The background of the cover features a large, abstract geometric design. It consists of several overlapping triangles and polygons in various shades of blue and grey, creating a sense of depth and movement. The design is centered and occupies the upper half of the page.

# CPMI-IOSCO Principles for FMIs

Self Assessment / June 2020

## Index

PRINCIPLE 1: LEGAL BASIS

PRINCIPLE 2: GOVERNANCE

PRINCIPLE 3: FRAMEWORK FOR THE COMPREHENSIVE MANAGEMENT OF RISKS

PRINCIPLE 4: CREDIT RISK

PRINCIPLE 5: COLLATERAL

PRINCIPLE 6: MARGIN

PRINCIPLE 7 LIQUIDITY RISK

PRINCIPLE 8: SETTLEMENT FINALITY

PRINCIPLE 9: MONEY SETTLEMENTS

PRINCIPLE 10: PHYSICAL DELIVERIES

PRINCIPLE 12: EXCHANGE-OF-VALUE SETTLEMENT SYSTEMS

PRINCIPLE 13: PARTICIPANT-DEFAULT RULES AND PROCEDURES

PRINCIPLE 14 SEGREGATION AND PORTABILITY

PRINCIPLE 15: GENERAL BUSINESS RISK

PRINCIPLE 16: CUSTODY AND INVESTMENT RISKS

PRINCIPLE 17: OPERATIONAL RISK

PRINCIPLE 18 ACCESS AND PARTICIPATION REQUIREMENTS

PRINCIPLE 19: TIERED PARTICIPATION ARRANGEMENTS

PRINCIPLE 20: FMI LINKS

PRINCIPLE 21: EFFICIENCY AND EFFECTIVENESS

PRINCIPLE 22: COMMUNICATION PROCEDURES AND STANDARDS

PRINCIPLE 23: DISCLOSURE OF RULES, KEY PROCEDURES AND MARKET DATA

KEY ABBREVIATIONS AND TERMS

## Principle 1: Legal Basis

***An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.***

### Summary Narrative

BME CLEARING was authorised by the Spanish National Securities Market Commission (CNMV), on 16 September 2014, to provide clearing services in its capacity as central counterparty ("CCP") in accordance with article 14 of EMIR.

BME CLEARING, as central counterparty, is governed by EMIR and by the Securities Market Act, Consolidated text approved by Royal Legislative Decree 4/2015, 23 October (the "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. The internal rules and regulations will govern the functioning of the central counterparty as a company and contain the obligations and organisational requirements and procedures necessary to comply with the provisions of EMIR.

The amendment of the BME CLEARING Rule Book conforms to the procedure set out in article 107 of the SMA, under which authorisation by the CNMV is required, pursuant to a report from the Banco de España.

Further to the above mentioned initial authorization, in accordance with the provisions of the SMA and EMIR, and pursuant to a request by BME CLEARING, the CNMV has granted the following further authorizations to BME CLEARING, to extend its activities and services, under article 15 of EMIR:

- On 29 July 2015, to provide services as central counterparty for Equities and Interest Rates OTC Derivatives.
- On 18 May 2017, to provide services as central counterparty for Gas Derivatives traded OTC and Energy Electricity Derivatives traded on OTFs (Energy Derivatives Segment)
- On 7 March 2019, to provide services as central counterparty for Futures on FX (X Rolling) (Financial Derivatives Segment)

The regulatory framework applicable to BME CLEARING described above provides a grounded, clear and effective legal basis with a high degree of legal certainty that is mandatory and enforceable for CCP Members, Clients and users.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.**

### **Material aspects and relevant jurisdictions**

**Q.1.1.1 What are the material aspects of the FMI's activities that require a high degree of legal certainty (for example, rights and interests in financial instruments; settlement finality; netting; interoperability; immobilisation and dematerialisation of securities; arrangements for DvP, PvP or DvD; collateral arrangements (including margin arrangements); and default procedures)?**

The material aspects of the activities of BME CLEARING that require a high degree of legal certainty are as follows:

- the rights and obligations of CCP participants;
- registration system;
- finality of transactions;
- central counterparty;
- netting;
- collateral; and
- default procedures.

