</p>
	<p><i>Key Consideration 2</i></p> <p><i>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.</i></p>
Summary narrative	<p>The Executive Board of Eurex Clearing is responsible for the company's Risk Management Framework. Eurex Clearing disposes of a Risk Strategy as part of the Risk Management Framework that is based upon Eurex Clearing's business strategy and regulates the extent of risk taken within the various business activities carried out by Eurex Clearing. The Executive Board ensures that the Risk Strategy is integrated into the business activities throughout Eurex Clearing entirely and that adequate measures are in place to implement the strategies, policies and procedures.</p> <p>Risks are openly and fully reported to the responsible level of management. The responsible management body is informed fully and timely about Eurex Clearing's risk profile and relevant risks.</p> <p>In addition, Eurex Clearing is included in the group-wide risk management process of Deutsche Börse. The Deutsche Börse Group Risk Management Policy stipulates that the relevant boards and committees are timely and consistently informed about material risks - whether existing or potential - and the related risk control measures in order to take appropriate action. Adequate quality standards are established and reviewed on an ongoing basis.</p> <p>The risk management function at Eurex Clearing is performed by the CCP Risk Management department which develops and maintains operational risk procedures for new and existing clearing services.</p> <p>A timely, complete and reliable risk management constitutes a general risk principle of the Eurex Clearing Risk Management Framework. The operational risk aspects as well as other risk categories are taken into account with adequate quality standards. The Risk Management Framework is reviewed on an ongoing basis by</p>

	<p>the Eurex Clearing Executive Board.</p> <p>In addition, consistent with BT 2.1 of the “Minimum Requirements for Risk Management Rules” (MaRisk) issued by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, “BaFin”) the risk based internal audit plan covers all relevant aspects of the central counterparty including the risk management processes and control mechanisms. Audits are planned on a yearly basis for areas assessed. Independent audit opinions on the appropriateness of the risk control and risk management functions are given. The Internal Audit Plan is prepared annually, based on a three year audit cycle derived from a risk-based methodology. Also, the Audit and Risk Committee addresses risk matters, inter alia advises the Supervisory Board on the institution’s current and future risk appetite and Risk Strategy and examines whether the incentives provided by the remuneration system take into account the risk, capital and liquidity structure of Eurex Clearing.</p> <p>Eurex Clearing conducts annually workspace and staff unavailability tests during business hours, relevant external parties are implicitly involved. Additionally, Eurex Clearing involves Clearing Members, external providers and relevant institutions with which interdependencies have been identified in the Business Continuity Management (BCM) Plans in the testing process.</p>
<p><i>Key Consideration 3</i></p> <p><i>An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.</i></p>	
<p>Summary narrative</p>	<p>Timely, complete and reliable risk management is one of the general risk principles at Eurex Clearing AG (Eurex Clearing). Risk management is an elementary component of the management and the control of Eurex Clearing and the affiliated companies. Effective and efficient risk management is fundamental to protecting Eurex Clearing’s and its stakeholder’s interests. It enables Eurex Clearing to achieve its corporate goals and safeguards its continued existence. The established Risk Management Framework provides complete, timely and consistent information about risk. The framework enables Eurex Clearing to identify, notify, assess, control and report risk appropriately. Adequate quality standards are established and reviewed on an ongoing basis.</p> <p>Eurex Clearing calculates risk-bearing capacity as its main risk management tool. It uses VaR to calculate its required economic capital (EC). It calculates its EC at a confidence level of 99.98 per cent and compares it to its risk-bearing capacity in order to be able to cover financially even extreme events in the next twelve months. Eurex Clearing uses the equity on its balance sheet as the risk-bearing capacity for its economic capital. For control purposes, Eurex Clearing regularly calculates the ratio of EC to risk-bearing capacity, or “utilisation of risk-bearing capacity”, as an indicator.</p> <p>The results of the VaR calculation are entered into a reporting system. Reporting includes both a quantification of risks but also qualitative information. The reporting of risks to the Executive Board of Eurex Clearing is carried out quarterly as well as ad-hoc if necessary. The Supervisory Board of Eurex Clearing receives quarterly</p>

	<p>reports.</p> <p>Furthermore, Eurex Clearing strives to provide products and services with utmost reliability and thus gives the highest importance to the resilience of its business to safeguard it against incidents. Eurex Clearing aims to continue to operate under adverse conditions or in the face of unexpected events or disasters.</p> <p>Therefore, functions which are indispensable for the critical daily operations in view of the above objectives are defined as mission critical and must be resumed within a Recovery Time Objective (RTO) of 2 hours following a disruptive incident, crisis or disaster. The RTO is the time period following a disruptive incident within which products, services or activities must be resumed or resources must be recovered.</p> <p>Consequently, Eurex Clearing implements and maintains effective and efficient business continuity plans designed to minimise the impact of unavailability of the key resources, i.e. information (electronic or other), IT systems and networks, workspace and facilities, staff, suppliers and other external dependencies. Thereby Eurex Clearing adopts industry standard best practices in line with its needs and regulatory requirements.</p> <p>The business continuity plans specify how services, processes and resources will be reinstated to a predetermined level within pre-defined time scales after an incident or disaster. To ensure that Eurex Clearing is able to respond to an incident in rapid, controlled and effective manner, an incident and crisis management process is in place for the timely detection, escalation and assessment of incidents and the prompt activation of the business continuity plans.</p> <p>Business continuity plans are used, tested or exercised regularly in the most realistic way to ensure their effectiveness and viability and in order to provide assurance that a real incident could be successfully managed.</p>
<p><i>Key Consideration 4</i></p> <p><i>An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.</i></p>	
<p>Summary narrative</p>	<p>Information technology systems used by Eurex Clearing AG (Eurex Clearing) are secure and have an availability rate of 100 per cent over the last 12 months, proving their reliability. The systems are capable of processing the necessary information to perform the activities and operations in a safe and efficient manner. System documentation on the information technology architecture is available and redundant system architecture with failover functions are placed to ensure Eurex Clearing is scalable and can deal with operational needs and the risks faced, even in stressed market conditions. Additionally, regularly tested business continuity measures are in place. To assess the need for introducing new technology including clear reversion plans, Eurex Clearing monitors system performance constantly. Reports of this monitoring are provided to the management regularly.</p> <p>Stringent testing is performed for each change to the system and changes are simulated in a separate technical environment including involvement of participants, vendors and other affected parties. Additionally a permanent simulation</p>

