

BME CLEARING

Frequently Asked Questions

Corporate Structure and Governance

- Please describe the CCPs ownership structure.

BME Clearing is 100% subsidiary of Bolsas y Mercados Españoles (BME Group). Please see links to BME Group web site for comprehensive information about the Group:

<https://www.bolsasymercados.es/ing/About-BME/What-is-BME>

<https://www.bolsasymercados.es/ing/About-BME/Companies>

<https://www.bolsasymercados.es/ing/About-BME/Organization-Chart>

- Please provide details of the legal entity through which clearing services are provided

Full legal name: BME Clearing, S.A., Sociedad Unipersonal
Principal place of business: Plaza de la Lealtad, 1, 28014 Madrid
Main office phone, fax number & e-mail address: + 34 91 709 50 00

- Where BME CLEARING provides clearing services please confirm the entity is regulated or licensed by an official body? Please provide the name and address of the regulator or official body and confirm that you hold the appropriate authorization/license to conduct clearing services.

Yes, we are fully regulated by Spain's financial authorities, and specifically the Ministry of Economy and Finance and the Spanish Securities Markets Commission (Comisión Nacional del Mercado de Valores; CNMV) regulate and supervise BME CLEARING.

Ministry of Economy and Business: Paseo de la Castellana, 162, 28046 Madrid

CNMV: C/ Edison 4, Madrid, Spain.

We have full license to conduct clearing services. Additionally, BME CLEARING is EMIR compliant. It obtained the authorization as a Qualified CCP (QCCP) on September 16, 2014.

Please, check the ESMA's list of CCPs authorized to offer services and activities in the European Union in accordance with EMIR:

http://www.esma.europa.eu/system/files/ccps_authorised_under_emir.pdf

- Please describe your governance structure at Board of Directors level, including what governance committees exist at BME CLEARING.

The organizational structure is fully detailed in our web site, please see:

<http://www.bmeclearing.es/ing/AboutUs/EstructuraOrganizativa.aspx>

There is a specific Audit Committee and a Risk Committee.

- What is the policy of BME CLEARING in relation to business continuity?

BME CLEARING Business Continuity Policy is described in the attached document:

http://www.bmeclearing.es/docs/docsSubidos/esp/BME_CLEARING/Gobernanza/Pol%C3%ADtica_Continuidad_Negocio_BME_Clearing_20140226.pdf

- What is the role of the CCP's Risk Committee and how are its members selected? To what extent does the CCPs risk management framework incorporate feedback from the CCP Risk Committee?

Members of the Risk Committee are disclosed in our web site:

<http://www.bmeclearing.es/ing/AboutUs/EstructuraOrganizativa.aspx>

And for comprehensive information about the Risk Committee, please see Article 20 of the following document:

http://www.bmeclearing.es/docs/docsSubidos/ing/BME_CLEARING/CorporateGovernance/BoardofDirectorsandRiskCommitteeRegulations.pdf

- Are recommendations of the Risk Committee binding or can they be overridden by BME CLEARING Board of Directors?

The Risk Committee fulfills the EMIR requirements in all respects (composition, mandate, governance arrangements, etc.).

With respect to the binding nature of the advice, EMIR requires (art. 28.5) that “a CCP shall promptly inform the competent authority of any decision in which the board decides not to follow the advice of the risk committee”. And that is the approach in BME CLEARING Risk Committee too.

The Rules of the Board of Directors Regulations specifically contain the following provisions:

The Risk Committee is a consultative committee of the Board of Directors, advising it on any arrangements that may impact the risk management of the Company.

The CNMV shall be notified if the Board of Directors decides not to follow the advice of the Risk Committee with respect to matters within its remit.

There has not been any case of overridden recommendations.

- Describe the legal and regulatory structure of your institution and the operating entities/asset classes/services.

BME CLEARING rules are articulated in the Rulebook and in complementary regulations such as General Conditions of each segment of the CCP and Circulars approved by BME CLEARING Board of Directors and also by the CNMV.

Please see our Rulebook, General Conditions, Circulars and Operational Instructions:

<http://www.bmeclearing.es/ing/Resources/Resources.aspx>

- Please confirm if the regulators require you to have a minimum capital level to undertake clearing services?

Yes, on January 1, 2019:

TOTAL Required Capital BME CLEARING = 15,114,000.51 €

BME CLEARING Capital = 42,532,000.00 €

This amount is monitored by the Risk Department. Should the year-to-year variation exceed a 10 % or should the ratio (2)/(1) fall below 137.5 % , the Risk Committee would be warned.