#### **Q.1.1.2 What are the relevant jurisdictions for each material aspect of the FMI's activities?**

The relevant jurisdiction for all the foregoing aspects is the Spanish jurisdiction, whose laws are exclusively applicable, except for what is indicated here below:

BME CLEARING offers the possibility of posting collateral in the form of sovereign public debt of Germany, France, United Kingdom, The Netherlands, Belgium, Austria, Portugal, Italy and the United States registered in Clearstream Banking Luxembourg (CBL) and/or in Euroclear Bank (EUROCLEAR). Legal, material and procedural aspects relating to the posting of such collateral are subject to the law of Luxembourg and the law of Belgium, as the case may be.

#### **Legal basis for each material aspect.**

#### **Q.1.1.3 How does the FMI ensure that its legal basis (that is, the legal framework and the FMI's rules, procedures and contracts) provides a high degree of legal certainty for each material aspect of the FMI's activities in all relevant jurisdictions?**

BME CLEARING Rule Book and enhancing regulations are governed by Spanish Law. Clearing members must enter into an agreement with BME CLEARING which requires the clearing member to comply with BME CLEARING internal regulations.

A high degree of legal certainty on these activities has been achieved through obtaining legal opinions as to the enforceability of BME CLEARING Rule Book in the main relevant jurisdictions, from reputable external counsel based in those relevant jurisdictions.

#### Rights and obligations of CCP participants

BME CLEARING Rule Book establishes the requirements for becoming a Member or a Client of the CCP, the types of Members, their rights and obligations, and the minimum content of contracts between BME CLEARING and its Members, between Members and between Members and their Clients.

Please see principles 18 and 19 for further information.

#### Registration system

BME CLEARING Rule Book covers the different ways of recording Trades in the Register, the general rules applicable to Recording of Trades, different account types, and the regulation of Members with the capacity to run a Second-tier Register.

Please see principle 14 for further information.

### Collateral

The legal basis for the regulation of collateral in BME CLEARING Rule Book consists of article 109 of the SMA and the provisions on financial collateral arrangements in Royal Decree-Law 5/2005, of 11 March, on urgent reforms to foster productivity and improve public contracting, transposing Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002, on financial collateral arrangements.

The Rule Book contains detailed provisions on the regime for posting, maintaining, requiring and managing collateral to be provided by Members and Clients in accordance with their open positions, the category of Members and the functions they perform.

Please see principle 5 for more information.

### Default procedures

Regulation of situations of default by a Member or Client is based on the regulations governing collateral, transfer or closing of positions in article 110 of the SMA, together with Act 41/1999, of 12 November, on the securities payment and settlement systems, and it is implemented with greater detail in BME CLEARING Rule Book, where the causes of default, the measures to be adopted in the event of default, including the application of collateral and closing out of positions in the event of a declaration of default, as well as the settlement of costs, expenses and balances resulting from default, are subject to detailed regulation.

The Rule Book regulates the insolvency and the default of BME CLEARING as well.

For more information, please see principle 13.

**For an FMI that is a CCP, how does the CCP ensure that its legal basis enables it to act as a CCP, including the legal basis for novation, open offer or other similar legal device? Does the CCP state whether novation, open offer or other similar legal device can be revoked or modified? If yes, in which circumstances?**

The novation process which occurs in BME CLEARING's activity as a Central Counterparty is based on the SMA, on the Royal Decree 827/2017, of September 1<sup>st</sup>, which modifies Royal Decree 878/2015, of October 2<sup>nd</sup>, on Clearing, Settlement and Registry of book entry securities, about the Central Securities Depositories and Central Counterparties legal framework and the transparency requirements for issuers of securities admitted to trading in the official secondary, and on Act 41/1999, of 12 November, on the securities payment and settlement systems which transposes into national Law the provisions of Directive 98/26/EC, of 19 May 1998 on settlement finality in payment and securities settlement systems. BME CLEARING Rule Book sets out in article 26, the conditions under which the novation occurs: "BME CLEARING shall act as Central Counterparty for Trades from the date on which they are entered in the Central Register. As part of its functions as Central Counterparty, BME CLEARING interposes in the obligations resulting from the Trades, acting with respect to the Central Register Account holders as Central Counterparty to each of the original counterparties of each of the Trades, which shall cease to hold reciprocal rights and obligations and shall exclusively hold them in respect of BME CLEARING." This same provision also states the conditions under which the novated cleared transactions are irrevocable, as further explained here below.