	<p>environment is operated for testing.</p> <p>Transaction volumes on Eurex Clearing's core systems are constantly monitored if they are within a defined overall capacity target and reported to responsible Executive Board members. If necessary, the capacity target is adjusted and an increase of system capacity is initiated to meet the new capacity target.</p>
<p><i>Key Consideration 5</i></p> <p><i>An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.</i></p>	
Summary narrative	<p>The geographical position of Germany, and thus the location of Frankfurt, does not expose the Deutsche Börse Group (DBG) or its data centres to any potential large scale physical vulnerabilities. A risk assessment containing a Security Controls Questionnaire is completed including any potential physical vulnerability. The construction and technical safety provisions in place adequately and reliably protect the data centres against the few environmental hazards that are to be expected in central Europe.</p> <p>Eurex Clearing AG (Eurex Clearing) currently uses scenario based risk analysis as part of the operational risk process, as defined in the Deutsche Börse Group's overall Risk Management Framework. The scenario risk analysis includes, for example, disruption of clearing systems caused by hardware, network, software or even terrorist attack; disruption of services from external providers, including utilities services; internal human errors and omissions related to calculation of settlement prices and delivery of securities. The results of the scenario risk analysis are assessed by Business Continuity Management function and taken into account during the regular reviews of the Eurex Clearing Business Continuity Management Plan. The scenario analysis is reviewed annually. The results of the reviews are reported to the Eurex Clearing Executive Board.</p> <p>Based on increased protection needs of a data centre Deutsche Börse Group documents the data centre specific security and safety standards and requirements (PSSDC).</p> <p>The overall Business Continuity Management Framework ensures that Eurex Clearing secures the functioning and timely recovery of its crucial systems and processes in case of a disaster or emergency event.</p> <p>Also, Eurex Clearing has a robust information security framework in place to manage the information security risk.</p>
<p><i>Key Consideration 6</i></p> <p><i>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.</i></p>	

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Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) together with Deutsche Börse Group (DBG) has implemented a group-wide incident and crisis management process. Eurex Clearing's business continuity plan supports a co-ordinated and rapid reaction to incidents in a controlled and effective manner. That way, Eurex Clearing minimises business and market impact to facilitate a return to normal activity as soon as possible.</p> <p>Eurex Clearing's business continuity plan is integrated into the overall Risk Management Framework. It comprises information, guidelines and procedures, including the loss of IT, workspace and staff — in order to maintain the continuity of critical services. The business continuity plan includes a Recovery Time Objective (RTO) to ensure that critical services, processes and resources are recovered in time before Eurex Clearing is impacted beyond tolerable limits. The DBG group-wide BCM Policy and the Eurex Clearing BCM Plan prescribes a maximum RTO of 2 hours as an objective for all mission critical functions.</p> <p>Eurex Clearing's business continuity arrangements are tested on a regular basis and in a comprehensive manner.</p>
<p><i>Key Consideration 7</i></p> <p><i>An FMI should identify, monitor, and manage the risks that key participants, 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.</i></p>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) has identified several potential operational risks that could be caused by key participants, service and utility providers. The potential risks are monitored and also considered within the operational risk scenarios of Eurex Clearing.</p> <p>Eurex Clearing has implemented a business continuity management (BCM) plan which is integrated into the overall BCM of Deutsche Börse AG.</p> <p>The Eurex Clearing BCM plan also contains a requirement to take into account external links and interdependencies within the financial infrastructure and critical functions or services which have been outsourced to third-party providers.</p> <p>The proper interconnectedness of business continuity plans between outsourcing and insourcing company is already requested by the current national German framework for credit institutions. It is therefore implemented both within the business continuity framework and the outsourcing framework.</p> <p>Additionally, Eurex Clearing involves Clearing Members, external providers and relevant institutions in the financial infrastructure with which interdependencies have been identified in the BCM plans in the testing process.</p>
<p><b>Assessment of principle:</b></p> <p><i>Observed</i></p>	

**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 participants and other FMIs, based on reasonable risk-related participation requirements.*

**Summary narrative**

Eurex Clearing AG (Eurex Clearing) provides open and fair access to its services to all participants, with no limits other than risk.

In this context, Eurex Clearing has established clear and transparent admission criteria per clearing license. The admission requirements are set forth in the Clearing Conditions in Chapter I for the general prerequisites and in Chapters II following for special prerequisites for the relevant transaction type (transactions concluded at Eurex Deutschland/Zürich, Eurex Bonds, Eurex Repo, Frankfurter Wertpapierbörse, Irish Stock Exchange as well as the novation of over-the-counter transactions in interest rate swaps and securities lending).

Eurex Clearing's participation requirements are non-discriminatory, objective and do not limit access on grounds other than risk (e.g. sufficient liable equity capital, compliance with technical requirements, verification of the legal validity and enforceability of the Clearing Conditions, etc.). To ensure that this purpose is met, Eurex Clearing assesses its admission requirements continuously including market participants, Clearing Members also via the Eurex Clearing Committees (Derivatives, Cash Equity and Repo & Bonds) and the Eurex Clearing Risk Committee.

Eurex Clearing requires Clearing Members to provide evidence of sufficient financial resources and operational capacity to meet their obligations and minimise the risk towards the central counterparty.

Eurex Clearing uses a risk-based approach to determine the level of financial resources requirements that a Clearing Member needs to prove:

- Minimum liable equity capital requirements are defined and depend on the product and the type of clearing membership the new member applies for. A minimum liable equity capital requirement is defined for admission and Eurex Clearing additionally employs a dynamic component ensuring that the liable equity capital requirements are scaled to represent the risk of the individual Clearing Member. The dynamic component is calculated as a percentage of each Clearing Member's additional margin requirement.
- If Clearing Members have insufficient liable equity capital or equivalent own funds for a clearing license, Eurex Clearing may determine that the shortfall may be made up by collateral in cash and/or securities.
- Clearing Members must contribute to the Clearing Fund whereas the contribution is determined as the maximum amount out of the minimum

