

Germany: Financial Sector Assessment Program—Detailed Assessment of Observance on Eurex Clearing AG Observance of the CPSS-IOSCO Recommendations for Central Counterparties

This Financial Sector Assessment Program - Detailed Assessment of Observance on Eurex Clearing AG Observance of the CPSS-IOSCO Recommendations for Central Counterparties for Germany was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed in July, 2011. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Germany or the Executive Board of the IMF.

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FINANCIAL SECTOR ASSESSMENT PROGRAM UPDATE

GERMANY

EUREX CLEARING AG OBSERVANCE OF THE CPSS-IOSCO
RECOMMENDATIONS FOR CENTRAL COUNTERPARTIES

DETAILED ASSESSMENT OF OBSERVANCE

JULY 2011

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

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GLOSSARY

BCP	Business Continuity Plan
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht
BCM	Business Continuity Management Policy
CCP	Central Counterparty
CDS	Credit default swaps
CEBS	Committee of European Banking Supervisors
CFTC	United States Commodities Futures Trading Commission
CHF	Swiss francs
CPSS	Committee on Payment and Settlement Systems
CRD	Capital requirements directive
CSD	Central securities depository
CVaR	Conditional value at risk
DCM	Direct Clearing Member
DBG	Deutsche Börse Group
DTB	Deutsche Termin Börse
DTCC	Depository Trust and Clearing Corporation (DTCC)
DVP	Delivery-versus-Payment
EEA	European Economic Area
EEC	European Commodity Clearing
EEX	European Energy Exchange
ESCB	European System of Central Banks
Eurex	Eurex Clearing AG
EUR	Euros
FAC	Financial Accounting and Controls Department
FiNMa	Swiss Financial Market Supervisory Authority
FX	Foreign exchange
FSA	United Kingdom Financial Services Authority
GCM	General Clearing Member
GBP	British pound
ICSDs	International Central Securities Depositories
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commission
ISO	International Organisation for Standardisation
NCM	Non-Clearing Member
MCO	Multilateral Clearing Organization MCO
MOF	Ministry of Finance
MOJ	Ministry of Justice
MOU	Memorandum of understanding
OTC	Over-the-Counter
RBM	Risk-Based Margining
RCCP	Recommendation for Central Counterparties
ROCH	Recognized Overseas Clearing House
RSSS	Recommendation for securities Settlement Systems
SEC	United States Securities and Exchange Commission
SIX	Swiss Exchange Group

SNB Schweizerische (Swiss) National Bank
SREP Supervisory Review and Evaluation Process

EXECUTIVE SUMMARY

Eurex Clearing AG (Eurex) observes the Committee on Payment and Settlement Systems (CPSS)-International Organization of Securities Commission (IOSCO) Recommendations for Central Counterparties (RCCPs). Eurex has a sound, transparent, and enforceable legal basis to address the legal risks related to its activities. It has developed a comprehensive and adequate risk management framework to address financial and operational risks. The default rules and procedures are clearly stated in its rules, which are available to its participants. Participants' assets as well as collaterals are safely kept in regulated national and international depositories, although there is legal uncertainty for client's assets portability, which is addressed by legislative proposals. Eurex uses central bank money for the cash settlement of most of its transactions. Eurex governance arrangements and composition of management, boards, and committees are clear and made publicly available.

Eurex is regulated and supervised as a bank, and all regulatory requirements are related to banking activities. The Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) (BaFin) does not fully observe the recommendation on regulation and oversight, as it has not defined any specific regulatory regime that covers Eurex CCP business. Furthermore, the Bundesbank does not have the legal basis to oversee Eurex as a financial market infrastructure.

The authorities provisionally evaluated the impacts of the draft CPSS/IOSCO Principles (expected to be finalized by end-2011) on Eurex activities, and it was concluded that the impact of the new principles on Eurex Clearing depends on the outcome of the current discussion. Nevertheless, it was expected that the new principles would not have a significant impact on Eurex, and it will be able to adjust to the new requirements as far as needed.

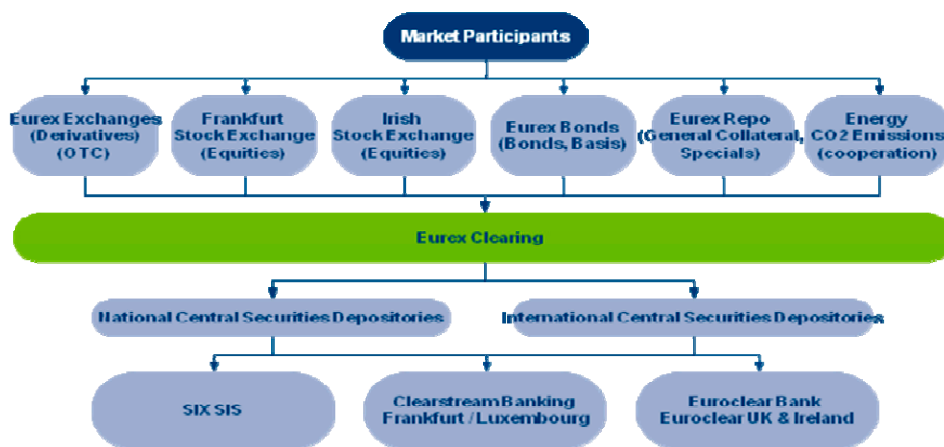
I. INFORMATION AND METHODOLOGY USED FOR ASSESSMENT

1. **The assessment of Eurex against the CPSS/IOSCO RCCP was undertaken in the context of the IMF’s Financial Sector Assessment Program (FSAP) Update for Germany, January 17-February 3, 2011.**¹ Prior to the mission, Eurex conducted a comprehensive self assessment following the methodology of the RCCPs, which was published in 2004. The assessor also benefited from discussions with BaFin, Deutsche Bundesbank, Eurex senior management and staff, and some major participants in the system. The German authorities and the operator of the system have been very cooperative in providing supplemental information and organizing additional meetings to fulfill the assessment.

II. INSTITUTIONAL AND MARKET STRUCTURE—OVERVIEW

2. **Eurex provides central counterparty (CCP) services for several stock exchanges and over-the-counter (OTC) transactions.** It offers fully automated, electronic, and straight-through post trade services for both cash instruments and derivatives such as equities, bonds, repo, and energy products (Figure 1).

Figure 1. Market Infrastructure



Source: Eurex.

3. **Eurex was established in 1990 offering clearing services to Eurex predecessor, Deutsche Termin Börse (DTB).** It is a wholly owned subsidiary of Eurex Frankfurt AG, which in turn is jointly owned by Deutsche Börse AG and SIX Swiss Exchange (Figure 2).

¹ The assessor was Elias Kazarian of the IMF’s Monetary and Capital Markets Department.

Figure 2. Ownership Structure

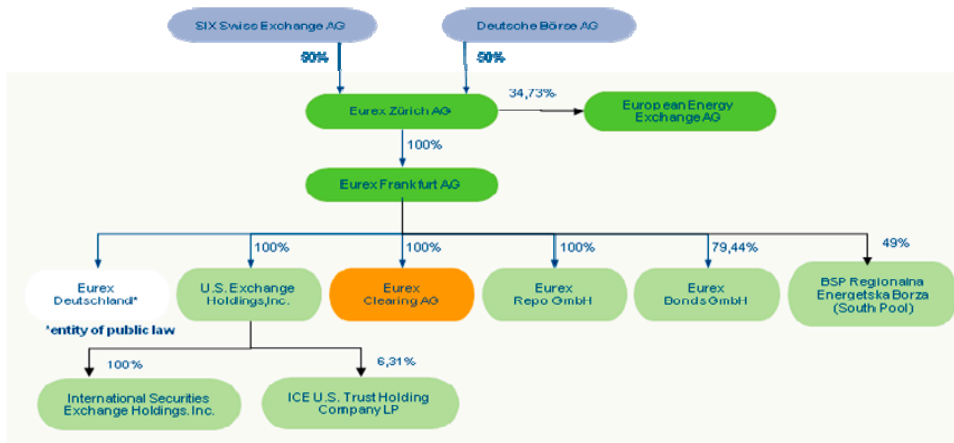


Table 1. Key Statistics of Eurex, 2007-10

	2006	2007	2008	2009	2010
1. Number of transactions (millions)					
1.1 Equities	73.48	109.98	129.15	94.23	96.45
1.2 Debt instruments	0.009	0.089	0.115	0.085	0.097
1.3 Derivatives	1,526.75	1,899.80	2,165.04	1,687.16	1,896.92
Total	1,600.24	2,009.87	2,294.31	1,781.48	1,993.47
2. Value of transactions (EUR billions)	108,039.4	127,156.4	116,757.3	80,525.9	99,838.9
3. Average daily value of transactions (EUR billions)	423.7	504.6	459.7	317.0	390.0
4. Peak value of transactions (EUR billions)	945.2	1,287.1	1,110.3	802.3	841.1
5. Number of clearing members of which:	119	118	109	117	128
5.1 Foreign clearing members	66	66	60	65	75
6. Clearing fund (EUR millions)	752	895	1,392	1,259	912

Source: Eurex.

4. **Eurex is licensed as a credit institution and is regulated and supervised by BaFin.** In conducting its oversight responsibilities, BaFin applies the RCCPs. Eurex is also subject to the Bundesbank's oversight. BaFin and the Bundesbank's statutory mandate to regulate and oversee Eurex is based on their banking supervisory capacity (German Banking Act). Both BaFin and Bundesbank have formal and extensive cooperation to monitor Eurex activities.

III. MAIN FINDINGS

Legal framework (Rec. 1)

5. **Eurex clearing activities are governed by a consistent and solid set of laws, regulations, rules, and instructions.** In particular, this legal framework supports the enforcement of transactions, netting procedures, protection of customer assets, and delivery versus payment (DVP) with finality. There are adequate rules for addressing the event of a participant default, including the effective use of collateral, and these rules can legally be enforced. The implementation of both the settlement finality and collateral directives provide a solid protection both in Germany and other European Economic Area (EEA) countries.

Participation requirements (Rec. 2)

6. **Eurex access and exit criteria are well defined and publicly disclosed.** Eurex requirements for participants' financial resources and operational reliability are defined according to membership category and the types of services selected by the participants. All members must be regulated entities and must have a minimum capital requirement. Eurex also reviews the external credit ratings of the applicants before approval and assesses participants' operational capability.

Financial risk management (Rec. 3-6)

7. **Eurex has a comprehensive risk management framework composed of objectives, measures, and tools defined at the level of Eurex and that of the DBG.** Eurex monitors its participants' exposure on a real time basis, and conducts intraday calls for margins. Eurex employs different tools to limit its exposures to potential losses from defaulting participants. Major measures include a high level of required capital, margin requirements, and contributions to the clearing fund. The levels of margins are verified via back testing and stress testing calculations. Eurex can also require additional financial resources/margins from participants in situations when unusual trading activity is detected. The stress testing policies, assumptions, and scenarios are discussed with market participants and the regulating authority, and mitigating actions are available on Eurex website. Eurex default procedures are clearly stated in the system's rules and published on its website. Eurex accepts highly liquid collaterals such as cash, government, and covered bonds.

Custody and investment risks (Rec. 7)

8. **Eurex securities and cash associated with its clearing activities are held in national and international central securities depositories.** Cash collateral is placed according to Eurex Treasury and Credit Policy, which describe standards for approving market counterparts and treasury limits. Some private banks are used for the deposit of non-euro currencies, generally in form of repos. Eurex investments in U.S. dollars (USD) are carried out through repo transactions, and the Bank of New York Mellon and JP Morgan Chase act as triparty agents.