In accordance with article 23.8 of the BME CLEARING Rule Book, entries in the Central Register may be amended or, as the case may be, cancelled by BME CLEARING in the following events: a) Manifest material errors or technical failure; b) Set-off of Trades within the same Account; c) Transfers between Accounts; d) Amendments or cancellations of Market Trades agreed on a market or trading system with which BME CLEARING has made the appropriate agreements to act as CCP. BME CLEARING may request the justifying documents it deems necessary in order to perform any amendments or cancellations requested.

**For an FMI that has a netting arrangement, how does the FMI ensure that its legal basis supports the enforceability of that arrangement?**

The SMA establishes that the BME CLEARING Rule Book and its Circulars may determine the conditions under which early maturity of all the contracts and positions of a member apply, whether for its proprietary account or a client's account.

This will give rise to clearing and to the creation of a single legal obligation encompassing all included transactions. Subsequently, the parties will only be entitled to request the net balance of the result of the clearing of such transactions. The above cases may include default on obligations and the commencement of insolvency proceedings for members and clients, or for the central counterparty itself.

This clearing regime will be considered a contractual netting agreement in accordance with the provisions of Royal Decree Law 5/2005, and without prejudice to the application of the specific regime under Act 41/1999.

Articles 42.3 of the Rule Book implement the aforementioned provisions of the SMA.

**Where settlement finality occurs in an FMI, how does the FMI ensure that its legal basis supports the finality of transactions, including those of an insolvent participant? Does the legal basis for the external settlement mechanisms the FMI uses, such as funds transfer or securities transfer systems, also support this finality?**

Article 104.1 of the SMA states that the central counterparty must be recognised as a system for the purposes of Act 41/1999.

Finality in transaction settlement in BME CLEARING is based on Act 41/1999, which incorporates into Spanish law the provisions of Directive 98/26/EC, of the European Parliament and of the Council, of 19 May, on settlement finality in payment and securities settlement systems, where article 8, letter d) expressly recognises BME CLEARING as a system for the purposes of the Law. It regulates the validity and effectiveness of clearing and settlement operations in such systems and the collateral posted by participants, as well as the effects of insolvency proceedings on such transactions and collateral.

Article 26 of the BME CLEARING Rule Book states that from the moment of entry in the Central Register the interposition of BME CLEARING in these obligations shall be understood to be irrevocable, as defined by Act 41/1999 and EC Directive 98/26/EC: "From the moment of entry in the Central Register the interposition of BME CLEARING in these obligations shall be understood to be irrevocable, as defined by Act 41/1999, of 12 November, on securities payment and settlement systems, and EC Directive 98/26/CE, of the European Parliament and of the Council, of 19 May, on the finality of settlement in securities payment and settlement systems. From the moment of entry in the Central Register the obligations resulting from Trades, and from their netting, when it is so determined in the corresponding General Conditions for the relevant type of Account or Trade, shall be legally enforceable and shall be binding on third parties as defined by Article 11 of Act 41/1999, of 12 November, on payment and securities settlement systems and Article 3 of EU Directive 98/26/EC, of the European Parliament and of the Council, of 19 May, on the finality of settlement in securities payment and settlement systems."

External settlement mechanisms, such as fund transfers or securities transfer systems, are governed by their own finality rules and regulations. Hence, securities transfer orders arising from the maturity of derivatives with settlement upon delivery, or transactions on fixed income securities, are governed by the finality rules applicable to the Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores (IBERCLEAR), article 8.f) of Act 41/1999. The settlement of cash payment obligations is made in the participants' accounts in TARGET2-Banco de España, which is governed by the finality rules established by said firm (article 8.i) of Act 41/1999.

For more information, please see principle 8.

**Key consideration 2: An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.**

**Q.1.2.1 How has the FMI demonstrated that its rules, procedures and contracts are clear and understandable?**

BME CLEARING's rules, procedures and contracts are clear and understandable and consistent with EMIR.

No queries by participants or users have been found indicating confusion or uncertainty about the regulatory framework applicable to BME CLEARING.

**Q.1.2.2 How does the FMI ensure that its rules, procedures and contracts are consistent with relevant laws and regulations (for example, through legal opinions or analyses)? Have any inconsistencies been identified and remedied? Are the FMI's rules, procedures and contracts reviewed or assessed by external authorities or entities?**

BME CLEARING's rules, procedures and contracts are reviewed by BME CLEARING's Legal Department. In cases where specific matters of special complexity or importance have been identified, specialised external advice has been sought.