	<p>requirement of each Clearing Member and the requirement based on the risk exposure of a member firm. Clearing Members are required to deposit the higher of the following amounts:</p> <ul style="list-style-type: none"> <li>· A minimum amount (static component): for the General Clearing Fund (including OTC IRS): EUR 5mn for a GCM/CM or EUR 1mn for a DCM. Specific Lender License Holders (SLLH) for Securities Lending is not concerned.</li> <li>· A dynamic component based on the member’s total margin requirement across all products.</li> </ul> <p>Eurex Clearing also assesses the participants’ operational capability. Members must provide proof of the technical and functional connection, the use of appropriate technical equipment (back-office facilities) and sufficiently qualified back-office personnel.</p> <p>Eurex Clearing has established a Member Compliance Framework to assess Clearing Members’ compliance with the participation requirements set out by Eurex Clearing.</p> <p>With respect to the default management process, each Clearing Member is obliged to participate (i) in Default Management Committees (if selected to do so by Eurex Clearing in accordance with its rules), (ii) in default simulations and (iii) in auctions of a defaulted Clearing Member’s positions, with respect to all asset classes such Clearing Member is active in.</p>
<p><i>Key Consideration 2</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>The overall objective of clearing membership requirements is to admit firms which are appropriately licensed in their local jurisdiction to provide credit to customers in relation to transactions of the respective market and receive collateral in the form of cash or securities.</p> <p>The scope of the membership requirements encompasses a set of quantitative and qualitative criteria, catering for excellent credit quality, indicating the financial and operational strength of Clearing Members at the time of admission and ongoing during their membership.</p> <p>Admission criteria can be categorised according to the following criteria and requirements:</p> <ol style="list-style-type: none"> <li>1. Liable equity capital requirements</li> <li>2. Acceptable credit quality (initial and ongoing credit risk assessment)</li> <li>3. Jurisdiction &amp; regulatory oversight</li> </ol>



	<p>4. Infrastructure requirements</p> <p>5. Operational set up (Including Qualified Clearing Staff)</p> <p>6. Contribution to the Clearing Fund (a Clearing Member’s admission requires the payment to the Clearing Fund)</p> <p>Eurex Clearing offers three different types of Clearing Licenses:</p> <ol style="list-style-type: none"> <li>1. General Clearing License,</li> <li>2. Direct Clearing License and</li> <li>3. OTC Clearing License.</li> </ol> <p>General Clearing Members and OTC Clearing Members are entitled to clear own transactions, customer-related transactions as well as Non-Clearing Member-related transactions or Registered Customer-related transactions respectively. Direct Clearing Members are entitled to clear own transactions, customer-related transactions, registered customer-related transactions and only those Non-Clearing Member-related transactions referring to transactions by Non-Clearing Members, affiliated with it.</p> <p>To ensure that Clearing Members that clear transactions on behalf of their clients have necessary additional financial resources, different minimum equity capital is required per clearing membership, cleared products and markets served. The different categories are shown in the table below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No</th> <th>Product</th> <th>Market</th> <th>GCM/ CM equity required in EUR mn</th> <th>DCM equity required in EUR mn</th> <th>Credit against No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Futures/ Options</td> <td>Eurex Frankfurt/ Eurex Zürich</td> <td>50</td> <td>12.5</td> <td>7</td> </tr> <tr> <td>2</td> <td>Securities (Bonds)</td> <td>Eurex Bonds</td> <td>30</td> <td>7.5</td> <td></td> </tr> <tr> <td>3</td> <td>Securities (Repos)</td> <td>Eurex Repo</td> <td>200</td> <td>50</td> <td></td> </tr> <tr> <td>4</td> <td>Securities (Equities)</td> <td>FWB</td> <td>15</td> <td>3.75</td> <td>5, 6</td> </tr> <tr> <td>5</td> <td>Securities (IRSX)</td> <td>Irish Stock Exchange (ISE)</td> <td>15</td> <td>3.75</td> <td>4, 5</td> </tr> <tr> <td>6</td> <td>Futures/Options (EEX)</td> <td>EEX</td> <td>50</td> <td>12.5</td> <td>1</td> </tr> <tr> <td>7</td> <td>Securities Lending</td> <td>CCP Services for Securities Lending</td> <td>200</td> <td>50</td> <td></td> </tr> <tr> <td>8</td> <td>Interest Rate Derivatives</td> <td>EurexOTC Clear</td> <td>30</td> <td>-</td> <td></td> </tr> </tbody> </table> <p>Figure 15: Categories of memberships and minimum equity capital requirements</p> <p>Furthermore different minimum requirements for the Clearing Fund contribution are applicable depending on the type of clearing membership which is described in Key Consideration 1 of this Principle.</p>	No	Product	Market	GCM/ CM equity required in EUR mn	DCM equity required in EUR mn	Credit against No.	1	Futures/ Options	Eurex Frankfurt/ Eurex Zürich	50	12.5	7	2	Securities (Bonds)	Eurex Bonds	30	7.5		3	Securities (Repos)	Eurex Repo	200	50		4	Securities (Equities)	FWB	15	3.75	5, 6	5	Securities (IRSX)	Irish Stock Exchange (ISE)	15	3.75	4, 5	6	Futures/Options (EEX)	EEX	50	12.5	1	7	Securities Lending	CCP Services for Securities Lending	200	50		8	Interest Rate Derivatives	EurexOTC Clear	30	-	
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**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 participant that breaches, or no longer meets, the participation requirements.*

Summary narrative	<p>According to the Clearing Conditions Clearing Members are obliged to provide evidence of compliance with the prerequisites for a clearing license. As part of each Clearing Member admission process it is ensured that all admission requirements are fulfilled. In order to also ensure the application of the admission criteria on an ongoing basis, Clearing Members are regularly audited based on the Member Compliance Framework. This includes on-site visits as well as due diligence questionnaires as the on-site evaluation will not always cover all aspects of the audit.</p> <p>Eurex Clearing monitors the compliance of operational procedures and the adequacy of back-office staff of Clearing Members with the operational minimum standards established by its admission criteria.</p> <p>The audit process also focuses on the compliance of Clearing Members who outsource clearing, risk and/ or back-office functions. Thereby, Eurex Clearing is entitled to request further information and evidence concerning the orderly conduct of outsourced functions from the outsourcer if deemed necessary. In addition, Eurex Clearing or an independent auditor authorised by Eurex Clearing have the right to conduct on-site visits.</p> <p>More specifically, compliance of Clearing Members with financial resource requirements is monitored on a regular basis to obtain evidence of the level of their liable equity capital at admission and at least once a year. All Clearing Members are required to submit proof of liable equity capital annually by June 30 for the previous fiscal year. A minimum liable equity capital requirement is defined for admission and Eurex Clearing additionally employs a dynamic component for liable equity capital requirements. The dynamic component ensures that the liable equity capital requirements are scaled to represent the risk of the individual Clearing Member. The dynamic component is calculated as a percentage of each Clearing Member's additional margin requirement.</p> <p>The same process is applied for the Clearing Fund contribution. A minimum contribution is required and the dynamic component ensures scaling of the Clearing Fund contribution to represent the risk of the individual Clearing Member.</p> <p>The overall risk exposure of the single Clearing Member towards the clearing house is calculated regularly. Both the liable equity requirement and the Clearing Fund requirement are newly determined at the end of each calendar quarter or ad-hoc, if required. Monitoring is performed once a week for liable equity capital requirements against reported liable equity capital and collateral as well as for the Clearing Fund requirements.</p> <p>In case of irregularities detected by the standard audit activities or in case of any doubt regarding the compliance of the Clearing Member with the admission requirement Eurex Clearing applies measures like:</p> <ol style="list-style-type: none"><li>1. Spot Tests and</li><li>2. On-site audits.</li></ol> <p>According to the Clearing Conditions Eurex Clearing is entitled to request further information and evidence concerning the orderly conduct of outsourced functions</p>
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	<p>from the outsourcer.</p> <p>In case of breaches of rules discovered during the Clearing Member’s ongoing operative assessment, external assessment through the due diligence questionnaire or during on-site assessments, an escalation process is started.</p> <p>The Clearing Conditions give Eurex Clearing the right to suspend and/or terminate a license and its business relationship with that member in case the admission requirements are no longer fulfilled.</p>
<p><b>Assessment of principle:</b></p> <p><i>Observed</i></p>	