- What methods are used by the regulator to monitor your compliance with the regulations and laws that govern your organization (on site visits, regulatory submissions, regulatory inquiries etc.)?

Regulatory inquiries

- Please provide an overview of the specific rules or regulations which govern the clearing of assets in markets that you provide services?

BME CLEARING, as central counterparty, is governed by EMIR and by the Spanish Securities Market Act (SMA) and its activities are carried out within the framework envisaged in its Rule Book, General Conditions, and complementary regulations such as Circulars and Instructions.

Additionally, the Royal Decree-Law 5/2005, of 11 March, on urgent reforms to foster productivity and improve public contracting, and under Law 41/1999, on securities payment and settlement systems.

The internal rules and regulations will govern the functioning of the central counterparty as a company and contain the obligations and organizational requirements and procedures necessary to comply with the provisions of the EMIR. Please see our Rulebook, General Conditions, Circulars and Operational Instructions: <http://www.bmeclearing.es/ing/Resources/Resources.aspx>.

- Do you provide clearing services from a country outside of your legal address? If yes, where are those countries?

Yes, we have Members based in different countries, out of Spain:

- UK
- Ireland
- Germany
- France
- Netherlands
- US
- Canada
- Switzerland
- Denmark
- Israel

Compliance

- What is the governing law applicable to your institution?

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Please see our Rulebook, General Conditions, Circulars and Operational Instructions: <http://www.bmeclearing.es/ing/Resources/Resources.aspx>.

- Is the regulatory framework compliant with “EMIR” and “CPSS-IOSCO” recommendations? Please provide us a copy of the independent confirmation by the regulator. If not, please explain.

Yes, BME CLEARING is EMIR compliant (QCCP).

Please, check the ESMA's list of CCPs authorized to offer services and activities in the European Union in accordance with EMIR:

http://www.esma.europa.eu/system/files/ccps_authorsd_under_emir.pdf.

Regarding the CPSS-IOSCO. Please, see the current link:

<http://www.bmeclearing.es/ing/Resources/CPMI-IOSCO.aspx>

- Please describe whether your organization is required by local law to obtain a certain legal status or license in order to provide clearing services in the market. If so, does your organization have such status/license?

The CCP is regulated by the CNMV as the competent authority under EMIR. In addition, it is a condition in order to obtain authorization as a Central Counterparty under EMIR (Regulation 17(4)) that any central counterparty which satisfies the authorization requirements in EMIR is notified as a "system" under the Settlement Finality Directive.

The CCP is subject to Law 24/1988, of 28 July 1988, on the Securities Market (the "Spanish Securities Market Act") and Law 41/1999, of 12 November 1999, on Payment and Securities Settlement Systems, which implements the Settlement Finality Directive ("Law 41/1999").

- Is your institution designated as a Systemically Important Financial Market Utility (SIFMU) by the Financial Stability Oversight Council, or by the local equivalent? If yes, what additional regulatory oversight is your institution subject to?

No.

- Is your institution covered by CPMI IOSCO principles for Financial Market Infrastructures? If yes, please provide a link to your institution's CPMI IOSCO disclosures (or the disclosure itself).

Yes. <http://www.bmeclearing.es/ing/Resources/CPMI-IOSCO.aspx>

- Do local regulations require you to perform regular external control audits?

Yes, external control audits in per annum basis.

- Please provide the full name and address of the external auditor used by your organisation?

PwC

- Please provide a copy of your most recent CPMI IOSCO disclosures and SSAE16/ISAE3402 reports where available.

Please see them in the following link:
<http://www.bmeclearing.es/ing/Resources/CPMI-IOSCO.aspx>

We are working to have a new CPMI IOSCO disclosure published soon.

- Please advise whether your staff servicing our activity receive regular training on Anti –Bribery and Corruption (ABC), Anti-Money Laundering (AML), Counter Terrorist Financing (CTF), Know Your Client (KYC), Politically Exposed Persons (PEP), Bank Secrecy Act (BSA) and sanctions issues?

BME Group has a Corporate Defence Programme that includes training for BME employees. The trainings usually take place at least on a yearly basis and it includes IT security and data protection areas besides Corporate Defence Programme issues. Attendance is monitored and it usually includes an assessment of the trainees.