A high degree of legal certainty has been achieved through obtaining legal opinions as to the enforceability of BME CLEARING Rule Book in the main relevant jurisdictions, from reputable external counsel based in those relevant jurisdictions.

**Q.1.2.3 Do the FMI's rules, procedures and contracts have to be approved before coming into effect? If so, by whom and how?**

BME CLEARING Rule Book, as indicated in the previous answer, which contains the minimum content of the contracts to be signed with and between CCP participants, and its General Conditions for each group of contracts (which form part of the Rule Book) are subject to the prior approval of the CNMV, pursuant to a report from Banco de España. Certain Circulars on posting collateral might be subject, where so prescribed by EMIR, to prior validation of CNMV.

**Key consideration 3: An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.**

**Q.1.3.1. How does the FMI articulate the legal basis for its activities to relevant authorities, participants and, where relevant, participants' customers?**

The regulatory framework applicable to BME CLEARING is publicly disseminated through the websites of BME CLEARING and of CNMV.

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

<http://www.cnmv.es/Portal/legislacion/legislacion/tematico.aspx>



Key consideration 4: An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.

#### Enforceability of rules, procedures and contracts

**Q.1.4.1. How does the FMI achieve a high level of confidence that the rules, procedures and contracts related to its operations are enforceable in all relevant jurisdictions identified in key consideration 1 (for example, through legal opinions and analyses)?**

BME CLEARING has independent legal opinions on the validity and applicability of CCP regulations in the relevant jurisdictions such as Spain, France and UK in relation to Membership, Insolvency, Margins, Set-off and Close-out netting.

BME CLEARING also has legal opinions on the validity and applicability of its regulations about Margins in Luxembourg and Belgium.

Moreover, BME CLEARING has legal memos on the other relevant jurisdictions identified, such as Portugal, Germany and the Netherlands.

Pursuant to the SMA, BME CLEARING's internal rules and regulations have the status of rules of organisation and discipline of the Securities Market and are mandatory for BME CLEARING Members, Clients and users.

#### Degree of certainty for rules and procedures

**Q.1.4.2 How does the FMI achieve a high degree of certainty that its rules, procedures and contracts will not be voided, reversed or subject to stays? Are there any circumstances in which an FMI's actions under its rules, procedures or contracts could be voided, reversed or subject to stays? If so, what are those circumstances?**

The CNMV may oppose and suspend or void Circulars when it considers that they may infringe applicable legislation or harm the prudent and secure functioning of the CCP and of the markets to which it provides services or investor protection. The aforementioned Regulator has never made use of such power.

The Legal certainty of the Rules and regulations of BME Clearing is directly rooted in the SMA, which prescribes the legal basis and protections for the most relevant aspect of the clearing activities, such as novation, close out netting, and bankruptcy remoteness of collateral.

**Q.1.4.3. Has a court in any relevant jurisdiction ever held any of the FMI's relevant activities or arrangements under its rules and procedures to be unenforceable?**

Never.

Key consideration 5: An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.

**Q.1.5.1 If the FMI is conducting business in multiple jurisdictions, how does the FMI identify and analyse any potential conflict-of-laws issues? When uncertainty exists regarding the enforceability of an FMI's choice of law in relevant jurisdictions, has the FMI obtained an independent legal analysis of potential conflict-of-laws issues? What potential conflict-of-laws issues has the FMI identified and analysed? How has the FMI addressed any potential conflict-of-laws issues?**

With regard to collateral posted in the form of securities deposited in IBERCLEAR, CBL and/or EUROCLEAR, Spanish, Luxembourg and Belgian laws apply, respectively. To identify potential conflicts of laws, external legal opinions were sought to analyse fundamental legal matters.

No situation has been found that might jeopardise the legal certainty of the regulations applicable in BME CLEARING.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING's legal basis provides a high degree of certainty in every material aspect - rights and obligations of CCP participants, registration system, transaction finality, central counterparty, netting, collateral and default procedures - of the CCP's activities in relevant jurisdictions, which is basically the Spanish jurisdiction. BME CLEARING has rules, procedures and contracts that are clear, comprehensible and consistent with relevant laws and regulations.

There is a high degree of certainty that the measures adopted by the CCP under such rules and procedures will not be voided, reversed or suspended and also regarding the applicability and validity of BME CLEARING's rules and regulations in other jurisdictions.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 1 on Legal Basis without any type of limit or restriction.