Operational risk (Rec. 8)

9. **Eurex business continuity arrangements are developed at the level of the holding company, DBG, and covers all sites, networks control centers and business sites.** At the DBG level, there is a Group Risk Management (GRM) that defines the overall objectives and monitors the overall risk profile of DBG, including a comprehensive Business Continuity Management (BCM) policy. The BCM policy ensures that the risk framework is implemented group-wise so that all risks are identified, centrally recorded, and systemically assessed. Contingency plans and back-up facilities are regularly tested with market participants and relevant parties, and maintained to ensure the resilience of Eurex.

Money settlements (Rec. 9)

10. **Eurex uses both central bank money and private settlement bank for cash processing (margin and settlement).** The central bank money is used for cash payments of euros (EUR) and Swiss francs (CHF), and for settlement in the euro area and Swiss markets. For cash payments of British pound (GBP), and USD as well as for global Eurobond settlement, private settlement banks, including the two International Central Securities Depositories (CSDs), Clearstream Banking, and Euroclear Bank, are used.

Physical deliveries (Rec. 10)

11. **Eurex deliveries of securities are carried out in book-entry form (immobilized or dematerialized), and delivery obligations are fulfilled via book transfer.** Eurex Clearing Conditions clearly define the responsibilities to deliver and receive securities from participants. Eurex delivery process is supported by a DVP and receive versus payment (DvP/RvP) settlement eliminating principal risk. A simultaneous booking is always given due to the functionality of the chosen settlement system of the CSD, which operates on DVP.

Risks in links between central counterparties (Rec. 11)

12. **Eurex has one link with the European Commodity Clearing AG (ECC), which is located in Germany.** The contractual relation is simultaneously extended by Eurex as a counterpart of the ECC and the clearing member. Eurex has specific rules and risk methodology for linked CCPs, aimed at minimizing the risk that all obligations cannot be performed in a timely manner. Both Eurex and ECC are regulated and supervised by BaFin. Both CCPs are designated payment systems according to Article 10 of the Settlement Finality Directive 98/26/EC, which provides legal protection to finality.

Efficiency (Rec. 12)

13. **Eurex regularly reviews its pricing, service, and capacity levels.** It performs periodic benchmarking studies with comparable CCPs in other European countries to assess its costs and fees. Eurex provides rebates to participants when their transaction volumes exceed some specified thresholds. An ongoing profit and loss analysis is conducted; the outcome is provided to the Executive Board of Eurex. Eurex states that, in the pricing of its clearing activities that are a part of other services, there is no cross subsidiary between different services and products of Eurex and those provided by other entities of the DBG. Nevertheless, Eurex applies higher prices to clear OTC transactions compared to exchange-

traded transactions. Although such a policy has the merit that it encourages moving trade to exchanges, it is possible that the clearing fees for non-traded transactions are subsidizing the cost of clearing traded transactions.

Governance (Rec. 13)

14. Eurex is a wholly owned subsidiary of Eurex Frankfurt, which is owned by Eurex Zurich, and the latter is jointly owned by Deutsche Börse and SIX Swiss Exchange.

Eurex governance arrangements and composition of the boards are clear and publicly available via the Eurex website. At its supervisory board, Eurex has representative from Deutsche Börse, market participants, and regulators (only as observers).

Transparency (Rec. 14)

15. Eurex discloses to its clearing members and other market participants, its rules, procedures, and policies on its website. These rules cover, among other things, governance issues, the rights and obligations of participants, procedures for handling risks, and fees for using its services. Also, important notices and information are posted on the website. Eurex has completed a comprehensive self-assessment following the RCCPs assessment methodology.

Regulation and oversight (Rec. 15)

16. Eurex is regulated and supervised by several authorities. In Germany, the main regulator is BaFin, which cooperates with Deutsche Bundesbank. As a global CCP, Eurex is also regulated and overseen by the Swiss Financial Market Supervisory Authority (FINMA)/ Swiss National Bank (SNB), as a recognized overseas clearing house (ROCH) by the United Kingdom Financial Service Authority (FSA), and as a Multilateral Clearing Organization by the United States Commodities Futures Trading Commission (CFTC) as well as by the United States Securities and Exchange Commission (SEC). Licensed as a credit institution and subject to the banking act, Eurex does not have a specific regime for its CCP activities, although BaFin has been using the overall risk management provision to require Eurex to meet the CPSS/IOSCO recommendations.

Table 2. Detailed Assessment of Observance of the Eurex Clearing AG (Eurex) of the CPSS-IOSCO Recommendations for Central Counterparties

Recommendation 1.	A CCP should have a well founded, transparent and enforceable legal framework for each aspect of its activities in all relevant jurisdictions.
Description	<p><i>Accessibility of the regulatory framework (Q1)</i></p> <p>Laws, regulations, rules, procedures and contractual provisions governing the operations and activities of Eurex clearing are public and readily accessible to system participants on Eurex clearing AG website http://www.eurexclearing.com/documents/regulations/clearing_conditions_en.htm</p> <p>Eurex Clearing AG's activities are governed and regulated by:</p> <ul style="list-style-type: none"> • Kreditwesengesetz (KWG) –Banking Act • Bürgerliches Gesetzbuch (BGB) – Civil Code. • Insolvenzordnung(InsO) – Insolvency Code. • Solvabilitätsverordnung (SolvV) - Solvency regulation.

- Handelsgesetzbuch (HGB) –Commerce Code.
- Securities trading Act.
- *Aktiengesetz (AktG)* – The Stock Companies Act.
- *Bundesbankgesetz (BBankG)* – *Bundesbank Act*
- *Solvabilitätsverordnung (SolvV)* - Solvency regulation.
- *Großkredit- und Millionkreditverordnung (GroMiKV)* - Large Exposure Regulation.
- *Liquiditätsverordnung (LiqV)* - Liquidity Regulation.
- The Clearing Conditions for Eurex Clearing AG.
- Contractual arrangement with clearing members.

Legal basis (Q2)

There is a legal framework based on the banking law, Section 32 (Section 1 chapter 1 no. 12) enabling Eurex clearing AG (hereafter “Eurex”) to perform its services as a CCP. In particular:

(a) The CCP acting as counterparty

The legal framework includes statutory provisions and clearing agency rules. According to the German legal framework, Eurex is currently regulated as a credit institution and subject to the Banking Act. Section 32 of the Banking Act also provides the legal basis to Eurex to act as a CCP. According to its current license, Eurex can only provide CCP function. In order to provide additional function, Eurex needs to require approval from the regulator. In addition, Eurex operations are governed by a clearing agreement entered into by Eurex and its participants.

(b) The timing of assumption of liability as a CCP

According to its rules (Clearing Conditions, Chapter 1.2.1), Eurex becomes the legal counterparty to trade at the time of the confirmation of the selling and assumes locked-in trades at the level of the trading platform.

(c) Netting arrangements

Netting procedures are defined in the Clearing Conditions and based on the set-off pursuant to Section 387 of the Civil Code.

(d) The protection of the CCP's interest in collateral (including margin)

The CCP's interest in collateral is legally protected by the implementation of Directive 98/26/EC of the European Parliament and of 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”) – amended by Directive 2009/44/EC. These directives have been transposed into the German legal framework by amending several legislations, mainly in the Insolvency Code.

(e) Default procedures

The German statutory laws, such as the Banking Law and Commercial Code, provide a legal basis for default rules and include rules for the default of a member. Several provisions in the Clearing Conditions provide details on how to handle defaults (Chapter I, parts 7 and 8) and Chapter I, Section 9).

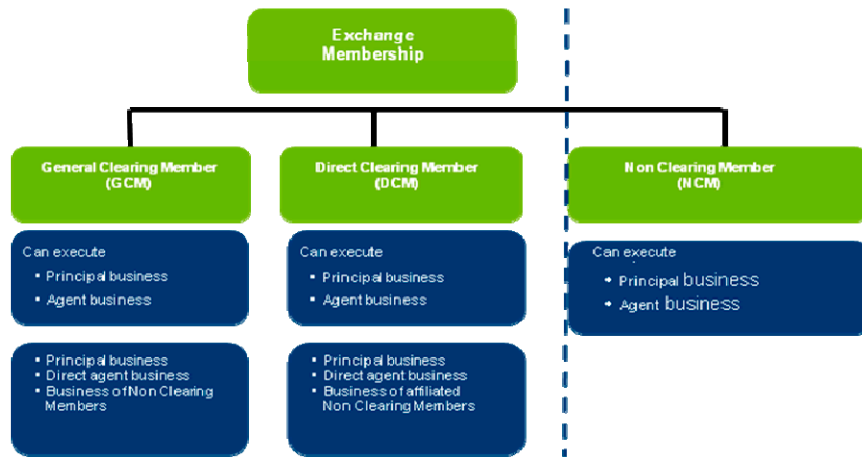
(f) Finality of transfers of funds and financial instruments

Finality is confirmed by Eurex specific rule (Clearing Condition, Chapter 1.1.5), which stipulates that finality is achieved when securities are transferred in the CSD. For funds transfers, in EUR and CHF, finality is achieved at the time defined by the cash transfers system of the central banks- TARGET-2

	<p>and the Swiss payment system. Regarding the use of USD and GBP, Eurex uses private banks, which provide intra-day confirmations of credit.</p> <p><i>Enforceability of rules/procedures/contracts (Q3)</i> Enforceability is ensured as the rules and regulations are part of the contract that is signed by the participants. The handling of default or insolvency of Eurex participants, including the closing out of the participant's positions, is regulated in the Clearing Conditions (Chapter I, parts 7 and 8). In addition, the European Union legislation provides legal protection to the clearing activities in the EEA, including the Finality and Collateral Directives.</p> <p>The legal basis for the clearing links between Eurex and the linked clearing houses are provided by the Clearing Conditions (Chapter I, number 9.4). The clearing link agreements contain specific default rules including close-out netting rules.</p> <p><i>Cross-border activities (Q4)</i> There is a significant number of Eurex participants domiciled in other EEA member states. Eurex has carried out legal analysis with regard to the applicable insolvency law in the case of a participant's insolvency.</p> <p>Within the EEA, the Finality Directive provides harmonized rules in each member state, which states that "in the event of insolvency proceedings being opened against a participant in a system, the rights and obligations arising from, or in connection with, the participation of that participant shall be determined by the law governing that system."</p> <p>At present, Eurex does not have a remote participant domiciled outside the EEA. Nevertheless, when such an applicant is submitted to Eurex, a legal opinion on conflict of law will be prepared. Furthermore, independent of the jurisdiction of the participants, all Eurex clearing members have to submit themselves to the German jurisdiction once they sign the Eurex clearing agreement. Thus, in case of any law suits between Eurex and its members regarding obligations in the context of the clearing services, German laws will primarily be applied.</p>
Assessment	Observed
Comments	<p>In line with its license, Eurex is regulated as a credit institution with a single purpose to provide clearing activity. The banking law and other legislations provide a sound, transparent, and enforceable legal basis for each aspect of its activities.</p> <p>Eurex can change its clearing conditions without prior consultation or approval by the relevant regulator and overseer, although in practice Eurex does consult. It is recommended that the relevant authorities should require Eurex to prior consult the authorities for any material changes of its clearing conditions. This procedure would ensure a higher degree of legal safety, public interest taken into account, and increase impartiality vis-à-vis its participants.</p>
Recommendation 2.	<p>A CCP should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP. A CCP should have procedures in place to monitor that participation requirements are met on an ongoing basis. A CCP's participation requirements should be objective, publicly disclosed, and permit fair and open access.</p>
Description	<p><i>Sufficient financial resources and robust operational reliability (Q1)</i> Eurex financial and operational requirements for participants are established</p>

in its Clearing Conditions. These requirements are agreed to by participants, and the applicant's financial resources are examined by Eurex before becoming a member.