- Please detail the policies, procedures and systems you have in place relating to AML, Sanctions, KYC, PEP, CTF, ABC, counter terrorist financing, KYC, politically exposed persons, privacy and data protection, and other related regulations, which you need to comply with, as it relates to the services that you provide.

BME Group has a Corporate Defence Programme which applies to all the companies of the Group including BME CLEARING.

The Corporate Defence Programme establishes a set of general controls and tools in order to moderate the risk: BME Group Code of Conduct; BME Group Internal Regulations of Conduct; Whistle-blowing system, policy and procedures; BME Group Prevention of criminal offences Guidelines; Criminal Prevention Handbook; Group's Corporate Governance: Audit Committee, Standards of Conduct Committee...; Process map, risk management file and control plans; Principles of action guidelines for employees; mandatory Training program on this issue.

This programme also encloses special clauses regarding Money Laundering, breach of privacy and data protection, Hacking, fraud, insolvency offence, computer damages, Crimes against intellectual property rights, breach of professional or business secrecy, misleading advertising, Stock Market offences, private corruption, Crimes against the Public Treasury and the Social Security, breach of accountancy obligations, Bribery, Trading in influence and Corruption in international commercial transactions.

- Is the status of the AML and Sanctions program reported to senior management/board?

BME CLEARING CCO and BME Group Compliance team are responsible for AML monitoring and reporting to the Competent Authorities if needed. BME CLEARING shall report to the Board any AML issue identified.

According to Law 10/2010, of 28 April, on prevention of money laundering and terrorism financing and after consultation to the Spanish Financial Intelligence Unit (FIU) and AML/CFT Supervisory Authority, that is SEPBLAC, BME CLEARING is not considered an obliged person and therefore is not subject to the regular requirements of this law. In any case, BME CLEARING will respond to specific requests of the SEPBLAC. So far, BME CLEARING has not received any request for information from the SEPBLAC.

- In the last 5 years, has a regulator or other independent body applied any publicly disclosed warnings, sanctions, fines or penalties on your institution related to your ABC, AML, CTF, KYC, PEP, BSA or sanctions procedures?

No

- Does BME CLEARING have a banking license?

No

- Is your institution designated as a Systemically Important Financial Market Utility (SIFMU) by the Financial Stability Oversight Council, or by the local equivalent?

No

- How frequently do you meet with regulators and what have been the main topics of discussion? Are there any expected rulebook changes as a result of discussions with regulators? If so, please detail.

It depends on the relevance of changes proposed. For example, due to the EMIR authorization (granted September 2014) we had more frequent meetings with them. On the other hand, if there are no important changes to face, there are no regular meetings, even though on a monthly basis we usually contact them in order to get their approval before the entry into force of any updated Circular of BME CLEARING.

- Please advise if the regulatory authorities have enforced any action in the last three years against your institution.

No.

- Please detail any additional monitoring policies in place relating to prevention of fraudulent / criminal activity.

As regards Anti-Money laundering and terrorism financing there is a procedure aimed at complying with the Spanish Authorities requirements, approved by BME Group in accordance with the Internal Control System of Financial Information. Some other policies are duly segregation of duties, external review of public agreements by a Notary Public, double check and signature system for bank transfers, Security policies and Committees, confidentiality clauses, System for the approval of purchases, attachment to the Spanish Tax Agency code of conduct... etc.

- Do you screen your participants against sanctions lists at onboarding and on a regular basis thereafter? If so, against which list(s) (eg. UN, OFAC, EU) and how frequently?

No, we don't. We are subject to the European and Spanish law and to any request for information made by the SEPBLAC (Spain's Financial Intelligence Unit (FIU) and AML/CFT Supervisory Authority) any time.

- Please provide an overview of your institution's internal audit structure.

The Audit Committee is a BME board committee.

The Internal Audit Service's mission is to support BME's Audit in overseeing the effectiveness of the control mechanisms and risk management processes in place. To this, it shall operate independently and in accordance with professional quality standards and rules, helping the various Group companies to comply with applicable regulations and the most stringent of corporate governance standards, and reducing to an acceptable level the possible impact of any risks on the Company's ability to meet its objectives.