**Principle 19: Tiered participation arrangements**

<p><b><i>An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.</i></b></p>	
<p><i>Key Consideration 1</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>Based on the clearing model prevailing in Europe (i.e., the principle model in contrast to the agency model prevailing in the U.S.) Eurex Clearing AG (Eurex Clearing) enters into transactions only with its Clearing Members. Eurex Clearing does not enter into transactions with clients of a Clearing Member. Therefore, only Clearing Members are obliged to fulfil obligations resulting from cleared transactions in relation to Eurex Clearing.</p> <p>Nevertheless, Eurex Clearing has contractual relationships with its Clearing Members and certain clients of its Clearing Members. Non-Clearing Members and Registered Customers enter into tripartite agreements with their Clearing Members and Eurex Clearing. Hence, Eurex Clearing has a direct contractual relationship not only to Clearing Members, but also to Non-Clearing Members and Registered Customers. These tripartite agreements stipulate rights and obligations (including information rights and obligations) for all three parties. Based on these agreements (i) Clearing Members are for example obliged to provide certain information to Eurex Clearing related the client business of the Clearing Member and (ii) Eurex Clearing is entitled to request certain risk related information and data from Clearing Members, Non-Clearing Members and Registered Customers.</p> <p>Prior to entering into such tripartite agreements certain procedures are applied to gather relevant information also from Non-Clearing Members and Registered Customers (“know your customer” procedures).</p> <p>Eurex Clearing grants Clearing Members, Non-Clearing Members and Registered Customers technical access to its clearing system (IT system). System IDs are assigned per company. Based on this technical structure Eurex Clearing is always</p>

informed on all relevant actions and steps done by Clearing Members, Non-Clearing Members and Registered Customers in Eurex Clearing's clearing system.

In addition, Clearing Members, Non-Clearing Members and Registered Customers are obliged to record proprietary and client related transactions on dedicated accounts in Eurex Clearing's clearing system. This allows Eurex Clearing to monitor the respective risks per Clearing Member, Non-Clearing Member and Registered Customer.

Certain clients are known to the Clearing Member, but not disclosed to Eurex Clearing. Those clients do not enter into tripartite agreements with Eurex Clearing and therefore do not establish a direct contractual relationship to Eurex Clearing. Nevertheless, Clearing Members are obliged to submit certain client related information to Eurex Clearing. An important tool to monitor the risks in relation to undisclosed clients of Clearing Members is the Clearing Members' obligation to record transactions related to undisclosed clients on a dedicated account (A Account).

Eurex Clearing requires Clearing Members that clear transactions on behalf of their clients to have the necessary additional financial resources and operational capacity in place. In order to ensure that Eurex Clearing requires different minimum equity capital per Clearing Membership, cleared products and markets served. Details are provided in Principle 18.

Compliance with financial resource requirements is monitored on a regular basis and members must provide evidence of the level of their liable equity capital at admission and at least once a year.

In addition, different minimum requirements for the Clearing Fund contribution are applicable depending on the type of Clearing Membership. The Clearing Fund contribution is determined as the maximum amount out of the minimum requirement of each Clearing Member and the requirement based on the risk exposure of a member firm. At admission, a Clearing Member's minimum contribution to the Clearing Fund is as follows:

- GCM/IRS CM: EUR 5mn
- DCM: EUR 1mn

This amount increase in case the CM has higher margin requirements.

To ensure operational capacity Eurex Clearing defined operational minimum standards:

- Adequate systems and full operational support and back-up to ensure the continuity of members various linkages with Eurex Clearing
- Member's staff have appropriate experience and training
- Standards need to be established and training needs to be offered

Eurex Clearing monitors the compliance of operational procedures and the adequacy of back office staff of Clearing Members.

In order to better supervise and monitor the risk associated with Clearing Members

	<p>and their clients Eurex Clearing has established a Member Compliance Framework. The framework foresees that Eurex Clearing requests information directly from the Clearing Members to confirm compliance with the requirements in the Eurex Clearing rules and regulations and that Clearing Members are able to comply with the requirements with respect to customer business.</p> <p>Eurex Clearing takes into consideration criteria such as trading or clearing volumes, margin requirements and internal credit as an indication of potential concentrations of risk relating to the provision of services to clients.</p> <p>Also, the monitoring of Clearing Members and their client’s business is ensured by a framework which identifies, monitors and reports concentration &amp; wrong way risks that may arise out of the clearing business of Eurex Clearing. The monitoring of the concentration &amp; wrong way risk also includes the client business of a Clearing Member.</p> <p>This monitoring includes the level of exposure of a Clearing Member, the quality of the collateral pool as well as the overall trading activities. Events that are considered as concentrations of risk also be trigger events for requests for information or on-site meetings as described above.</p> <p>Furthermore, Eurex Clearing is entitled to transmit or to request from clearing and settlement institutions or independent auditors which are subject to confidentiality regulations comparable to those applicable to Eurex Clearing AG, all data and information which refer to Clearing Members, Non-Clearing Members or Registered Customers and which are necessary for the orderly conduct of the Clearing and for the fulfilment of Transactions.</p> <p>It should be noted that EMR Article 37 (3) and also paragraph 3.19.8 of the CPSS IOSCO PFMI stipulates that the responsibility for ensuring that clients comply with their obligations remains with the Clearing Member.</p> <p>Furthermore the Clearing Member is required to separately demand or provide (additional) cover in respect of daily profits or losses arising in respect of the corresponding transactions with its Non-Clearing Members, Registered Customers and/or Customers in an amount not less than the Variation Margin Requirement applicable between the Clearing Member and Eurex Clearing AG.</p>
	<p><i>Key Consideration 2</i></p> <p><i>An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.</i></p>
<p>Summary narrative</p>	<p>For Eurex Clearing AG (Eurex Clearing) main sources of material dependencies between direct and indirect participants are the ownership structure and risk concentrations between these entities.</p> <p><u>Ownership structure:</u></p> <p>In terms of ownership structure Eurex Clearing defines a material dependency as a close link. For Eurex Clearing a close link is a direct or indirect ownership or control via voting rights between two entities (which may be direct and indirect participants), in which an ownership of 50% or more of the voting rights or capital of</p>