The financial and operational requirements are defined according to the category of membership and dependent on the products and services selected by the participants. A participant can apply to be a General Clearing Member (GCM), a Direct Clearing Member (DCM), or a Non-Clearing Member (NCM). In particular, all members must be regulated entities and should have a minimum capital requirement with the highest for GDM. The level of capital requirement is also dependent on the product to be cleared by the member, where the highest is to clear repo and derivatives transactions and the lowest for clearing equities. Eurex also review the external credit ratings of the applicants before approval. Available evidence suggests that these financial requirements are in line with international norms and appear adequate for the risks involved.



Eurex assesses participants' operational capability. According to Eurex rules (Clearing Conditions, Chapter I, number 2), participants must proof the technical and functional connection and the use of appropriate technical equipment (back-office facilities), and sufficiently qualified back office personal. Prior to activating membership, applicants are required to conduct different types of testing with Eurex.

In the case of OTC derivatives, participants are obliged to support the default management process. The respective Market Committee, which consists exclusively of clearing members, is involved in the default management and other relevant matter. The role and mandate of the committees are clearly defined in the "Statutes for Eurex CDS Market Committees." In particular, in case of a default of a clearing member, the Committee should arrange an auction to perform the closing of open transactions and performing pro-rata transfers." Further, clearing members are required to participate in an auction process and (if required) in a pro-rata transfer. Eurex monitors the close of contract and the transfer of registered customers' positions to other members. It also has the discretion to close a contract if these transactions have not been concluded within a certain adequate period of time.

If the closing of a participant's transactions could not be performed successfully, Eurex may transfer the remaining transactions on a pro rata basis to other clearing members after consultation with the CDS Market Committee. The basis for the pro rata transfer is the net outstanding nominal

in the respective opposite transactions of the non-defaulting clearing member booked on their position accounts. Transfer will be based on the daily evaluation price of the previous business day determined by Eurex, to which a spread shall be added, or from which a spread shall be subtracted, depending on whether the remaining transactions are buy or sell transactions.”

Monitor compliance with participation requirements (Q2)

Eurex has procedures in place to monitor the participants' requirements on an ongoing basis. Both the minimum liable equity capital and the fulfillment of the minimum clearing fund requirement are checked by the Member Services & Admission Unit during the initial admission process. The size of the liable equity capital is monitored on a yearly basis, as all clearing members are required to report and prove their liable equity capital toward Eurex based on externally approved statement of annual report figures. In addition, the following measures are performed:

- (a) Continuous intraday and overnight monitoring of the fulfillment of any payment and margin obligation.
- (b) Monitoring of movements of share prices and credit spreads, where available.

Furthermore, the clearing members are obliged to inform Eurex if there are any changes to their participation requirements. Eurex carry out periodically a calibration of the liable equity capital requirement and the clearing Fund Requirement, considering the overall risk exposure of the single clearing member towards Eurex. The dynamic component for the liable equity capital requirement is calculated by 10 percent of a clearing member's 30 days and 250 days average total margin requirement. For the dynamic clearing Fund Component, 2 percent of a clearing member's 30 days and 250 days average total margin requirement are calculated. Both the liable equity requirement and the clearing fund requirement are determined by the highest single amount of the following components.

After having determined the liable equity capital requirement and the clearing fund requirement at the end of each quarter, a weekly check is carried out. In case of a shortfall in either liable equity capital requirement or clearing fund contribution, a clearing member has five days to fill the missing gap. If a clearing member does not provide the required additional collateral within the given five days, Eurex will call for immediate cash via direct debit authorization, which was provided by the participant in advance.

Suspension and termination of participants' membership

Eurex has rules for the termination and suspension of clearing licenses (Clearing Conditions, Chapter I, 2.4). A license for a GCM and DCM is terminated if:

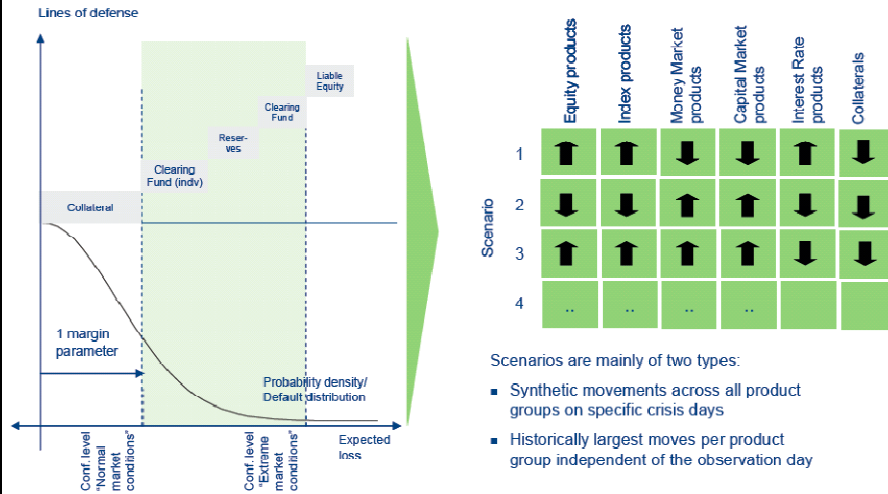
- (a) The clearing license has been granted on the basis of incorrect or incomplete information;
- (b) The clearing member violates essential provisions of the Clearing Conditions or repeatedly violated other rules of the Clearing Conditions;
- (c) The clearing member objects to an amendment of the Clearing Conditions; or
- (d) Eurex has gained notice of the fact that measures against the clearing member have been ordered pursuant to provisions of the banking law or insolvency proceedings have been initiated and the concerned clearing member does not fulfill in whole or in part its obligations resulting from the clearing of its transactions or other obligations. Respective measures and proceedings under the law of the country in which the

	<p>clearing member is domiciled shall be considered equivalent to the measures pursuant to the provisions of the German banking law and the initiation of insolvency proceedings.</p> <p>Eurex notifies the respective clearing member in writing of the termination of the clearing License, indicating the reasons therefore. The Clearing Conditions also apply after termination of the clearing license with regard to the procedure, respectively closing of transactions or open positions of the relevant clearing member.”</p> <p>Eurex also has the right to terminate a clearing license in the event a clearing member is being subject to special measures by the financial supervisory authority, so called “Moratorium” (Chapter I, number 2.4, paragraph 3).</p> <p>Under certain conditions, Eurex is entitled to suspend the license. This is the case if the requirements for termination are not yet proven, but Eurex has reasonable suspicion. The period of suspension should not exceed six months. During this period, Eurex may demand from the concerned clearing member needed information and evidence as may be necessary for purposes of an appropriate decision. The Clearing Conditions also provide a clear procedure in order to facilitate and safeguard the suspension and orderly exit of a clearing member.</p> <p>The termination or suspension of a clearing license does not affect any rights and obligations of the respective clearing member proceeding from any existing transactions or positions for which it has clearing responsibility.</p> <p><i>Open and fair access (Q3)</i> Participation requirements are clearly stated in Eurex General Terms and Conditions the “Clearing Conditions for Eurex Clearing AG.” This and other rules and regulations are available via the Eurex website (www.eurexclearing.com). Eurex’s participation requirements are objective and clearly stated. They do not limit access on grounds other than risks. Eurex access requirements enable any types of institutions to participate given they meet Eurex requirements. Nevertheless, Eurex reserves the right to not allow an applicant to become a member dependent on the judgment made concerning the participation requirements. An applicant does not have the possibility to challenge a denial to become a member with BaFin or Bundesbank but with the relevant and competent German antitrust authority (Kartellamt). Access requirements and other rules are available on Eurex clearing AG website (www.eurexclearing.com).</p>
Assessment	Observed
Comments	
Recommendation 3.	A CCP should measure its credit exposures to its participants at least once a day. Through margin requirements, other risk control mechanisms or a combination of both, a CCP should limit its exposures to potential losses from defaults of its participants in normal market conditions so that the operation of the CCP would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.
Description	<p><i>Measurement of exposures (Q1)</i> Eurex has a comprehensive risk management framework composed of objectives, measures, and tools defined at the level of Eurex entity and Deutsche Börse Group. This framework is reviewed and assessed on a regular basis. The risk management objectives follow industry benchmark, and relevant international standards. The risk management covers the entire chain of a membership, including minimum capital, financial and technical</p>

	<p>requirements for admission, margining and collateral requirement to cover exposures, intraday day monitoring and well-defined default procedures. As tools to control exposures, Eurex and clearing member may use pre-trade risk services such as too many simultaneous trade executions, maximum order quantity, stop button to halt trading, and clearing. In addition, Eurex risk data services provided real time information to optimized intraday risk management.</p> <p>Eurex employs two risk models to measure its exposure to it members: Risk Based Margining (RBM) model for all listed derivatives, equities, and fixed income products; and a Conditional Value at Risk (CVaR) model based on historical simulation for the credit default swaps (CDS). The calculation is carried out as soon as updates of position or pricing data are available (“event-driven”).</p> <p>In respect to RBM, the calculation is done continuously throughout the business day, i.e., an exposure is calculated continuously intraday once the positions or the participants or the prices of the products have changed. The new calculation would automatically trigger a request for an intraday margin call as soon as the risk threshold is breached. Furthermore, for the CDS products, the exposure is measured once the position of the participant has changed or new price information is available. Due to the market practice of the CDS market, this is normally done at least once a day, but can be done intraday, triggered by the availability of new position or price data. Price and position information are immediately incorporated in the exposure measurement, i.e., in real time as soon as they are available to the risk management systems that monitor the exposures of participants on contentious basis.</p> <p><i>Risk mitigation tools (Q2)</i></p> <p>Eurex employs different tools to limit its exposures to potential losses from defaulting participants. One major measure that limits the exposure of Eurex is the high level of capital requirement for a GCM and DCM, which is imposed on all participants to ensure the financial safety of Eurex operations and to avoid impact on non-defaulting participants. On the basis of its membership requirements, Eurex requests end-of-day margining, intraday margining, and default funds and employs other risk control mechanisms. In addition, intraday risk controls are in place to safeguard and strengthen the lines of defense of Eurex and thus ensuring its continuous integrity for the markets cleared by Eurex. For all listed OTC derivatives, equities, and fixed income products, an intraday margin monitoring procedure is in place that enables Eurex to perform an intraday margin call at any time. In addition, for the CDS products, the exposure is limited by a pre-margining policy, i.e., before the acceptance of a new transaction for clearing, the participants need to have the respective collateral deposited to Eurex. The levels of margins are verified via back testing and stress testing calculations. Eurex can also demand additional financial resources/margin from the participant in situations when unusual trading activity is detected or stress testing calculations show an unexpected exposure.</p>
Assessment	Observed
Comments	
Recommendation 4.	If a CCP relies on margin requirements to limit its credit exposures to participants, those requirements should be sufficient to cover potential exposures in normal market conditions. The models and parameters used in setting margin requirements should be risk-based and reviewed regularly.