The primary responsibility of the Internal Audit Service is to oversee the proper functioning of the internal control and risk management systems, and keep the Board informed through the Audit Committee, and BME's senior management

through the Risk Committee about the adequacy and effectiveness of the procedures, rules, policies and instructions established by Group companies to ensure the proper functioning of these systems to attain the goals related to:

- Effectiveness and efficiency of resources and operations;
 - Reliability of financial and operational information; and
 - Compliance with applicable laws and other regulations.
- Does your Audit Committee review the scope of the auditing procedures of the external auditors?
Yes
- Is your institution subject to onsite inspections by regulators? If so, how often are these conducted?
No
- What do such audits / regulatory inspections cover? (eg. financials, operational procedures, risk management and controls)
- Internal: operational procedures, risk management and controls.
 - External: Financials.

Commercial

- What geographic markets do you clear for, and are there any plans to extend your market coverage?

BME Clearing is a multi-asset class CCP, organized in Segments on a per asset class basis. It clears products from 5 different segments: Financial Derivatives, Cash Equities, Repos, Electricity and Gas Derivatives, and IRS.

- Cash Equities: stocks, warrants and ETFs.
 - Financial Derivatives: futures and options on the IBEX 35 Index and on Spanish single stocks, dividend futures and rolling spot futures on FX pairs and on single stocks (coming soon).
 - Fixed Income/ Repo: government debt repos from Spain, Italy, Portugal, France, Germany, Netherlands and Austria.
 - IRS: Coupon and Basis Swaps, OIS and FRAs.
 - Energy Derivatives:
 - Electricity: futures and swaps
 - Gas: futures and day-aheads
- Please provide us with a list of Exchanges / Trading Venues that you clear per segment.
- Financial Derivatives: Regulated Market (RM) **MEFF (Financial Derivatives segment)**.

- Electricity Derivatives: Regulated Market (RM) **MEFF (MEFFPower segment)**.
 - Fixed Income/ Repo segment: Multilateral Trading Facility (MTF) – **SENAF**
 - Fixed Income/ Repo segment: Regulated Market (RM) - **CME Europe B.V. (BrokerTec)**
 - Cash Equities Segment: Regulated Market (RM) – **SIBE**
- Is your institution interoperable with other CCP's and if so with which CCP's and for which products?

No, it is not.

- Do you pay credit interest on members' Default Fund and Initial Margin?

As you may know, BME CLEARING may invest the Cash Margins (both for Default Fund and IM) in overnight buy/sell back transactions under the frame of IBERCLEAR, CLEARSTREAM or EUROCLEAR, as established in point 6 of our Circular "Posting of Margins":

http://www.bmeclearing.es/docs/ing/normativa/circulares/2018/C-GEN-2018_16_Posting_of_margins.pdf

But, as you know, the Clearing Member (or a Client under an ISA) may request to not invest the cash margins and to leave the cash posted in the account of BME CLEARING in the ECB-Eurosystem, through TARGET2-Bank of Spain.

In the case of a negative interest rates environment, BME CLEARING chooses from the following two alternatives, the least harmful for Members at all times:

To Perform the investment in a buy/sell back transaction to a negative interest rate or to maintain the cash in its account in the Eurosystem, with the cost of negative interest rate applied by the ECB.

Therefore, BME CLEARING will charge or credit any negative or positive interest rate generated by each alternative to the Clearing Member or its Payment Agent, along with the associated costs of the alternatives, if any.

BME CLEARING shall not make any withholding from its Members when crediting the amount of interests, due to its Members' financial intermediary condition.

- Is the credit interest rate based on a transparent interbank interest rate benchmark?

Yes, the ECB interest rate, -0.5% right now.

Financial information

- Provide a copy of your most recent Annual Report:

<http://www.bmeclearing.es/ing/AboutUs/InformacionFinanciera.aspx>.

- What is your institution, resp. group's credit rating? Please mention the rating agency.

BME, mother company of BME CLEARING, has an A- rating, with stable outlook, from credit rating agency S&P Global Ratings.

Membership

- Describe the process of evaluation if the Members fulfill the admission criteria. Is a periodical validation if members still meet the eligibility criteria, and if so, how often is this check performed?

Membership applications shall be approved by the Board of Directors of BME CLEARING.

In order to acquire such condition, applicants must apply in writing to BME CLEARING, identifying the Segments to which they request to be admitted, and execute the relevant agreements with BME CLEARING, as well as any additional agreements, if any, to be executed with other Members, depending on the class to which they belong.

An application to become a Clearing Member of BME CLEARING must be accompanied by a certificate issued by the Competent Authority, as appropriate to the type of entity involved. This certificate confirms the entity's compliance with the corresponding regulatory requirements.