	<p>an undertaking or a control agreement exists. All issuer identification numbers of those entities that have an ownership structure that classifies them as close link are grouped and regularly monitored. Clearing Members are not allowed to post financial instruments as collateral if those instruments were issued by an entity which is highly interlinked with the Clearing Member. Furthermore, material dependencies are considered in determining the appropriate size of Eurex Clearing's default waterfall by considering not only the default of the Clearing Members in the stress tests but also the default of all their clients. Thereby also indirect participant defaults which result in potential direct participant insolvencies are implicitly considered.</p> <p><u>Risk concentration:</u></p> <p>Eurex Clearing's monitoring of risk concentration is detailed in Key Consideration 1 of this Principle.</p>
<p><i>Key Consideration 3</i></p> <p><i>An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.</i></p>	
<p>Summary narrative</p>	<p>The general approach to monitoring and mitigating the risk of disclosed clients and undisclosed clients is outlined in Key Consideration 1 and 2 of this Principle.</p> <p>Eurex Clearing AG (Eurex Clearing) has several measures which allow for a monitoring additional to the supervision conducted by direct participants.</p> <p>Eurex Clearing's account set up and segregation models enable the identification and differentiation between direct and indirect participants' activities. Activities of Clearing Members as direct participants are reflected on the respective proprietary accounts, whereas activities of clients of Clearing Members are reflected on the agent accounts or the respective Non-Clearing Member / Registered Customers accounts. Therefore, Eurex Clearing identifies and monitors the proportion of activity that each Clearing Member conducts on behalf of its clients. The posted collateral has to be sufficient to cover the Clearing Member as well as its clients' exposure.</p> <p>In addition, as outlined above, Eurex Clearing applies concentration limits at two levels; the clearing house level and the Clearing Member level. Limits on the clearing house level are applied across every Clearing Member and their clients at Eurex Clearing. Concentration limits at the Clearing Member level apply per Clearing Member; this includes the Clearing Member's own business and the business of their clients in the Elementary Clearing Model and the UK Client Asset Sourcebook (CASS rules) compliant Net Omnibus Model.</p> <p>In the case that accounts indicate behaviors outside the typically observed standards e.g. large transaction volume or position buildup, Eurex Clearing is entitled to requests further information or on-site meetings.</p>
<p><i>Key Consideration 4</i></p>	

*An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.*

Summary narrative All established policies and procedures are reviewed annual as well as ad-hoc if necessary.

**Assessment of principle:**

*Observed*

**Principle 20: FMI links**

**An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.**

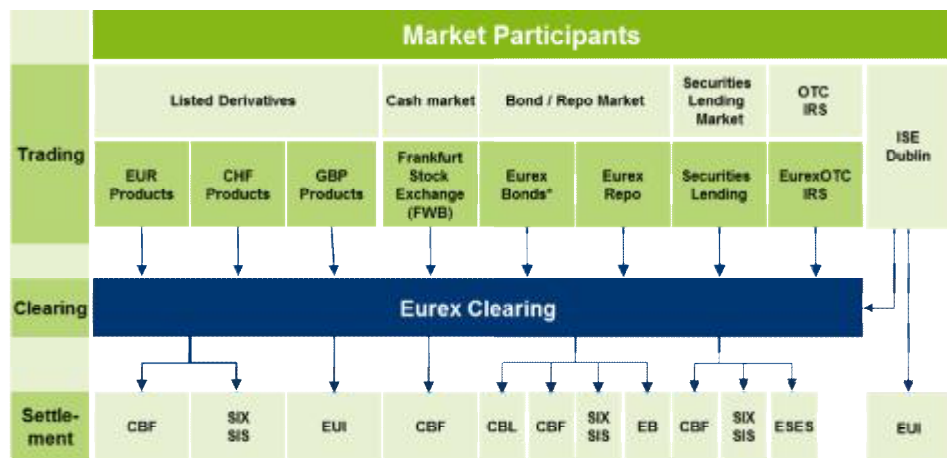
*Key Consideration 1*

*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.*

Summary narrative Eurex Clearing AG (Eurex Clearing) has links in place with Central Securities Depositories (CSD) and trade repositories. Eurex Clearing has no link in place with another central counterparty.

*Links with Central Securities Depositories (CSDs)*

The figure below gives an overview of CSDs to which Eurex Clearing is linked for ensuring the settlement of transactions.



CBF = Clearstream Banking Frankfurt; EB = Euroclear Bank; SIX SIS = SIX Securities Services;  
 CBL = Clearstream Banking Luxembourg; EUI = Euroclear UK & Ireland;  
 ESES = Euroclear Settlement for Euronext-zone Securities (currently Euroclear France, Euroclear Netherlands, Euroclear Belgium)

Figure 16: Eurex Clearing’s links with Central Securities Depositories

For further information on CSDs please refer to Principle 8 (Settlement Finality).