Description	<p><i>Models and parameters to set margins (Q1)</i></p> <p>According to Eurex credit risk management policy, margin requirements are designed and calibrated to cover all financial obligations, all occurred losses, and potential future losses for at least 99 percent of all cases over an appropriate liquidation time horizon. Eurex uses both RBM model for all listed derivatives, equities, and fixed income products; and a CVaR model based on historical simulation for the CDS. See recommendations 3 and 5 for additional information on the models used for the calculation. The parameters of the risk margin model should cover for the expected time needed for the liquidation of the defaulting participant's positions. Currently, this expected time ranges from one to more than 20 days depending on the product characteristics and the size of the position. The risks reducing effect of combinations of positions is taken into consideration in this calculation.</p> <p>The consistency of the time to liquidate the position is validated within a daily back testing procedure that checks the delivered margins against the real profit and losses of a portfolio over the assumed longer time horizons. In addition, for CDS products the assumed market liquidity and thus the concluded liquidation horizons are verified via regular volume analysis available in the central trade repository hosted by the Depository Trust and Clearing Corporation (DTCC).</p> <p>The models, including the parameters and assumptions are validated against predefined metrics and thresholds via a clearly defined risk model validation procedure. This includes a detailed validation of the overall models via back testing the results of the initial margin calculation in several dimensions and aggregation levels and also dedicated validations for the individual parameters and assumptions used. In addition, these validations are accompanied by daily stress testing. The applied haircuts for collaterals and other collateral parameters and assumptions are included in the validations as well.</p> <p>The margin model and its parameters are validated regularly. The parameters and the assumptions that are used in the models are validated daily, weekly, monthly, or quarterly reviews depending on the type of parameter.</p> <p><i>Intraday margin calls (Q2)</i></p> <p>Due to the contractual obligation with participants, Eurex has the right to demand from its clearing members, at any time during the business day, a higher or supplementary margin in cash or in securities acceptable to Eurex on the basis of the risk assessment made by Eurex (Chapter III, number 3.2, paragraph 1 clearing Conditions). Further, supplementary margin must be transferred immediately in the appropriate currency to the TARGET2 account, the account of the SECB Swiss Euro Clearing Bank GmbH ("SECB-Account") or the account of the SIX Interbank Clearing AG (the last two named accounts jointly referred to "euroSIC Account") or the SIC Account of Eurex Clearing AG or on the pledged securities account of the Clearing Member with Clearstream Banking AG or SegalIntersettle AG. Each clearing member shall also have corresponding rights with respect to its non-clearing members. As explained in Recommendation 3, calculation of exposure is done continuously throughout the day when changes occur to the prices, position, and volatility. Based on the result of the calculation, an automated intraday margin call is issued throughout the trading day. The respective internal process has been communicated and is available to the participants. In general, intraday margin calls are issued once a Eurex participant has a temporary under-coverage of 10 percent of his total margin requirement (smaller threshold may be applied</p>
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	<p>dependent on the risk assessment of the participant).</p> <p><i>Assets accepted as margins and related haircuts (Q3)</i> As margin collateral, Eurex accepts securities (bonds and equities) that are highly liquid, and of high credit quality, and cash (EUR, CHF, USD and GBP). In order to meet high quality standards, the issuer must not be the clearing member and the admissible portion of the bonds issues or the free float of equities is limited. In general, all bonds collateral must be exchange-listed and all EUR bond collateral must be eligible and of liquidity classes I-IV of the European System of Central Banks (ESCB). All CHF bond collateral must be eligible as repo of the Schweizerische Nationalbank (SNB). Equity collateral must not exceed 30 percent of the margin requirement. Further details and the full list of eligible instruments are available on the Eurex website; http://www.eurexclearing.com/risk/parameters_en.html.</p> <p>On average, Eurex' collateral is composed of around 15 percent cash (around 90 percent in EUR) and 85 percent securities (nearly 100 percent bonds). The securities collateral prices are evaluated at least daily. To be covered for a potential decline in the value of the assets, haircuts on all securities and currency haircuts are applied to all non-EUR cash collaterals. All haircuts are calculated on a confidence level of 99.9 percent (i.e., 99.9 percent of the respective price changes are below the applied haircut).</p>
Assessment	Observed
Comments	
Recommendation 5.	A CCP should maintain sufficient financial resources to withstand, at a minimum, a default by the participant to which it has the largest exposure in extreme but plausible market conditions.
Description	<p><i>Stress testing (Q1)</i> Eurex performs daily stress testing with extreme, but plausible market conditions. It can be run on intraday basis when it is needed. Eurex has defined coverage for the most extreme market conditions. This coverage stipulates that obligations will be backed in at least 999 out of 1,000 events with margin requirements and financial resources available. Eurex has a stress test procedure in place that aims to verify that the financial resources are sufficient to cover its risk exposure of defaulting clearing members in the most extreme market conditions. 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 executive management's expectations on worst potential future price movements. Scenarios based on historical observations are mainly of two types:</p> <ol style="list-style-type: none"> a) Price movements across all product groups on specific crisis days. b) Historically largest moves per product group independent of the observation day. <p>The stress test is performed on the risk exposure of each clearing member, and potential losses based on stress scenarios are compared to each member's margin collateral. Losses beyond additional margin are then compared to the clearing fund.</p>



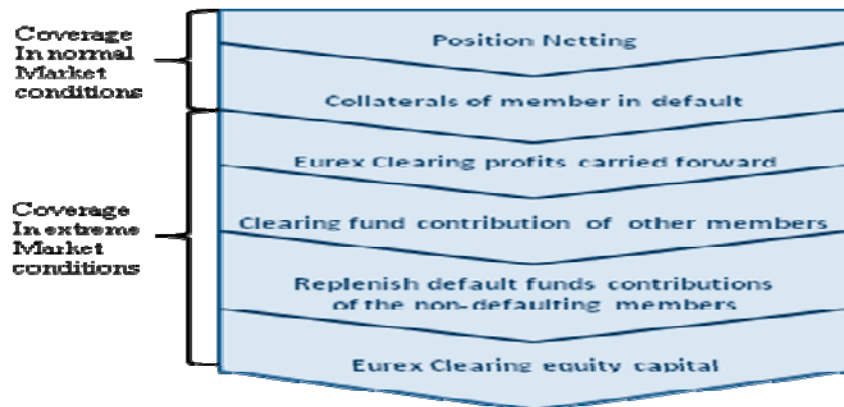
The stress scenarios are defined using dynamic parameters that are linked to the volatility of the underlying product, and thus by definition adjust automatically in case market volatility increases. The stress tests are performed daily and included in a daily and monthly stress testing reporting to the management. In parallel with the general risk model validations also the stress test scenarios and testing parameters (at least quarterly) are regularly reviewed and adjusted if required.

The analysis of the stress testing shows that the current resources would be sufficient to cover the simultaneous defaults of the five clearing members with the largest exposure.

Both the stress test scenarios and mitigating actions are available to the regulating authority. In addition the stress testing policy is available to the participants via the Eurex website. In a quarterly cycle the utilization of the financial resources is presented in an anonymous version to the Eurex Risk Committee, which is composed exclusively of clearing member.

Ability to draw on financial resources (Q2)

Eurex resources by means of lines of defense to handle default are:



As of December 2010, Eurex financial resources are:

- (a) EUR 1.5 billion in clearing Fund after taking into account haircuts.
- (b) EUR 44 billion in collaterals held by Eurex.

	<p>(c) EUR 5.5 million in reserve fund. (d) EUR 110 million in equity capital.</p> <p>Eligible collaterals are cash, government and governmental agency bonds, bank and corporate bonds for selected countries, and high liquid equities. The collateral eligibility criteria are defined according to the level of credit, market, and liquidity risks.</p> <p>In the event that the resources are not sufficient to cover default, Eurex has the right to request the non-defaulting clearing members to replenish the clearing fund.</p> <p><i>Immediate availability of financial resources (Q3)</i> Eurex resources to cover losses from a defaulting member are liquid and immediately available. Collaterals (bonds/equities) are held on collateral pledge accounts for the benefit of Eurex at eligible CSD in the EEA, hence being immediately accessible for covering default losses. Also, the cash collaterals are immediately available, as they have been already transferred to the Eurex accounts (see above for the structure of Eurex cash accounts). The accounts prohibit resources from being used for covering operating losses of Eurex.</p> <p>Eurex has access to intraday credit facility of the Eurosystem. Cash margins placed by clearing members are to the largest extent placed overnight and are thus to be classified as immediately available.</p>
Assessment	Observed
Comments	
Recommendation 6.	A CCP's default procedures should be clearly stated, and they should ensure that the CCP can take timely action to contain losses and liquidity pressure and to continue meeting its obligations. Key aspects of the default procedures should be publicly available.
Description	<p><i>Definition of default and clarity of default procedures (Q1)</i> Eurex rules clearly states the circumstances that constitute a default or insolvency case (Clearing Conditions, Chapter I, part 7). These rules allow Eurex to control, manage, or close the positions of the defaulting member in a way that ensures market integrity and Eurex security. Eurex also has the right to transfer the customers' positions of the defaulting member to a nondefaulting member. The waterfall model of Eurex lines of defense foresee in the case of clearing member default that the defaulting member's assets and collateral are liquidated. According to the clearing agreement between Eurex and the clearing member, the clearing member confirms that he is the owner/proprietor of the collaterals pledged with Eurex. Since according to German Law, securities can, as a rule, only be pledged legally effective if the pledgor owns the respective securities. Therefore, Eurex only accepts propriety assets to be pledged by the clearing member and currently no customer assets.</p> <p>In the case of default, the first step undertaken by Eurex is to transfer positions, especially client positions, to another clearing member within a set period of time. Next step, Eurex will try to close out and settle the defaulting member's open positions. For CSD products, Eurex may use an auction process to liquidate the defaulter's position as a whole or in slots to the nondefaulting members. Eurex also has the right to assign the remaining positions pro rata to the non-defaulting clearing members.</p>

	<p><i>(Legal) enforceability of default procedures (Q2)</i> Based on the Settlement Finality Directive, the German Insolvency provides a high degree of legal protection that Eurex default procedures are enforceable within the EEA.</p> <p>German insolvency law provides legal certainty for securities pledged as collateral to an intermediary in the event of the intermediaries' default. The client securities are segregated and can be legally enforced in an insolvency procedure against the intermediary. However, when a client provides the securities to the intermediary with the consent that the intermediary can use the securities as a pledge for its total exposures, the client may not receive back the securities in the event of the intermediaries' default.</p> <p>Although customer's securities and collateralized assets have a strong legal protection, German insolvency law does currently not fully support the portability of customer positions and collateral. Insolvency law as it currently stands provides for close-out netting of customer positions in the event of a clearing member's default. As a consequence, the positions are transformed into a single payment obligation and cannot be transferred to another clearing member any more. In parliament, an amendment to the existing insolvency law is currently discussed that would allow the CCP to transfer customer positions and collateral to another clearing member in the event of the original clearing member's default. This situation is also valid for other European countries. To this end, the draft European regulation on derivative transactions, central counterparties and trade repositories (EMIR), which would be directly applicable in Germany, include provisions that would provide the legal basis for the transfer of customer's positions and collateral.</p> <p><i>Internal plans for managing defaults (Q3)</i> Default procedures are implemented by means of detailed internal operational business procedures for processing a clearing member default. These procedures are based on legal framework and documented appropriately. The structure of the documentation provides a general overview, description of the possible default trigger, management and division of roles and responsibilities and referring to further detailed processes such as cash settlement, trading, collateral liquidation, and close derivatives position.</p> <p>The respective default business procedures are reviewed at least yearly or as needed if the legal framework requires changes in the procedures. At least once a year, a default scenario is tested by simulating the liquidation in the respective simulation environments. Default procedures are part of regular reviews by Internal Auditing.</p> <p><i>Transparency / publicity of default procedures (Q4)</i> Eurex default procedures are part of the Eurex conditions and published on Eurex website. Important information and notices are posted by Eurex on its website, and are available to the public.</p>
Assessment	Observed
Comments	
Recommendation 7.	A CCP should hold assets in a manner whereby risk of loss or of delay in its access to them is minimized. Assets invested by a CCP should be held in instruments with minimal credit, market and liquidity risks.
Description	<p><i>Monitoring of custody risk for CCP assets (Q1)</i> Securities pledged to Eurex by its participants are only deposited with CSDs and international CSDs, which are supervised by national authorities. In</p>