BME CLEARING may only deny access to Clearing Members meeting the relevant requirements and criteria where duly justified in writing and based on a comprehensive risk analysis

- What are your admission criteria for Members and how are they defined/controlled?

The following are eligible to become Members of BME CLEARING:

- Spanish investment service companies which are authorised to execute client orders or to trade on their own account.
- Spanish credit institutions.
- Investment service companies and credit institutions authorised in other member States of the European Union which are authorised to execute client orders or to trade on their own account.
- Investment service companies and credit institutions authorised in a State which is not a member of the European Union, provided that they comply with the requirements established in the Securities Market Law to operate in Spain and which, in the authorisation granted by the authorities of their country of origin, are empowered to execute client orders or to trade on their own account.
- Other persons that, in BME CLEARING's opinion:

- Are appropriate
 - Have a sufficient level of aptitude and competence in clearing and settlement
 - Have established, where applicable, adequate organisational measures
 - Have sufficient resources for the function they have to carry out, taking into account the various financial mechanisms which may have been established by BME CLEARING to cover the risks arising from their activity in BME CLEARING and to ensure the correct Position Settlement.
- Please provide an overview of the different Member categories.

Members may be:

- General Clearing Members
- Individual Clearing Members
- Non-Clearing Members
- Ordinary Non-Clearing Members.

All MEFF (BME Derivatives Exchange) and SIBE (BME Cash Equities Exchange) Members must hold a membership at BME CLEARING, either non-clearing or clearing. However a membership at the CCP does not compulsory require an exchange membership.

NCMs and ONCMs are considered Members who cannot clear transactions directly with the CCP and thus must have a clearing agreement with a General Clearing Member

- What financial requirements are applicable to each category of membership?

The minimum equity required to Members to participate in the different segments are established in the General Conditions of each segment under the “Solvency Requirements of Members” section:

<http://www.bmeclearing.es/ing/Resources/BMEClearing/ClearingConditions.aspx>

Audited financial statements must be sent annually to the CCP.

- Is there a periodical review process of your clearing members?

There is a daily monitoring of the Credit Ratings of all Members. Also, regarding the Member’s Shareholder’s Equity there is at least an annual review, regardless of several companies for which the review is done on a quarterly basis instead.

Risk

- Please provide an overview of how you manage operational risk.

We have the following mechanisms in order to manage operational risk:

- Operational risk map that has been checked by external validators.
 - Business Impact Analysis
 - Business Continuity Plan
 - Disaster Recovery Simulations
- Please outline the CCP's cash, trade sources, collateral and securities reconciliation processes, including the frequency that reconciliations take place. Please describe your procedure used for the reconciliation of breaks.

Reconciliation is performed:

- o Weekly for non-cash collateral. Double check of system information.
 - o Daily for Cash Collateral. Double check of system information.
 - o Daily Trade Sources. We double check external received trades when registered in the system.
- How do you maintain segregation of duties between employees to control operational risk?
 - o Four Eye Validation
 - o Predefined System Warnings
 - o Predefined System Filters
- What is BME CLEARING's Initial Margin methodology?

The methodology, which is applicable to all segments of the CCP, except to the Interest Rate Swaps (IRS), is called MEFFCOM2 and is similar to the SPAN model, the industry standard for estimating portfolio risk. It assesses, by modelling various scenarios resulting from movement in the risk factors, the highest potential loss in order to quantify the margin required. Twenty-two hypothetical scenarios combining changes in prices and volatility (the number of scenarios can be increased for large positions). Margin level is based on a minimum confidence level of 99% (99th percentile of return series).

A sample that covers at least the last year (taking in at least a stress period), plus another sample taking in the last quarter for Financial Derivatives in order to capture any uptick in volatility.

In order to have enough margin to avoid procyclical effects, a margin buffer at least equal to 25 % of the calculated margins is applied, or if 10 years or more of reliable historical data are available, margin is calculated using the largest sample.

The margin finally used is the average of:

- 1,25 times margin calculated from the yearly sample,
- Margin from the largest sample.

The close-out period for Financial Derivatives, Cash Equities and Fixed Income Securities is 2 business days. For Energy Derivatives is 5 business days (closing out 20% of the position each day)

Close-out period may be increased:

- If a concentration of positions exists
- Due to wrong way risk

- [How frequently is the model recalibrated?](#)

The model would be recalibrated whenever back testing results would indicate that the model did not perform as expected, with the result that it does not identify the appropriate amount of initial margin necessary to achieve the intended level of confidence.