	<p><i>Links with trade repositories</i></p> <p>Eurex Clearing is linked to the trade repository REGIS-TR in order to fulfil the requirements stipulated in Article 9 EMIR to report all derivatives transaction. The link to the European trade repository REGIS-TR is properly set up and does not pose any material risk to Eurex Clearing. REGIS-TR is located in Luxembourg, supervised in Luxembourg by the Commission de Surveillance du Secteur Financier (CSSF) and offers its services under Luxembourg law. On 7<sup>th</sup> of November 2013 the European Securities and Markets Authority (ESMA) registered REGIS-TR as Trade Repository in accordance with Article 55 of the European Market Infrastructure Regulation (EMIR).</p> <p>An implemented and operational link is monitored and evaluated regularly. Thereby Eurex Clearing aims to assure the continuous provision of critical supplier services to the extent possible through a regular due diligence review of suppliers’ Business Continuity Management arrangements.</p> <p><i>Future links with financial market infrastructures</i></p> <p>With respect of future links with financial market infrastructure Eurex Clearing disposes of policies and procedures that describe the process which will be followed by Eurex Clearing after having received a formal request to set up a link. In addition, Eurex Clearing performs a proper due-diligence of the legal, operational, functional and risk-related aspects that arise from a potential link.</p>
<p><i>Key Consideration 2</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>As outlined in Principle 1 Eurex Clearing AG (Eurex Clearing) has a legal basis providing a high degree of certainty for each aspect of its activities.</p> <p>Eurex Clearing is a clearing house in accordance with the Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (European Market Infrastructure Regulation, EMIR) as approved by the German Federal Financial Supervisory Authority (<i>Bundesanstalt für Finanzdienstleistungsaufsicht - “BaFin”</i>) on the 10 April 2014. Eurex Clearing is listed in the European Securities and Markets Authority’s (ESMA) register of Central Counterparties authorised to offer services and activities in the European Union in accordance with EMIR (<a href="http://www.esma.europa.eu/page/Central-Counterparties">http://www.esma.europa.eu/page/Central-Counterparties</a>). Furthermore, Eurex Clearing is also holding a German banking licence for the provision of the services as a central counterparty (<i>zentraler Kontrahent</i>), deposit business (<i>Einlagengeschäft</i>), lending business (<i>Kreditgeschäft</i>) and own account trading not relating to a client (<i>Eigengeschäft</i>) pursuant to Section 32 of the German Banking Act (<i>Kreditwesengesetz – “KWG”</i>).</p> <p>Eurex Clearing is linked to Central Securities Depositories (CSDs) through the deposit of financial instruments posted as margins and default fund contributions. Instruments are posted to Clearstream Banking AG, Frankfurt, Germany and Clearstream Banking S.A., Luxembourg – both notified according to Article 10 of</p>



	<p>the Settlement Finality Directive (98/26/EC), as well as with SIX SIS Ltd., Olten, Switzerland, which is the operator of one of the systemically important payment and settlement systems (SECOM) in Switzerland and as such is overseen by the Swiss National Bank (SNB). SIX SIS Ltd. is licensed as bank by the Swiss Financial Market Supervisory Authority (FINMA) and therefore has to comply with the respective regulatory requirements, which together ensures the full protection of the financial instruments. The same holds true for Euroclear UK &amp; Ireland which is also notified according to Article 10 of the Settlement Finality Directive (98/26/EC).</p> <p>Also, the link to the European trade repository REGIS-TR is properly set up and does not pose any material risk to Eurex Clearing. REGIS-TR is located in Luxembourg, supervised in Luxembourg by the Commission de Surveillance du Secteur Financier (CSSF) and offers its services under Luxembourg law. On 7 November 2013 the European Securities and Markets Authority (ESMA) registered REGIS-TR as trade repository in accordance with Article 55 of the European Market Infrastructure Regulation (EMIR).</p> <p>Eurex Clearing verifies whether the linked CSDs have valid accounting practices and safekeeping/internal control procedures in place, are appropriately regulated and have a strong financial position, as also required by the CPSS - IOSCO Principles for Financial Market Infrastructures. This assessment is performed on an annual basis and if deemed necessary.</p>
	<p><i>Key Consideration 3</i></p> <p><i>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.</i></p>
	<p><i>Not applicable</i></p>
	<p><i>Key Consideration 4</i></p> <p><i>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.</i></p>
	<p><i>Not applicable</i></p>
	<p><i>Key Consideration 5</i></p> <p><i>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 participants.</i></p>
	<p><i>Not applicable</i></p>

<i>Key Consideration 6</i> <i>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.</i>	
<i>Not applicable</i>	
<i>Key Consideration 7</i> <i>Before entering into a link with another CCP, a CCP should identify and manage the potential spill-over effects from the default of the linked CCP. If a link has three or more CCPs, each CCP should identify, assess, and manage the risks of the collective link arrangement.</i>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) as a central counterparty has only contractual relationships with Central Securities Depositories (CSDs) and trade repositories. There are no contractual relationships with other central counterparties (CCPs) in place.</p> <p>On 13 June 2014 it decommissioned the clearing link between Eurex Clearing and European Commodity Clearing. Clearing Licenses for Eurex Exchange/EEX cooperation products pursuant to Chapter VII of the Clearing Conditions for Eurex Clearing (EEX-Clearing Licenses) are terminated. There are no open positions. Furthermore, the Clearing Conditions and the Price List are amended.</p> <p>However, in case a link with another CCP would be established Eurex Clearing will evaluate the risks before entering into the link (including due diligence or other analyses/measures as seen appropriate).</p>
<i>Key Consideration 8</i> <i>Each CCP in a CCP link arrangement should be able to cover, at least on a daily basis, its current and potential future exposures to the linked CCP and its participants, if any, fully with a high degree of confidence without reducing the CCP's ability to fulfil its obligations to its own participants at any time.</i>	
<i>Not applicable</i>	
<b>Assessment of principle:</b> <i>Observed</i>	

**Principle 21: Efficiency and effectiveness**

***An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.***

*Key Consideration 1*

*An FMI should be designed to meet the needs of its participants 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.*

Summary narrative

Eurex Clearing AG (Eurex Clearing) has in place adequate processes for taking into account the needs of its participants and the markets it serves.

First of all, Eurex Clearing is in continuous dialogue with its customers. Eurex Clearing hosts a number of specialist committees to inform and integrate participants from all its markets served into the consultation process. Following committees have been initiated to inform and integrate participants into the decision-making process for changes and new developments to the services offered by Eurex Clearing: Risk Committee, Derivatives Clearing Committee, Securities Clearing and Settlement Committee, Clearing Collateral Committee, IRS Product Committee and the Default Management Committees (DMC).

The Supervisory Board has constituted the Audit and Risk Committee in compliance with CRD IV (Capital Requirements Directive) and EMIR that deals, with audit matters particularly related to the preparation of the annual budget, the accounting process, internal and external audits, compliance and control systems.

More detailed information regarding the Eurex Clearing Committees is available in Key Consideration of Principle 2.

Also, Eurex Clearing determined a Technology Roadmap aiming to assure the safety and integrity of markets while providing innovation in risk management and clearing technology. Eurex Clearing deploys reliable and state-of-the art, customer-focused technology.

In order to provide its members with innovative and cost-efficient technologies, Eurex Clearing's latest clearing interfaces use industry standards such as FIXML which lets its members benefit from increased customisation. This reduction in programming complexity allows further cost savings and operational efficiencies. Further information on the use of internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording can be found in Principle 22.