	<p>particular, securities are pledged in Clearstream Banking AG Frankfurt and SegalInterSettle AG. The participants' securities are held in dedicated accounts in the name of the participant, but pledged in favor of Eurex. These securities can only be withdrawn with the consent of Eurex.</p> <p>The regulations in Germany and Switzerland provide an appropriate legal environment to ensure access to pledged securities in the case of insolvency of the clearing member. Settlement accounts with the ICSDs, Euroclear, and Clearstream Banking Luxembourg; and the CSDs Clearstream Banking Frankfurt and Euroclear United Kingdom and Ireland are used for securities settlement. At the end of the settlement day, no securities should be held in these accounts. Securities purchased in Eurex own repo transactions are held in Clearstream Banking (EUR), Credit Suisse (CHF), Bank of New York Mellon and JPMorgan Chase Bank (USD). Of course, Eurex has separate accounts for holding the pledged securities as collateral.</p> <p>Eurex has in place processes and specialized staff to monitor the custodian banks, including:</p> <ul style="list-style-type: none"> (a) Daily monitoring of custodian's external ratings via reporting generated from Bloomberg. (b) Annual credit reviews for custodians to assess their creditworthiness and to ensure that only liquid and solvent custodians are accepted. A major event (e.g., market shock) or a sudden change in custodian's credit quality may trigger a reassessment of the relationship. The sources used for the annual credit reviews are the annual reports, Bankscope, subscribed rating agencies reports (Fitch/Standard & Poor's/Moody's), press, and web. (c) Eurex assessment of these custodians against the CPSS/IOSCO recommendation 12 with regard to accounting practices and safekeeping/internal control procedures, regulated, and strong financial position. <p><i>Investments of CCP resources (Q2)</i></p> <p>Cash collateral is placed according to Eurex Treasury and Credit Policy, which describes standards for approving market counterparts and treasury limits. The credit and treasury policies are reviewed annually and amended if necessary.</p> <p>According to this policy, Eurex investment should be, to the extent possible, in the form of bilateral or triparty repo. For triparty repo, Clearstream Banking S.A., Bank of New York Mellon, and JP Morgan Chase act as triparty agents. Only residual balances are placed uncollateralized with commercial banks under credit limits approved by the Credit Section independent from the treasury. The Credit Section has the authority to approve investments within the limits approved by the Eurex Executive Board (Vorstand). Any amount exceeding the credit authority requires an exceptional approval by the Board.</p> <p>Eligibility criteria for repo collateral include a minimum rating of AA- / Aa3. Since the outset of the financial crisis, only bonds representing sovereign risk are eligible. With regard to credit risk, eligible counterparts are required to have an external credit rating equal or above 'A-' with Fitch/Standard & Poor's and 'A3' with Moody's, whereby the lowest rating applies. Any exception must be approved by the Eurex Executive Board.</p> <p>Eurex Credit Section monitors its market counterparts in the following ways:</p> <ul style="list-style-type: none"> (a) Daily monitoring of external credit ratings of market counterparts (report
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	<p>generated from Bloomberg).</p> <p>(b) Monthly reporting to the Eurex Executive Board, Treasury Department and Group Risk Management via “Monthly Credit Report”, which gives an overview about new/existing market counterparts and treasury limits, ratings, and treasury limits changes.</p> <p>(c) Annual credit assessments and if necessary in case of a major event.</p> <p>Any negative change in the quality of a counterpart may trigger a reduction or cancellation of its treasury limit.</p> <p>Eurex is not allowed to invest its own capital or margin in its own securities or those of its parent company.</p> <p><i>Concentration limits (Q3)</i> Investments may only be conducted under counterparty limits approved by the Credit Section. In its assessment, it takes into account both the credit worthiness of market counterparts as well as the total exposure of Deutsche Börse Group toward counterparties in order to avoid any concentration of credit risk. The investments of own liquidity and received cash collateral is done with a variety of counterparts to avoid concentration risk. In addition, Eurex concentration risk is limited by the Large Exposure Rules of the Capital Requirements Directive since Eurex is also licensed as a bank.</p>
Assessment	Observed
Comments	
Recommendation 8.	<p>A CCP should identify sources of operational risk and minimize them through the development of appropriate systems, controls and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Business continuity plans should allow for timely recovery of operations and fulfillment of a CCP’s obligations.</p>
Description	<p><i>Identification and management of operational risk (Q1)</i> The Eurex risk management framework is governed by policies and procedures defined both at the level of Eurex and of Deutsche Börse Group (DBG). At the level of Eurex, risk identification and management is done by the Risk Design Unit and the Clearing and Risk Operations Unit. The main focus of the former is to identify for example, the financial risk related to products and collaterals, while the later monitors the risks associated with Eurex’s daily activities, including clearing operation and data management issues.</p> <p>At DBG, there is a Group Risk Management (GRM) that defines the overall objective and monitors the overall risk profile of DBG. It ensures that the risk framework is implemented group-wise so all risks are identified, centrally recorded, and systemically assessed. The GRM’s function is independent of the operational areas, reporting to the executive management.</p> <p>The operational risk for the entire group is defined as the risk of loss resulting from inadequate or failed internal processes, staff and system or from external events. The quantification of the risk is performed on a regular basis using Value at Risk methodology. It relies on the use of internal and external operational risk events, as well as scenarios.</p> <p>Eurex IT is completely outsourced to Deutsche Börse Systems AG. Some functions, such as the hosting of the website, are outsourced to the Swiss Exchange (SIX) Group. All contracts have automatic prolongation clauses and offer sufficient flexible rights to Eurex to cancel the contract in case the need</p>

arises. Outsourcing relations are monitored according to the requirements of the German Banking Act in conjunction with BaFin's Minimum Requirements for Risk Management (MaRisk). There is a risk classification done at the time of the outsourcing and an annual review of those services classified as material from a risk perspective. This is carried out by the so-called outsourcing coordinator. This function is outsourced to Clearstream Banking AG. The monitoring results are presented to the Executive Management Board. Despite this centrally coordinated process to supervise and monitor outsourcing relations, the business owner of an outsourced service—regardless of the regulatory classification—remains responsible to constantly monitor the service quality and the fulfillment of the service provider's obligations.

Contingency plans and back-up facilities (Q2)

The DBG has developed and implemented a comprehensive Business Continuity Management (BCM) policy, which defines the organizational roles and responsibilities, and the guiding principles to ensure operational resilience. The BCM arrangements also address the unavailability of systems, workspace, suppliers, and the loss of significant numbers of staff in order to ensure the continuity of the critical operations even in cases of catastrophe scenarios. The Group Risk Management Unit, which reports to the Executive Management, is responsible for the overall coordination and monitoring of Eurex preparedness to deal with incidents and crises.

The general Recovery Time Objective (RTO) within Eurex is set to four hours, which applies to systems, workspace, staff, and supplier unavailability, although recovery can be achieved quicker dependent on the incident. There are two geographically separated IT processing sites. The systems are clustered between the two data centre and load balanced in normal operation mode with continuous full data synchronization (real-time data mirroring). All types of components are redundant between the two data centers in each location and actively used for production. In case of an incident in one data centre, an automatic failover mechanism ensures that all processing is taken over instantly by the second data centre. The data centers are operated remotely as "dark rooms" requiring no onsite staff. Further, exclusively dedicated alternate facilities exist to provide office space for critical staff in the event their normal office location would become unavailable. The alternate office facilities are fully equipped and networked to both data centers are operational at all times.

The business continuity plan (BCP) is regularly reviewed on a six-monthly basis and are tested at least annually. Eurex has adopted a comprehensive and ambitious BCM testing approach to simulate situations as close as possible to real life. A simulation exercise is carried out annually with market participants. Plans and arrangements are validated against the following criteria:

- (a) Functional effectiveness, validate that they are technically functioning.
- (b) Execution ability, ensure that staff are familiar and knowledgeable in their execution.
- (c) Recovery time, confirm that they can be executed within the defined recovery time objective.

In addition, certain BCM arrangements are used in production on a daily or routine basis (e.g., clustered systems, shift roster, and remote operations). Any issues are reported and resolved including any potential adjustments to operations.

	<p><i>Adequate management controls and periodic independent audit (Q3)</i> Operational reliability is regularly reviewed by senior management. All relevant processes are audited periodically depending on their risk assessment rating; "high" rated processes are audited annually, and "medium" and "low" rated risk areas are audited every two or three years, respectively. The Internal Audit Section, which is responsible for the audit, submits its internal audit report to the executive board. No major incident occurred last year. An external audit of the business continuity plan is already carried out yearly. The annual audit of the yearend figures includes an audit of the risk management systems of banks (including the German CCPs) as the auditor also has to assess whether the minimum requirements regarding the business continuity plan are met. (See section 25a chapter 1 Nr.3 and section 29 of the Banking Act.</p> <p><i>Availability and scalability of the system (Q4)</i> There was not a single complete failure of Eurex system in 2010. In one event, the system was available with delay because of missing input data. No financial transaction data were lost. On average the system was available for 99.95 percent.</p> <p>Capacity plans for the key systems are in place and regularly monitored and reported to management. Stress tests in respect to loaded trades are executed in a performance test environment. Eurex can process 80 percent above peak processing volume.</p>
Assessment	Observed
Comments	
Recommendation 9.	A CCP should employ money settlement arrangements that eliminate or strictly limit its settlement bank risks, that is, its credit and liquidity risk from the use of banks to effect money settlements with its participants. Funds transfers to a CCP should be final when effected.
Description	<p><i>Use of central bank money (Q1)</i> Eurex uses both central bank money and private settlement bank for cash processing (margin and settlement). The central bank money, via TARGET-2 and Swiss SIX payment systems, is used for cash payments for EUR and CHF and for settlement in the German and Swiss markets. For cash payments of GBP and USD, as well as, for Eurobond settlements, private settlement banks, including the ICSDs Clearstream Banking and Euroclear Bank are used.</p> <p><i>Finality of transfers (Q2)</i> The finality for the settlement in central bank money for the EUR and CHF is achieved in TARGET-2 and the Swiss payment system SIC is protected by the Settlement Finality Directive and by the Swiss Banking Law (which adopted parts of the Settlement Finality Directive), respectively. Barclays Bank is used to settle GBP-denominated transactions. Finality is achieved intraday. For transactions in USD, Citibank and JPMorgan bank are used. Confirmation of the settlement is provided intraday. In all currencies, intra-day confirmations of credit are provided by the settlement agent. Laws of the relevant jurisdictions support the provisions of transfers and finality.</p> <p><i>Criteria for selection of settlement banks (Q3)</i> Eurex applies strict criteria for the selection of private settlement agents. Eligible agents must have an external credit rating equal or above 'A-' by Fitch/Standard & Poor's and 'A3' by Moody's, whereas the lowest rating</p>