## PRINCIPLE 2: GOVERNANCE

***An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.***

### Summary narrative

BME CLEARING is 100% owned by Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros, S.A. (BME) a listed company, whose corporate purpose is the direct or indirect ownership of stakes in companies operating in securities registration, clearing and settlement systems, central counterparties, official secondary markets and multilateral trading systems in Spain, responsible for the unity of action, decision and strategic co-ordination of the afore-mentioned companies. Therefore, BME is supervised by the CNMV and complies with the obligations established by the Spanish Company Law and the SMA for listed companies.

BME CLEARING is the central counterparty within the BME Group, and performs interposition functions in its own name in relation to the obligations resulting from the Trades registered in the Central Register. The main objective of BME CLEARING is to organise, direct, order, manage and supervise this counterparty functions, thereby ensuring the maximum efficiency.

To this end, BME CLEARING uses the Circulars and Instructions, which complement the provisions of the Rule Book and the General Terms and which will be mandatory for Members and Clients, thereby ensuring greater transparency, security and stability in the development of its functions.

BME CLEARING fully complies with EMIR and its supplementing regulations, which establish Governance Arrangements required for CCPs. Given BME CLEARING's status, the CNMV shall remain informed of the development of its activities at all times.

BME CLEARING's control activities are based on BME's policies and procedures and those of BME CLEARING itself. BME's policies and procedures are established and put in place to ensure that measures to mitigate risks are implemented effectively across the Group. BME CLEARING's policies and procedures must therefore be in line with those defined by BME.

BME CLEARING has an independent Compliance function whose mission is to support BME CLEARING and its Board of Directors in meeting its objectives by implementing regulatory compliance control procedures that contribute to providing services that are responsible and compliant with law; and to support the business in integrating the aforesaid compliance principle into day-to-day operations.

As part of the BME Group, the internal audit function of BME CLEARING is carried out by the BME Internal Audit Department. Any relevant decision made by BME CLEARING's Board of Directors will be communicated to its owners, regulators, and subsequently to its participants, final users and the public in general, as appropriate.

## QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS

**Key consideration 1: An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.**

### **Q.2.1.1. What are the FMI's objectives, and are they clearly identified? How does the FMI assess its performance in meeting its objectives?**

As a Central Counterparty, BME CLEARING performs interposition functions in its own name in relation to the obligations resulting from the Trades registered in the Central Register, in accordance with the Rule Book and its supplementing regulations. In relation to the Trades for which it acts as CCP, BME CLEARING provides Registration, Central Counterparty, Clearing and Settlement services.

The main objective of BME CLEARING is to organise, manage and supervise its services ensuring the maximum efficiency of the counterparty functions. To this end, BME CLEARING uses the Circulars and Instructions, which complement the provisions of the Rule Book and the General Conditions and which are mandatory for Members and Clients, thereby ensuring greater security and stability in the development of its functions and those of the market in general.

According to EMIR and its subsequent delegated regulations, BME CLEARING places a high priority on safety and efficiency through several means:

- A robust governance system
- Procedures for Conflicts of interest management
- A proper Risk management system
- A safe liquidity and credit risk management system
- A sound margins system
- Clear procedures on default management
- Conduct of Business rules which guarantee BME CLEARING's impartiality, professionalism, assurance of BME CLEARING's always acting in the best interests of its clients and members
- Full compliance with the principle of transparency

In addition, BME CLEARING reports to CNMV on relevant issues.

### **Q.2.1.2. How do the FMI's objectives place a high priority on safety and efficiency? How do the FMI's objectives explicitly support financial stability and other relevant public interest considerations?**

Article 2 of BME CLEARING Rule Book establishes the functions that are to be carried out and the services provided by the CCP to therefore provide the transparency, security and stability the financial system needs. Article 2.9 states that BME CLEARING shall perform its functions giving particular priority to the safety and efficiency of the CCP, and paying special attention to the safeguard of the stability of the financial system, other relevant public interest considerations and the objectives of its Members and Clients.