- [Please detail the market data sources used by BME for risk management purposes: third-party vendors, members' contributions, brokers, proprietary curves, etc.](#)

BME CLEARING's database uses the following sources: Data from the trading platforms with which the Company interacts (MEFF and AIAF-SENAF); data from the Spanish stock exchange trading platform (SIBE) for IBEX 35 shares and the rest of Equities products; and REUTERS for all other information on pricing, like non Spanish Sovereign Debt.

Financial Derivatives segment: The price of underlyings are provided by Sociedad de Bolsas (the trading platform for the Spanish securities market). The interest rate curve, theoretical values of expected dividends (Markit), volatility curves inferred from the option market and market trading platform info are provided by MEFF (the trading platform for the Spanish derivatives market). Direct Feed.

Repo segment: Data from SENAF (Sistema Electrónico de Negociación de Activos Financieros), which is BME's electronic trading platform for Spanish Public Debt and repos, Direct Feed.

- [How frequently is the data updated?](#)

The CCP has constant access to the relevant pricing sources to measure its positions and collateral posted both in real time and at session end.

- What is BME CLEARING's Initial Margin methodology for the IRS segment?

The Initial Margin consists of the following:

1. Base IM Calculation
2. Risk Multiplier
3. Adjustment for position size

The Base IM is calculated as the highest value calculated with the Historic VaR (H-VaR) method and the Expected Shortfall method. These methods entail calculating the maximum expected loss on a portfolio over a specific time horizon, assuming a certain confidence level.

For comprehensive information about the methodology please see Circular of the IRS segment *"Procedure for Initial Margin Calculation"*.

- What is the look back period used when calibrating stress scenarios?

In order to define stress test scenarios based on extreme but plausible market conditions, BME CLEARING considers the most extreme historical movements over the last 30 years, or the longest period for which reliable data are available.

The current sample used began in 1990 for equities, in 1992 for the IBEX 35, and in 1991 for ten-year bonds and fixed income securities. No earlier historical data have been found that are reliable.

- Must non-defaulting Clearing Members replenish their contributions to the Default Fund?

Yes. If all losses are covered and the Default Fund is not fully consumed, all non-defaulting Clearing Members must replenish their utilized part within 5 business days after the use.

If the Default Fund is fully consumed and there are still remaining losses, for 90 calendar days starting when the default was declared, the maximum aggregated amount to be replenished by each Clearing Member will be twice their initial contribution.

At the end of the 90-day period, the Clearing Members must replenish their contributions to the Default Fund according to the new calculated level and proportions.

So, 90 days after the default occurred, the maximum loss of a non-defaulting Clearing Member, in relation to another Clearing Member's default, will be 3 times its initial contribution to the Default Fund.

- If a Clearing Member cancels its membership, when will the Default Fund be refunded?

If a Clearing Member intends to cease its membership it will notify BME CLEARING in a formal letter. The CCP then will proceed to refund its contribution only when open positions have been fully closed out.

If between the notification and the position close-out the contribution is to be used due to another Clearing Member's default, it will be used but it will not entail an obligation to replenish, provided the CM closes its open position within 5 business days of the request of replenishment.

- What methodology does BME CLEARING use to calculate the risk of each Clearing Member under Stress Test conditions and thus to size the Default Fund amount? How often does it run such calculation?

The calculation is run daily, when trading session is over.

The calculation of a Clearing Member's Risk under Stress Test conditions is based on a model which incorporates:

- The worst case historical scenarios recorded in the last 30 years or throughout the time that reliable data could have been obtained, and based on the market conditions at every time.
- Scenarios based on non-historical but plausible extreme fluctuations, according to Article 30 of Delegated Regulation (EU) 153/2013, which develops Article 42 of Regulation (EU) 648/2012 (EMIR).

The scenario with the highest risk will be selected according to the criteria established in the Stress Test Calculation Parameters Circular, which shall determine the Clearing Member's risk under a stress test situation for one particular segment.

- How often is Back Testing performed

Back Tests are run daily. Whenever there is a margin deficit compared to the worst loss incurred by any account (within 1 or 2 days) the situation will be analyzed in order to see if such excess may come from a low price or volatility interval or may be explained by some problem with the margin model. However, the second situation has never occurred yet.

- How many margin calls do you have intraday? Can the frequency be increased in times of high volatility?

None.