*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.*

Summary

Eurex Clearing AG (Eurex Clearing) has a two-tiered board structure comprising an

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<p>narrative</p>	<p>Executive Board and Supervisory Board. The objectives and strategies for Eurex Clearing are established by the Executive Board in accordance with §76 German Stock Company Act (Aktengesetz, AktG) and approved by the Supervisory Board. Consistent with §111 AktG, the Supervisory Board oversees the work of the Executive Board. The governance structure of Eurex Clearing contains an adequate system of checks and balances that help ensuring that the performance of management bodies is monitored.</p> <p>The Business Strategy provides the framework for more detailed goals and objective on cost, volume, financial and risk level. The achievements of these goals and objectives are monitored on a continuous basis.</p> <p>In order to achieve the corporate the Executive Board of Eurex Clearing also bears the overall responsibility for the implementation and effective operation of the Internal Control System (ICS). The ICS is a key management instrument designed to provide reasonable assurance achieving the corporate objectives regarding effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations. The ICS is an essential component of good corporate governance.</p> <p>The Business Continuity Management approach of Eurex Clearing aims to provide products and services with utmost reliability. It thus gives the highest importance to the resilience of its business to safeguard against incidents and disasters and the unavailability of core processes and resources. This includes the definition of mission critical areas where services must be resumed within a Recovery Time Objective (RTO) of 2 hours.</p> <p>Also, Eurex Clearing has clear objectives of its technology development in order to assure the safety and integrity of markets while providing innovation in risk management and clearing technology as well as cost-efficient technologies. Eurex Clearing's information technology systems are secure and have an availability rate of 100 per cent over the last 18 months (2013 to July 2014) which proves their reliability. The systems are capable of processing the necessary information to perform the activities and operations in a safe and efficient manner.</p> <p>Furthermore, Eurex Clearing has a high quality Client Asset Protection services that efficiently and effectively protect customer positions and deposited collateral.</p>
<p><i>Key Consideration 3</i></p> <p><i>An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) applies the Internal Control System (ICS) Policy of the Deutsche Börse Group AG (DBAG). The ICS-Policy was approved by the Eurex Clearing Executive Board. The ICS-Policy is applicable to all individuals as well as organisational functions that are in charge with management and control of processes within the legal entities of DBAG. The ICS is a key management instrument designed to provide reasonable assurance achieving the corporate objectives regarding effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations. The ICS is an</p>

	<p>essential component of good corporate governance. The ICS consists of safeguards and controls embedded in the organisational structures, in particular within the business processes, of the group companies to ensure that business processes and activities run in an orderly fashion.</p> <p>Internal Auditing reviews the effectiveness of measures taken in the business areas and also assesses the effective operation of the ICS. Internal Audit uses a risk-based approach in defining specific areas of the organisation to audit.</p> <p>In addition, Eurex Clearing has in place procedures to control its operational costs and operational reliability as well as the capacity levels seen as vital for the daily business of Eurex Clearing.</p> <p>Across the serviced products, participants meetings are held on a regular basis to discuss new product developments and service enhancements. The participants of the committees cover a significant portion of the cleared volume in the respective type of product. The committees are used to gather direct feedback for the potential new product or service offering, but also as means to receive feedback on the service provided.</p>
<p><b>Assessment of principle:</b></p> <p><i>Observed</i></p>	

**Principle 22: Communication procedures and standards**

<p><b><i>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.</i></b></p>	
<p><i>Key Consideration 1</i></p> <p><i>An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG (Eurex Clearing) uses SWIFT ISO 15022 for communication with other Financial Market Infrastructures (FMIs), thereby promoting standardisation and greater market efficiency. In its communication with Clearing Members concerning the securities market, Eurex Clearing also uses SWIFT.</p> <p>For the derivatives markets, FIXML, an internationally accepted standard, is used to communicate with participants. The Eurex Clearing FIXML Interface provides Clearing Members with a highly flexible, standards compliant and cost-effective way to use Eurex Clearing services. Based upon and compliant to the widely used FIX (Financial Information eXchange) standard, the interface allows members to choose and deploy their own operating systems and access interfaces. The Futures Industry Association (FIA)/Futures and Options Association (FOA) initiative for standardized post-trade processing has chosen FIX as the standard communication protocol. Eurex Clearing maintains detailed documentation on its website regarding FIXML.</p>

**Assessment of principle:***Observed***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 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.***

*Key Consideration 1*

*An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.*

**Summary narrative**

Eurex Clearing AG (Eurex Clearing) participants are subject to the Clearing Conditions in the conduct of their clearing business. The Clearing Conditions are based on German civil law and clearly stated and structured as general terms and conditions.

Furthermore, Eurex Clearing publicly discloses rules and procedures relating to the roles of participants determined in the Clearing Conditions on the Eurex Clearing website to allow applicants of the system to assess their rights, risk and obligations (<https://www.eurexclearing.com/clearing-en/resources/rules-and-regulations>). The following documents are disclosed:

- Clearing Conditions of Eurex Clearing
- Price List of Eurex Clearing
- Statutes for the Risk Committee
- Default Management Committee Rules
- Default Management Auction Rules
- Statutes for the CDS Market Committee
- Statutes for the CDS Default Management Committee
- Statutes for the IRS Product Committee
- Auction Terms of Eurex Clearing AG
- Statutes for the Disciplinary Committee
- Disciplinary Procedures Rules

Eurex Clearing ensures that its rules, procedures and contractual arrangements are clear, accurate, comprehensive, in writing and in applicable regulatory and supervisory requirements and up-to-date. Eurex Clearing regularly analyses the soundness of the rules, procedures and contractual arrangements. There is no indication that rules and regulations are not internally coherent.


The processes for changing Eurex Clearing's rules and procedures form an integral