	<p>applies. The Credit Section monitors these agents on a regular basis and also undertakes an annual credit review to assess their creditworthiness and to ensure their liquidity and solvency.</p> <p><i>Monitor distribution of exposures among settlement banks (Q4)</i> Clearstream relies on two private agent banks for the settlement of USD transactions. Eurex monitors its exposures between these two banks and tries to avoid any concentration. For GBP transactions, the amounts are currently considerably low and only one settlement agent bank is used.</p>
Assessment	Observed
Comments	<p>Eurex relies on a few banks for the settlement of foreign exchange (FX) denominated transactions, which exposures it to settlement risk. Access to central bank account would enhance the integrity of the settlement process. To this end, in 2008, Eurex applied for an account with the Federal Reserve Bank of New York but no positive access decision has been taken since then.</p> <p>Eurex uses central bank money for a broad range of products, e.g., the collections of margins, the settlement of German equities, and the settlement of bonds and repos. Nevertheless, as most banks hold their fixed income portfolios in the ICSDs (i.e., Clearstream Luxembourg and Euroclear Bank Brussels), contracts based on these fixed income securities are settled in commercial bank money in those ICSDs. This applies to bond and repo transactions carried out on the trading platforms Eurex Bonds and Eurex Repo.</p> <p>To further reduce settlement risk, Eurex may consider to settling in central bank money and/or increasing the number of settlement agent banks for FX currencies.</p>
Recommendation 10.	A CCP should clearly state its obligations with respect to physical deliveries. The risks from these obligations should be identified and managed.
Description	<p><i>CCP obligations for physical delivery (Q1)</i> Eurex deliveries of securities are carried out in book-entry form (immobilized or dematerialized) and delivery obligations are fulfilled via book transfer. Eurex Conditions clearly define its responsibilities to deliver and receive securities from participants.</p> <p><i>DVP of mitigation of principal risks (Q2)</i> Eurex enters into trades and becomes the buyer for the seller and the seller to the buyer. Eurex delivers the securities to the buyer after it is received from the seller. This process is supported by a DvP/RvP settlement eliminating principal risk. A simultaneous booking is always given due to the functionality of the chosen settlement system of the CSD, although all the relevant CSDs settle on DVP.</p> <p><i>Liquidity, storage and delivery (other than principal) risks (Q3)</i> The risk of money settlement for the deliveries is covered first by the rule of DvP/RvP. Second, cash obligations are covered by Eurex RBM. Storage risks do not occur as all securities are usually held in safe custody in CSDs and Eurex delivers them to the buyer in the moment Eurex receives them from the seller. All risks affecting deliveries are assessed by risk management in real time.</p>
Assessment	Observed
Comments	

Recommendation 11.	CCPs that establish links either cross-border or domestically to clear trades should evaluate the potential sources of risks that can arise, and ensure that the risks are managed prudently on an ongoing basis. There should be a framework for cooperation and coordination between the relevant regulators and overseers.
Description	<p><i>Sources of risks in links and compliance with RCCPs (Q1)</i> Eurex has currently one link with the European Commodity Clearing AG (ECC), located in Leipzig, Germany. ECC is a subsidiary of the European Energy Exchange (EEX), the leading European energy trading platform. ECC is supervised by BaFin, and designated as a payment system according to Article 10 of the Settlement Finality Directive 98/26/EC. Eurex has a sub-CCP relationship with the ECC. In the case a counterpart is clearing transactions conducted at the EEX via Eurex. Eurex simultaneously steps into the transaction in addition to the EEC. The contractual relationship is simultaneously extended by Eurex as a counterpart of the ECC and the clearing member. Eurex has specific rules for linked CCP in its clearing conditions. This is done to minimize the risk that all obligations cannot be performed in a timely manner.</p> <p><i>Legal support for links (Q2)</i> There is a Clearing Link Agreement between Eurex and the ECC that define the rights and obligations between Eurex and the ECC. Since both CCPs are located in Germany, the German jurisdiction will be applied and no potential conflict of law would arise. Contractual rules governing the linked systems, and governing the link itself, are submitted to the regulatory authorities for review.</p> <p><i>Ongoing monitoring of operational, liquidity and credit risk (Q3)</i> Before entering into a link, risks are evaluated (including due diligence or other analysis/measures as seen fit) according to a specific link methodology. Once a link is implemented and is operational, the risks associated with the link are evaluated daily.</p> <p><i>Co-operative (cross-border) oversight on links (Q4)</i> Both Eurex and the ECC are regulated and supervised by the BaFin. Both CCPs are designated systems according to Article 10 of the Settlement Finality Directive 98/26/EC.</p>
Assessment	Observed
Comments	
Recommendation 12.	While maintaining safe and secure operations, CCPs should be cost-effective in meeting the requirements of participants.
Description	<p><i>Procedures to control risks and pricing (Q1)</i> Eurex has in place procedures to control its operational costs. All budgets are reviewed and approved by management. The Financial Accounting and Controls (FAC) Department issues on a monthly basis, a set of financial reports that are distributed to executive management and certain line managers. These reports include comparison of budgets with actual and previous year's figures. They are prepared following the IFRS commercial format. A forecast for the entire year is also produced and revised periodically; additionally a rolling forecast has been implemented.</p> <p>Eurex states that the prices of its clearing activities may be a part of other services, but according to Eurex management, there is no cross-subsidiary between the services and product of Eurex and those provided by other</p>

entities of DBG. Nevertheless Eurex charges a higher price to clear transactions which are not traded on DGB. For example, the cost to clear a traded transaction is 30 cents, while the clearing of non-traded transaction is 45 cents. The rationale provided by Eurex is that it will reward participants as trading in the order book generate a positive external effect for the overall market through a substantial contribution to the transparent price formation and market quality. Discussions with market participants revealed that a preferential treatment may occur for the clearing of traded products.

Regular review of service levels and operational reliability (Q2)

Eurex has in place procedures to control its operational costs. All budgets are reviewed and approved by management. All pricing levels are repeatedly reviewed. Eurex performs periodic benchmarking studies with comparable CCPs in other European countries to assess its costs and fees. Eurex reviews its pricing and service levels, as well as capacity level on a regular basis. Eurex provides rebates to participants when their volume of transactions exceeds some specified thresholds. An ongoing profit and loss analysis is conducted and the outcome is provided to the Executive Board of Eurex.



Eurex have several advisory groups organized as committees and composed of clearing members: Committee for Derivative Clearing, Committee for Equity Clearing, and Committee for Fixed Income Clearing. Across the serviced products, member meetings are held on a regular basis to discuss new product developments, service enhancements, and costs and fees. The members of the different committees cover more than 80 percent of the traded volume market share in the respective type of product (cash equity, fixed income and derivatives). The forums are used to gather direct and specific feedback for newly released products and services, as well as to raise enhancement requests. The meetings take place on a quarterly basis for derivatives and cash products cleared. Further, Eurex carried out periodic surveys to collect market views.

Assessment	Observed
Comments	Eurex applies higher prices to clear OTC transactions compared to exchange-traded transactions. Eurex's argument for this policy is to promote the move of OTC transactions to the exchange. Although such a policy has its merit to move trade to trade platforms, it cannot be excluded that there is a preferential treatment to clear traded transactions compared to the clearing of OTC transactions.
Recommendation 13.	Governance arrangements for a CCP should be clear and transparent to fulfill public interest requirements and to support the objectives of owners and participants. In particular, they should promote the effectiveness of a CCP's

	risk management procedures.
Description	<p><i>Clarity and transparency of governance arrangements (Q1)</i></p> <p>Eurex was established in 1990 offering clearing services to Eurex's predecessor Deutsche Termin Börse (DTB). It offers fully automated, electronic, and straight-through post trade service. It is a wholly owned subsidiary of Eurex Zürich AG, which is, in turn, owned by Eurex Zürich AG, jointly operated by Deutsche Börse AG and SIX Swiss Exchange (see figure below). Eurex is licensed as a credit institution under the supervision of BaFin. Eurex fulfils Pillar 3 of Basel II (enhanced disclosure of transparency).</p> <p>The governance arrangements and composition of the boards are made publicly available via the Eurex website.</p> <pre> graph TD SIX[SIX Swiss Exchange AG] -- 25% --> EZ[Eurex Zürich AG] DB[Deutsche Börse AG] -- 75% --> EZ EZ -- 100% --> EF[Eurex Frankfurt AG] EF -- 100% --> ED[Eurex Deutschland*] EF -- 100% --> US[U.S. Exchange Holdings, Inc.] EF -- 100% --> EC[Eurex Clearing AG] EF -- 100% --> ER[Eurex Repo GmbH] EF -- 79.44% --> EB[Eurex Bonds GmbH] EF -- 45% --> BSP[BSP Regionalna Energetiska Borza (South Pool)] US -- 100% --> ICE[ICE U.S. Trust Holding Company LP] US -- 100% --> ISE[International Securities Exchange Holdings, Inc.] </pre> <p><i>Separation between reporting lines for risk management and other operations (Q2)</i></p> <p>The organizational structure is set up so that the segregation of duties between departments offers sufficient independence. There is a clear separation in the reporting lines between risk management and other operations of Eurex. The Risk Management Unit reports directly to the Board of Eurex and the Board of the DBG. Reporting is done on a monthly basis and on an ad-hoc basis if and when deemed necessary. The internal audit report is also delivered directly to the executive management.</p> <p><i>Management skills, incentives and accountability (Q3)</i></p> <p>The Banking Law stipulates the basic requirements for the Executive Management Board. They need to prove their theoretical and practical knowledge as well as their leadership experience in the respective business areas. According to Section 32 of the Banking Law, Eurex is obliged to provide BaFin with evidence about the professional qualification of the Management Board. Furthermore, Eurex has to provide a business plan, which describes the business, the organization, and the internal audit procedures. The Stock Companies Act provides several rules about the duties and responsibilities of the members of the Management Board. This is complemented by the MaRisk rules, which include standards with regard to all main organizational issues and business activities that need to be complied with by the CCP.</p> <p>Remuneration and incentive setting follows standardized rules and guidelines, which are risk averse and do not encourage excessive risk taking.</p> <p><i>Board composition, expertise and relevant interest' representation</i></p>

	<p>Eurex has an Executive Board and a Supervisory Board. The Executive Board is composed of six members, who are responsible for the daily business operations. The same members are also on the Boards of Eurex Zürich AG and Eurex Frankfurt AG.</p> <p>The Supervisory Board has 12 full members, and 1 member from BaFin and Bundesbank each, as observers. The majority are managers from Deutsche Börse, while the rest are representatives from the major participants, such as Deutsche Bank, Credit Suisse, UBS, and Pictet & Cie. The members of the Supervisory Board are elected for a term of three years.</p> <p>The most important function of the Eurex Supervisory Board is to oversee the work of the Executive Board, appoints its members as well as approves important corporate decisions and company planning. Members of the Supervisory Board must have a good reputation, be reliable and need to prove their theoretical and practical knowledge in the respective business areas to be able to evaluate and oversee the business of Eurex. All senior managers are appointed by the Executive Management Board.</p> <p><i>Public interest objectives</i></p> <p>There is no legal requirement for Eurex to have explicit public interest objectives. In particular, Eurex is established as a credit institution and, according to the license, its function is restricted to offer CCP service, but no specific public interest objective has been defined in the law. However, The main public objective of Eurex, as published in its website, is to serve Europe and global market place by offering efficient and sound clearing facility that reduce the risk and enhance the efficiency of the derivative markets. In addition, BaFin and Bundesbank representatives are present in meeting of the Supervisory Board of Eurex who ensure the interest of the public. In addition, Eurex has dedicated staff to ensure compliance with domestic and international requirements and standards, and to participate actively in domestic and international fora discussing and providing written opinions on how to enhance the safety of clearing and the efficiency of the derivative markets. It issues several documentations and newsletters aimed at increasing public awareness of the importance of CCP and securities markets related issues. Eurex also claims that its pricing policy is aimed at moving OTC derivatives to the exchanges in order to increase transparency and efficiency of the derivatives markets. This objective serves public interest.</p>
Assessment	Observed
Comments	<p>Eurex governance arrangements are clear and transparent, and publicly available via the Eurex website. These arrangements also reflect the public interest requirements and support the objectives of owners and participants.</p> <p>Eurex should increase the number of independent board members taking into account the interests of small and medium- sized clearing members.</p> <p>Due to the crucial role of Eurex in the German financial market, BaFin may explore the possibility to define explicit public interest objective to Eurex such as to facilitate prompt, efficient, and sound clearing of securities transactions.</p>
Recommendation 14.	A CCP should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using its services.
Description	<p><i>Disclosure of risk management information (Q1)</i></p> <p>Eurex discloses to its clearing members and other market participants its rules, procedures, and policy on its website. These rules cover, among other</p>