Margins are calculated and called once daily at COB. In cases of extraordinary volatility, BMEC can make intraday margin calls according to certain parameters established by Circular. Each segment has its own Circular about this issue.

BME CLEARING defines in its "Margin Calculation Parameters" Circulars a level of price variation called "Extraordinary Margin fluctuation parameter", with the purpose of allowing the CCP to regain a sufficient level of funds in situations of exceptional volatility. This extraordinary margin fluctuation is usually set up at an 80% of the initial margin interval (or price scanning range).

- Does the CCP have and Default Management Procedure? If so, please describe it and its objectives in detail.

Yes. BME CLEARING's Default Management Protocol is a general procedure for all segments of the CCP. Therefore, it will apply to all segments' positions of a defaulting Member regardless on the segment it may have defaulted.

It is reviewed, at least, annually.

This Protocol can be found in our web site in the following link:
http://www.bmeclearing.es/docs/docsSubidos/esp/BME_CLEARING/Incumplimiento/ANNEX_DEFAULT_MANAGEMENT_PROTOCOL.pdf

- Does your institution have a Risk Committee and what are its roles and responsibilities?

Yes, indeed. BME CLEARING has a Risk Committee, which is a consultative committee in charge of advising the Board on any measures that could affect the management of the CCP's risk models & methodologies.

The composition of the Risk Committee is updated once every 2 years.

- Please describe your institution's policy for rehypothecating members' collateral including details of controls in place to safeguard such collateral (both cash and securities).

BME CLEARING never rehypothecates Clearing Members' collateral.

Cash collateral is posted at the BME CLEARING's Target-2 Bank of Spain account, which is fully segregated from the CCP's own funds account. Such cash collateral can be invested under the Clearing Member's mandate through buy/sell back transactions.

- Please describe your institution's process for dealing with non-default losses (NDL) such as relating to asset servicing or rehypothecation of collateral. Would members be expected to contribute to NDLs? If so, please describe how these are allocated to members

BME CLEARING has evaluated several scenarios which do not involve a default of a Clearing Member but could affect its daily operations, even though all of them have been categorized as unlikely events.

- Uncovered Liquidity Shortfalls scenario

This situation could occur exclusively in the cash segments of BME CLEARING whenever a Clearing Member has insufficient funds to settle its net buys on the intended settlement date. In such case BME CLEARING could use cash margins posted by the non-defaulting members to bridge the settlement period of the equities that BME CLEARING would sell out, so that the settlements can be done without any problem.

- Custody and Investment Losses scenario

According to article 30.4 par. 4 of BME CLEARING's Rulebook, BME CLEARING shall invest the Collateral posted in accordance with the provisions established via Circular, and according to the Members'

mandate, and on behalf of the Members and Clients that have posted it, so that the positive and negative results of this investment shall correspond to the Member or Client, as applicable, which shall assume the full risk of the investment.

- General business losses scenario

BME CLEARING holds sufficient capital to conduct an orderly wind-down over a minimum of six months. This provides sufficient capital to continue providing the critical services.

This is associated to current business risk: concentration risk, reputational risk, economic risk, regulatory risk, and technological obsolescence risk.

4.1. How are the Default Fund size and member contributions calculated?

Default fund size is calculated so that it covers the risk, under stress test conditions, of the two Clearing Members with the largest risks, plus an additional 10%.

Member's contribution has two components: a fixed component (minimum contribution), only dependant on membership category, and a variable component, based on the member's share of the total uncovered exposure for the segment over the relevant time period (three months).

4.2. Have you undertaken any stress testing (per regulatory requirement or internal policy requirements) to ensure that your business strategy, risk management and capital planning decisions can withstand adverse market events?

Yes. Daily stress tests are carried out in order to prove that the Default Fund size can stand with the default of the two largest Clearing Members. In case the Default Fund may not cover these exposures, BME CLEARING will require additional individual funds to the Clearing Members affected. Daily stress test figures are disclosed to every Clearing Member through end-of-day data files.

Furthermore, the internal Executive Risk Committee regularly analyses on a monthly basis the outcome of the stress tests.

Finally, Reverse Stress Tests are also carried out on a quarterly basis in order to assess at which point the whole financial resources of the CCP may not be sufficient. These calculations are based following 2 different ways:

- Increasing the number of Clearing Members defaulting
- Bringing the Stress Test parameters to an implausible extreme level

Both, the stress test results as well as the reverse stress tests are quarterly disclosed to our Risk Committee.