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	<p>part of the Clearing Conditions as available via the Eurex Clearing website. As described in Chapter I, Part 1, Number 17.2, Eurex Clearing has in place adequate rules to make amendments to the Clearing Conditions. In addition, important news will be disclosed via Press Release.</p>
<p><i>Key Consideration 2</i></p> <p><i>An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.</i></p>	
<p>Summary narrative</p>	<p>Relevant information on its design and operations is to be found in the Technology tab on the Eurex Clearing AG (Eurex Clearing) website and is available to the public (For more information, please visit: <a href="http://www.eurexclearing.com/clearing-en/technology/">http://www.eurexclearing.com/clearing-en/technology/</a>).</p> <p>A detailed description of the concepts and messages of the Eurex Clearing Interfaces (Messaging Interfaces Connectivity and FIXML Interface), its XML representation and schema files, as well as all necessary information about Network Access and Eurex GUI Solutions can be found on the website and is organised using following categorisation as can be seen in the figure below.</p> <div data-bbox="453 1133 1453 1339" style="background-color: #f0f0f0; padding: 10px;"> <p>Overview of content</p> <ul style="list-style-type: none"> <li>• <b>Overview and Functionality</b></li> <li>• Eurex Clearing Interfaces</li> <li>• Network Access</li> <li>• Production</li> <li>• Eurex Clearing GUIs</li> <li>• Eurex Reports</li> <li>• Simulation</li> </ul> </div> <p>Figure 17: Categorisation of system documentation regarding the Eurex Clearing's C7 architecture</p> <p>Furthermore, the website of Eurex Clearing gives an extensive view on the Eurex Clearing Risk Management Framework, thereby providing Clearing Members and clients with information on all benefits as well as potential risks when choosing Eurex Clearing as a CCP. In the risk management area of the Eurex Clearing website, the various key topics for an adequate management of risks are explained in detail such as the lines of defense of Eurex Clearing, the default management process or the margining process. (For more information please refer to: <a href="http://www.eurexclearing.com/clearing-en/risk-management/lines-of-defense">http://www.eurexclearing.com/clearing-en/risk-management/lines-of-defense</a>).</p> <p>As outlined in Key Consideration 1 of this Principle Eurex Clearing provides documentation on all Committees established to allow applicants and participants to assess their rights, risk and obligations related to Eurex Clearing.</p> <p>As the margin methodology is elaborated in close contact with Clearing Members and described on the Eurex Clearing website, the most relevant risks are communicated from early stage on. Eurex Clearing currently offers two different margin methodologies Risk-based Margining (RBM) and Portfolio-based Margining (PRISMA). For further details on the two margin methodologies please also see Principle 6.</p> <p>Eurex Clearing deploys real-time margining in order to provide Clearing Members</p>

	with permanent risk assessments on their own exposures as well as the exposure of their clients (Non-Clearing Members) based on current market conditions and intraday changes in price volatility.
<i>Key Consideration 3</i> <i>An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.</i>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) deals with educated/sophisticated financial market participants and thus assumes a certain level of basic knowledge of the clearing process and the risks associated with the clearing process. In addition Eurex Clearing applies strict admission criteria for Clearing Members which are necessary to ensure that Clearing Members have the necessary financial and technical resources and the know-how. Consequently, Clearing Members must provide evidence that a sufficiently qualified member of staff works in the Clearing Member's back-office to orderly fulfil the clearing obligations during the business day and to be available as a reliable contact person via telephone.</p> <p>In order to facilitate participant's understanding of Eurex Clearing's rules and procedures and the risks, Eurex Clearing offers a wide variety of training courses and education materials. To maintain high qualification levels of Clearing Member staff in a rapidly changing environment, Eurex Clearing requires from its Clearing Members at least one qualified employee, a Qualified Clearing Staff (QCS). This requirement applies to every single clearing license and as well for Non-Clearing Members trading on Eurex Exchanges. For each clearing license an individual test is offered by Eurex Clearing, consisting of one so called basic module which is about core clearing knowledge and a market module for the respective clearing license. Sufficient qualification is reached if the respective clearer test is passed successfully.</p>
<i>Key Consideration 4</i> <i>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.</i>	
Summary narrative	<p>Eurex Clearing AG (Eurex Clearing) publicly discloses the prices and fees associated with the services provided for clearing. Chapter I, Part 1, Number 5.1 of the Clearing Conditions outlines the fees charged by Eurex Clearing to its Clearing Members for admission as a Clearing Member as well as a regular charge for holding a clearing license,</p> <ul style="list-style-type: none"><li>· a one-time fee upon conclusion of the first Clearing Agreement,</li><li>· an annual fee for the granting of a Clearing License, payable by the Clearing Member on January 31 of each year and</li><li>· further fees for certain actions (e.g. general service fees) and transactions (e.g. transaction fees in various cleared markets).</li></ul>



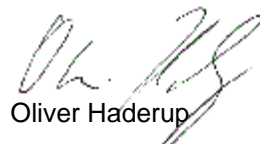
	<p>All fees and incentive models are publicly available and applied to all market participants on an equal basis. Fee structures and incentive models are made available in full detail in specifically updated sections of the Price List for Eurex Clearing. In addition, Eurex Clearing also maintains a close contact to Clearing Members, Non-Clearing Members/Registered Customers by informing of any envisaged amendments in publicly available circulars. In these circulars rebate models can also be presented and described in further detail.</p>
<p><i>Key Consideration 5</i></p> <p><i>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.</i></p>	
<p>Summary narrative</p>	<p>Eurex Clearing AG’s (Eurex Clearing) objectives are fully compliant with regulatory standards for clearing houses. Eurex Clearing has reviewed its methodologies and risk management practices against the Principles for Financial Market Infrastructures developed by the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Organization (IOSCO). The results are published in the Disclosure Document on the Eurex Clearing website.</p> <p>With respect to the disclosure of basic data on transaction volumes and values, Eurex Clearing offers a wide range of information. This includes theoretical price data and all necessary data to compute prices depending on the valuation of a product. It also contains theoretical values and parameters for equities, which are required for the risk-based margining of the day, theoretical values and parameters for subscription rights on equities, theoretical values and parameters for bonds and coupon dates and rates for all bonds which are required for the risk-based margining of the day. Both end of day and intraday data is available. Additionally, relevant risk parameters are published under the Risk Management tab of Eurex Clearing’s website to provide Clearing Members and the broader public with margin parameters, haircuts and a specification of accepted collaterals (see the figure below).</p>  <p>Figure 18: Screenshot of the dropdown menu showing the categories of disclosed quantitative data</p> <p>Quantitative data concerning the following risk parameters are available to the</p>

	<p>public free of charge: Derivatives margin groups and classes, Maturity factors, Vola shifts, Haircut and adjusted exchange rate. This data is available in intraday as well as end of day file version.</p> <p>The website further provides Clearing Members with necessary data to compute option prices or fair option prices for flexible options using the Cox-Ross-Rubinstein model. As already mentioned, this data comprises the theoretical values and parameters for various products which are required for the risk-based margining of the day.</p> <p>Volumes of the cleared transactions for each class of instruments cleared by the CCP on an aggregated basis along with other statistics are published on the Eurex website on a monthly basis. Eurex Clearing provides a monthly view of the number of cleared trades and the cleared volumes across all market segments, i.e. Eurex Exchange, Frankfurt Stock Exchange, Eurex Repo, Eurex Bonds, ISE Dublin, EurexOTC IRS (<a href="http://www.eurexclearing.com/clearing-en/resources/volume-statistics/">http://www.eurexclearing.com/clearing-en/resources/volume-statistics/</a>).</p>
<b>Assessment of principle:</b> <i>Observed</i>	

Approved on 23 February 2015



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Eurex Clearing AG



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