	<p>things, governance issues, procedures for handling risks, the rights and obligations of participants, and the costs of using its services. Also important notices and information are posted on the website.</p> <p>Eurex discloses the circumstances it accepts trades for clearing and thus assumes exposure as a central counterparty. The legal basis of its activities “Clearing Conditions” is also available online.</p> <p>In addition, Eurex discloses to its members information on the risk methodologies used (i.e., Risk Based Margining—scenario based matrix approach and historical simulation), risk parameters, and other calculations (e.g., detailed risk scenario calculations). Assessment of risks and costs are publicly distributed on a periodic basis (for example, parameters; margin, and haircuts).</p> <p>Disclosure of quantitative information on its clearing, netting, and setting activities is ensured within the DBG’s annual report, revaluated statistics, and the performance (“running”) of the settlement activities.</p> <p><i>Accessibility of information (Q2)</i> All relevant information is made public via the Eurex website in German and English.</p> <p><i>Completion and disclosure of the answers to the key questions of RCCPs (Q3)</i></p> <p>To ensure compliance with IOSCO Recommendations for Central Counterparties, Eurex has been reviewed by internal auditing three times in the past (2004, 2005, and 2008). The assessment performed in 2008 was made available to the public. A review of the answers to the key questions relating to these recommendations is being performed for the first time and will be reviewed and published annually from here on.</p>
Assessment	Observed
Comments	
Recommendation 15	A CCP should be subject to transparent and effective regulation and oversight. In both a domestic and an international context, central banks and securities regulators should co-operate with each other and with other relevant authorities.
Description	<p><i>Effective regulation and oversight (Q1)</i> Eurex is regulated and supervised by several authorities. In Germany, the main regulator is BaFin, which cooperates with Deutsche Bundesbank to monitor Eurex’s ongoing activities. As a global CCP, Eurex is also subject to the regulation and oversight by FINMA/SNB, by the FSA as a recognized overseas clearing house (ROCH), and by the U.S. Commodities Futures Trading Commission (CFTC) as a Multilateral Clearing Organization (MCO) as well as by the U.S. Securities and Exchange Commission (SEC).</p> <p>Eurex is licensed as a credit institution and subject to the Banking Act with the restriction to offer CCP activities. Eurex has to meet the requirements of the CRD. It is also subject to the requirements on large exposures and million euro loan reporting, and liquidity regulation. The Banking Act does not contain issues specific to CCPs activities, although BaFin has been using the overall risk management provision (Article 25A) to require Eurex to meet the CPSS/IOSCO recommendations.</p>

	<p>Eurex authorization as a ROCH is governed by the United Kingdom law (Financial Services and Markets Acts 2000), its business in the United States is governed by United States law (Securities Exchange Act) with temporary exemptions in connection with CDS clearing, and its business in Switzerland is governed by Swiss law (Financial Market Supervision Act).</p> <p>BaFin has six staff involved in regulating and overseeing clearing and settlement activities. It can also rely on additional staff from the banking supervisory department. The Bundesbank has 11 staff dealing with payment, clearing and securities settlement systems oversight (of which 5 oversee clearing and settlement activities). The BaFin regulator staff (but not the Bundesbank oversight staff) may accompany the banking supervisory staff carrying out onsite inspection. In addition,, the banking supervisory staff carrying out onsite inspection can be assigned to check some clearing aspects of Eurex clearing.</p> <p><i>Definition and disclosure of objectives of central banks and securities regulators (Q2)</i></p> <p>BaFin does not have any written materials that clearly disclose its objectives and roles in the field of CCPs, although some information has been given during its meetings with Eurex. The objectives and policies of the Bundesbank are clearly disclosed in several publications, including annual reports, and speeches by senior management.</p> <p>By using its banking supervisory authorities, BaFin and Bundesbank have sufficient legal capacity (German Banking Act, Section 3 of the Bundesbank Act, Article 105 (2) of the EC Treaty, Article 3 and 22 ESCB-Statute) to carry out effective regulation and oversight.</p> <p><i>Timely provision of oversight information to relevant authorities (Q3).</i></p> <p>Eurex is not required to send proposed changes to its clearing conditions to BaFin. Authorized as a credit institution, Eurex however needs to report to BaFin and the Bundesbank on a regular basis (yearly, half-yearly, quarterly, monthly, or weekly), and on an ad hoc basis if necessary. Also, some organizational changes (new Executive Board or Supervisory Board Members, changes in participations—if any) need to be reported or even approval need to be requested on a case-by-case basis.</p> <p>(a) BaFin and the Bundesbank information requirements: As home regulator, information requirements of BaFin and the Bundesbank are regulated within the Banking Law. However, this is a standardized reporting requirement aimed at covering banking activities and some items may cover Eurex activities. There are no specific reporting requirements for Eurex CCP activities.</p> <p>(b) The United Kingdom FSA information requirements: Eurex informs the FSA in advance of any plans to alter the governing law of its rules, procedures, and membership agreements. Furthermore, weekly stress and back testing reports, monthly financial resource reports as well as annual reports are provided to the FSA.</p> <p>(c) United States CFTC information requirements: Eurex needs to inform the CFTC about any material change in the information provided in the request for the MCO status, including information on risk management and the change agreements with regard to the exchange of information between the regulators.</p>
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	<p>(d) United States SEC information requirements: Eurex has to inform the SEC in advance of any plans to alter Eurex rules, procedures, and membership agreements. Furthermore, Eurex reports on a bi-weekly basis stress and back testing, and monthly on disciplinary actions. It is also obliged to report participants' defaults. Any material rule changes, outages and changes in risk management have to be reported in a timely manner. In general, annual talks and discussions with the regulators take place due to the Supervisory Review and Evaluation Process (SREP). Moreover, BaFin and the Bundesbank have the mandate to request any information or to conduct any ad-hoc onsite inspections.</p> <p><i>Domestic and cross-border cooperation (Q4)</i></p> <p>The general conditions for domestic cooperation are laid down in a guideline for the cooperation between BaFin and Deutsche Bundesbank. This "guideline on carrying out and ensuring the quality of the ongoing monitoring of credit and financial services institutions by the Deutsche Bundesbank of 21st of February 2008 (Supervision Guideline)" is publicly available in the internet: http://ww2.bafin.de/sdtf/xls/supervision_guideline.pdf</p> <p>The aforementioned supervision guideline also supports the targets of the guideline issued by the Central European Banking Supervisors (CEBS).</p> <p>BaFin and Deutsche Bundesbank are actively involved and cooperate closely in developing European and international standards and principles as the "ESCB/CESR Recommendations for Central Counterparties in the European Union" and the "CPSS/IOSCO Recommendations for Central Counterparties." Both BaFin and Bundesbank review Eurex self assessments against these recommendations.</p> <p>As the home regulators BaFin and the Bundesbank have the lead in supervision. BaFin and Bundesbank have formal relationships (memorandums of understanding (MOU)) with the other regulators.</p>
Assessment	Partly Observed
Comments	<p>Eurex is regulated and supervised as a bank, and all regulatory requirements are related to banking activities. There is no special regulatory regime that covers Eurex CCP business. Both BaFin's and the Bundesbank's mandate to regulate, supervise and oversee Eurex is based on its banking status. Furthermore, the Bundesbank does not have the legal basis to oversee Eurex as a financial market infrastructure.</p> <p>Given the intensive involvement of BaFin and Bundesbank in domestic and international committees, working groups and fora on clearing and settlement, the current staff is not entirely sufficient to effectively carry out regulation and oversight of clearing activities. To this end, BaFin and the Bundesbank should recruit additional staff to regulate and oversee clearing activities.</p> <p>The Bundesbank should be provided with the legal mandate to oversee Eurex as a CCP. Furthermore, the Bundesbank's staff should participate in the onsite inspection of Eurex as a complementary function to BaFin's regulatory responsibility</p> <p>For full compliance with this recommendation, Bafin should:</p> <ul style="list-style-type: none"> (a) Define and disclose its objectives and policies with regard to CCPs activities. (b) Either issue new regulatory regimes dedicated to CCPs activities or

	<p>further develop, in the Banking Law, special rules and requirements for CCPs activities.</p> <p>(a) Request Eurex to consult BaFin for any material changes of its clearing conditions.</p>
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Table 3. Summary of the Detailed Assessment of the Observance of Eurex Clearing AG (Eurex) with the CPSS-IOSCO Recommendations for Central Counterparties

Responsibility	Grading	Comments
Legal risk		
1. Central counterparties should have a well-founded, clear and transparent legal basis in the relevant jurisdiction.	O	<p>Eurex is regulated as a credit institution with a single purpose to provide clearing activity. The banking law and other legislations provide a sound, transparent, and enforceable legal basis for each aspect of its activities.</p> <p>Eurex can change its clearing conditions without prior consultation or approval by the relevant regulator and overseer, although Eurex does so in practice. It is recommended that the relevant authorities should require Eurex to consult the authorities prior to deciding on any material changes of its clearing conditions. This procedure would achieve a higher degree of legal safety, better ensure that the public interest is taken into account, and increase impartiality vis-à-vis its participants.</p>
Participation requirement		
2. A CCP should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP. A CCP should have procedures in place to monitor that participation requirements are met in an on-going basis. A CCP's participation requirements should be objectives, publicly disclosed, and permit fair and open access.	O	Eurex has adequate financial and technical requirements for participants, which are based on the types of membership and the products and services that the member will use. In particular, a full member must be regulated by the relevant authorities, meet adequate minimum capital, contribute to the clearing fund, have qualified staff and the meet the minimum level of technical capability including network communication, and establish appropriate settlement arrangement.
Measurement and management of credit exposures		

Responsibility	Grading	Comments
<p>3. A CCP should measure its credit exposure to its participants at least once a day. Through margin requirements, other risk control mechanisms or a combination of both, a CCP should limit its exposure to potential losses from defaults of its participants in normal market conditions so that the operation of the CCP would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.</p>	O	<p>Eurex has a comprehensive and adequate risk management framework composed of objectives, measures, and tools defined and implemented at the level of Eurex entity and DBG. This framework is reviewed and assessed on a regular basis. Eurex employs different tools to limit its exposures to potential losses from defaulting participants, including capital requirement, margin requirement, contribution to clearing fund, and employs other risk control mechanisms. In addition, intraday risk controls are in place to safeguard and strengthen the lines of defense of Eurex and thus ensuring its continuous integrity for the markets cleared by Eurex.</p>
Margin requirements		
<p>4. If a CCP relies on margin requirements to limit its credit exposures to participants, these requirements should be sufficient to cover potential exposures in normal market conditions. The models and parameters used in setting margin requirements should be risk-based and reviewed regularly.</p>	O	<p>Eurex relies on initial and variation margin requirements to limit its credit exposures to participants. The margin requirements are met through cash and eligible securities deposited in regulated entities. Eurex tests regularly the risk-based model on which the margin requirements calculation is based.</p> <p>The margin model and its parameters are regularly validated internally and by the authorities. The parameters and the assumptions that are used in the models are validated in daily, weekly monthly or quarterly reviews depending on parameter type. Market participants are informed on the assumptions, parameters, and scenarios.</p>
Financial resources		
<p>5. A CCP should maintain sufficient financial resources to withstand, at a minimum, the default of a participant to which it has the largest exposure in extreme but plausible market conditions.</p>	O	<p>By using a comprehensive risk management framework, Eurex has defined its financial resources needed to withstand the default of three participants with the largest exposures in extreme, but plausible market conditions. Eurex performs daily stress testing with extreme, but plausible market conditions, which can also be run on intraday basis when needed.</p> <p>As a CCP, Eurex has access to an intraday credit facility of the Eurosystem in line with the TARGET2 Guideline. As a credit institution, it is also eligible to receive emergency liquidity assistance from the Bundesbank. Cash margins placed by clearing members are almost all invested</p>

Responsibility	Grading	Comments
		overnight and are thus to be classified as immediately available.
Default procedures		
<p>6. A CCP default procedures should be clearly stated, and should ensure that the CCP can take timely action to contain losses and liquidity pressure and to continue meeting its obligations. Key aspects of the default procedures should be publicly available.</p>	O	<p>Eurex default rules and procedures are clearly stated in its clearing conditions, which allow Eurex to transfer customers' positions to another clearing member, close out, and settle the defaulting member's open positions. Eurex also has the right to assign the remaining positions pro rata to the non-defaulting clearing members.</p> <p>The German legislative framework provides a high degree of assurance with regard to the enforceability of default procedures. However, at present, the legal basis to separate the customer's collaterals from those of the clearing member is not entirely robust from a legal viewpoint.</p> <p>It is not certain whether German insolvency law fully supports the transfer of customer positions and collateral. In case of insolvency of a clearing member, the Insolvency Act provides for close-out netting of customer positions. As a consequence, positions are transformed into a single payment obligation and cannot be transferred to another clearing member any more. The German parliament (Bundestag) currently discusses an amendment to the Insolvency Act that would allow the CCP to transfer customer positions and collateral to another clearing member in case of insolvency of the original clearing member. The transfer of customer positions and collateral including support by insolvency law is also provided for in the draft EMIR, which would be directly applicable in Germany.</p>
Custody and investment risk		
<p>7. A CCP should hold assets in a manner whereby risk of loss or of delay in its access to them is minimized. Assets invested by a CCP should be held in instruments with minimal credit, market and liquidity risks.</p>	O	<p>Securities pledged to Eurex by its participants are only deposited with CSDs and ICSDs, which are supervised by national authorities. These securities can be withdrawn only with the consent of Eurex clearing AG.</p> <p>Regulations in Germany and Switzerland provide an appropriate legal environment to ensure access to pledged securities in the case of insolvency of the clearing member.</p>

Responsibility	Grading	Comments
		Eurex has in place processes and specialized staff to monitor the custodian banks, including daily monitoring and periodical review of the custodians. Eurex assesses these custodians against recommendation 12 with regard to accounting practices and safekeeping/internal control procedures, regulated, and strong financial position.
Operational risk		
8. A CCP should identify sources of operational risk and minimize them through the development of appropriate systems, controls and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Business continuity plans should allow for timely recovery of operations and fulfillment of a CCP's obligations.	O	<p>The Eurex risk management framework is governed by policies and procedures defined both at the level of Eurex and of DBG, which has developed and implemented a comprehensive BCM policy. This policy defines the organizational roles and responsibilities, and the guiding principles to ensure operational resilience.</p> <p>Eurex carries out testing of its contingency plan, IT infrastructure, and communication network with the majority of its participants on an annual basis.</p> <p>To ensure business continuity, there are two geographically separated IT processing sites. The systems are clustered between the two data centers and load balanced in normal operation mode with continuous full data synchronization (real-time data mirroring).</p>
Money settlements		
9. A CCP should employ money settlement arrangements that should eliminate or strictly limit its settlement bank risks, that is, its credit and liquidity risk from the use of banks to effect money settlements with its participants. Funds transfers to a CCP should be final when effected.	O	<p>Eurex relies on a few banks for the settlement of foreign exchange denominated transactions, which exposures it to settlement risk. Access to central bank account would enhance the integrity of the settlement process. To this end, in 2008, Eurex applied for an account with the Federal Reserve Bank of New York but no positive access decision has been taken since then.</p> <p>Eurex uses central bank money for a broad range of products, e.g. the collections of margins, the settlement of German equities, and the settlement of bonds and repos. Nevertheless, as most banks hold their fixed income portfolios in the ICSDs (i.e. Clearstream Luxembourg and Euroclear</p>

Responsibility	Grading	Comments
		<p>Bank Brussels), contracts based on these fixed income securities are settled in commercial bank money in those ICSDs. This applies to bond and repo transactions carried out on the trading platforms Eurex Bonds and Eurex Repo.</p> <p>To further reduce settlement risk, Eurex may consider to settling in central bank money and/or increasing the number of settlement agent banks for FX currencies.</p>
Physical deliveries		
<p>10. A CCP should clearly state its obligations with respect to physical deliveries. The risks from these obligations should be identified and managed.</p>	O	<p>Eurex deliveries of securities are carried out in book-entry form (immobilized or dematerialized) and delivery obligations are fulfilled via book transfer. Eurex rules clearly define the responsibilities to deliver and receive securities from participants.</p> <p>Eurex settles on a DVP basis, which takes place in CSD or ICSD. All risks affecting deliveries are assessed by risk management in real-time.</p>
Risks in links between CCPs		
<p>11. CCPs that establish links either cross-border or domestically to clear trades should evaluate the potential sources of risks that can arise, and ensure that the risks are managed prudently on an ongoing basis. There should be a framework for cooperation and coordination among the relevant regulators and overseers.</p>	O	<p>Eurex has currently one link with the ECC. There is a clearing link agreement between Eurex and ECC that define the rights and obligations between Eurex and ECC. Eurex has specific rules and procedures for linked CCP. Before entering into a link, risks are evaluated (including due diligence or other analysis/measures as seen fit) according to a specific link methodology. Once a link is implemented and is operational, the risks associated with the link are evaluated daily.</p>
Efficiency		
<p>12. While maintaining safe and secure operations, CCPs should be cost-effective in meeting the requirements of participants.</p>	O	<p>Eurex has in place procedures to control its operational costs. All budgets are reviewed and approved by management. All pricing levels are repeatedly reviewed. Eurex perform periodic benchmarking studies with comparable CCPs in other European countries to assess its costs and fees. Eurex provides rebates to participants when their volume of transactions exceeds some specified thresholds. An ongoing profit and loss analysis is conducted and the outcome is provided to the Executive Board of Eurex. Eurex applies higher prices to clear OTC transactions compared to exchange-traded</p>

Responsibility	Grading	Comments
		<p>transactions. Eurex's argument for this policy is to promote the move of OTC transactions to the exchange. Although such a policy has merits, it is possible that there is a preferential treatment to clear traded transactions compared to the clearing of OTC transactions.</p>
Governance		
<p>13. Governance arrangements for a CCP should be clear and transparent to fulfill public interest requirements and to support the objectives of owners and participants. In particular, they should promote the effectiveness of a CCP's risk management procedures.</p>	O	<p>Eurex governance arrangements are clear and transparent, and publicly available via the Eurex website. These arrangements also reflect the public interest requirements and support the objectives of owners and participants.</p> <p>Eurex should increase the number of independent board members taking into account the interests of small and medium-sized clearing members.</p> <p>Due to the crucial role of Eurex in the German financial market, BaFin may explore the possibility to define explicit public interest objective to Eurex such as to facilitate prompt, efficient, and sound clearing of securities transactions.</p>
Transparency		
<p>14. A CCP should provide market participants with sufficient information for them to identify and evaluate accurately the costs and risks associated with using its services.</p>	O	<p>Eurex discloses to its clearing members and other market participants its rules, procedures, and policies on its website. These rules cover, among other things, governance issues, procedures for handling risks, the rights and obligations of participants, and the costs of using its services.</p> <p>Eurex also discloses to its members information on the used risk methodologies (i.e., RBM; scenario based matrix approach; and historical simulation), risk parameters, and other calculations (e.g., detailed risk scenario calculations). Assessment of risks and costs are publicly distributed on a periodic basis (for example, parameters; margin; and haircuts).</p>
Regulation and oversight		

Responsibility	Grading	Comments
<p>15. A CCP should be subject to transparent and effective regulation and oversight. In both a domestic and an international context, central banks and securities regulators should co-operate with each other and with other relevant authorities.</p>	<p>PO</p>	<p>Eurex is regulated and supervised as a bank, and all regulatory requirements are related to banking activities. There is no special regulatory regime that covers Eurex' CCP business. Both BaFin's and Bundesbank's mandates to regulate, supervise and oversee Eurex is based on its banking status. Furthermore, the Bundesbank does not have the legal basis to oversee Eurex as financial market infrastructure.</p> <p>The Bundesbank should be provided with the legal mandate to oversee Eurex as a CCP. Further, the Bundesbank's staff should participate in the onsite inspection of Eurex as a complementary to BaFin's regulatory responsibility.</p> <p>Given the intensive involvement of BaFin and Bundesbank in domestic and international committees, working groups and fora on clearing and settlement, the current staff is not entirely sufficient to effectively carry out regulation and oversight of clearing activities. To this end, BaFin and Bundesbank should recruit additional staff to regulate and oversee clearing activities.</p> <p>For the full compliance with this recommendation:</p> <ul style="list-style-type: none"> a. BaFin should define and disclose its objectives and policies with regard to CCPs activities. b. BaFin should either issue a new regulatory regime dedicated to CCP activities, or further develop, in the Banking Law, special rules and requirements for CCP activities. c. BaFin should request Eurex to consult BaFin for any material changes of its clearing conditions.
<p><i>Aggregate: Observed (O), Broadly observed (BO), Partly observed (PO), Non-observed, Not applicable (N/A).</i></p>		

Table 4. Actions to Improve Compliance

Reference Recommendation	Recommended Action
Recommendation 1: Legal risk	It is recommended that the relevant authorities should require Eurex to consult the authorities in advance for any material changes of its clearing conditions. This procedure would achieve a higher degree of legal safety, better ensure that the public interest is taken into account, and increase impartiality vis-à-vis its participants.
Recommendation 15: Regulation and oversight	<p>BaFin should clearly define and disclose its objectives and policies with regard to CCPs activities.</p> <p>BaFin should either issue a new regulatory regime dedicated to CCPs activities, or further develop, in the Banking Law, specific rules and requirements for CCPs activities.</p> <p>BaFin should request Eurex to consult BaFin for any material changes of its clearing conditions.</p> <p>The Bundesbank should be provided with the legal mandate to oversee Eurex as a CCP. Further, the Bundesbank's staff should participate in the onsite inspection of Eurex as a complementary function to BaFin's regulatory responsibility</p> <p>BaFin and the Bundesbank should recruit additional staff to carry out the regulation and oversight of clearing activities more effectively.</p>

Table 5. Further Recommended Actions

Reference Recommendation	Recommended Action
Recommendation 6: Default procedures	At present, the legal basis to ensure portability of a customer's collaterals is not entirely robust from a legal viewpoint. In the case of default, there is a potential risk that the customer's holdings cannot be ported to another clearing member. However, an amendment of Article 104a of the insolvency law to eliminate this potential risk is currently under discussion in Bundestag.
Recommendation 9: Money settlements	To further reduce settlement risk, Eurex may consider to settling in central bank money and/or increasing the number of settlement agent banks for FX currencies.
Recommendation 12: Efficiency	Eurex should make public its differentiated price policy with regard to clearing non-traded transactions as a part of the general policy to encourage movement of these transactions to the exchange.

Reference Recommendation	Recommended Action
Recommendation 13: Governance	<p>Eurex should increase the number of independent board members taking into account the interests of small and medium-size clearing members.</p> <p>Due to the crucial role of Eurex in the German financial market, BaFin should explore the possibility of defining an explicit public interest objective to Eurex, such as facilitating prompt, efficient and sound clearing of securities transactions.</p>

Authorities' response to the assessment

17. **In Recommendation 13, the IMF suggests to increase the number of independent board members taking into account the interests of small and medium-sized members.** However, Eurex has to take into account that in Germany, the members of the supervisory board are elected by the shareholders only and Eurex cannot influence their decision.