**Key consideration 2: An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.**

## Governance arrangements

**Q.2.2.1. What are the governance arrangements under which the FMI's board of directors (or equivalent) and management operate? What are the lines of responsibility and accountability within the FMI? How and where are these arrangements documented?**

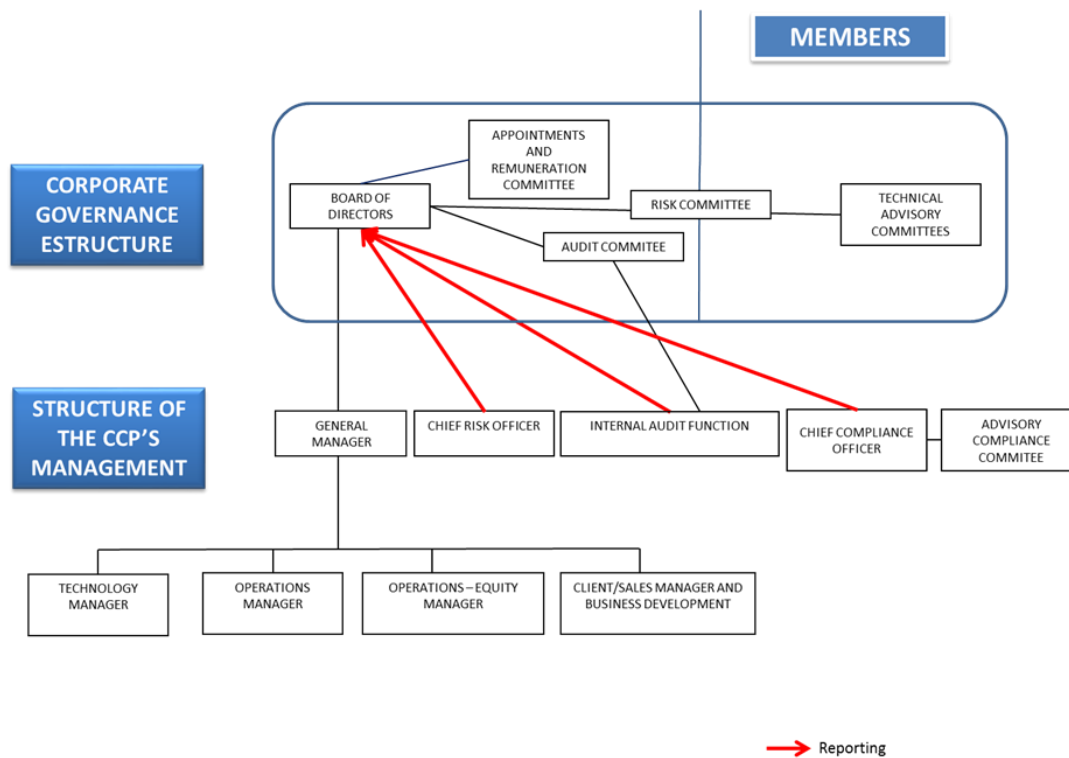
According to EMIR, BME CLEARING has robust governance arrangements, which include a clear organisational structure with well-defined, transparent and consistent lines of responsibility, effective processes to identify, manage, monitor and report the risks to which it is or might be exposed and adequate internal control mechanisms. The main principles of governance of the Board of Directors are established on BME CLEARING's Articles of Association, and developed in the Board of Directors' Regulations.

BME CLEARING's Board of Directors Regulations rule all the governance aspects of the Board: Composition, General functions, Principles of Conduct, Governance and functions of the Board officers and Committees, Operation of the Board of Directors (calling, venue, constitution, representation and adoption of resolutions of the Board of Directors), rules governing directors and members of committees and commissions and conflicts of interest.

The Company's Articles of Association establish that the General Manager, who shall be appointed and removed by the Board of Directors, shall report directly to the Board, and shall assist it at all times to ensure the Company fulfils its corporate purpose as best as possible.

At present, the General Manager of the company has board member status, and attends all Board of Directors' meetings, reporting to them periodically on the actions of senior management.

According to EMIR, BME CLEARING's lines of responsibility are clear, consistent and well-documented. The functions of the Chief Risk Officer, Chief Compliance Officer and Chief Technology Officer are carried out by different individuals, who are employees of the CCP entrusted with the exclusive responsibility of performing these functions.



Reporting lines between the senior management and the Board of Directors are clearly defined: the General Manager must notify the Board of Directors of any matters related to fulfilling BME CLEARING's corporate purpose, i.e. the activity of a central counterparty. As the most senior executive, all other members of the Company's senior management will report to him/her.

Irrespectively, the Board of Directors receives information directly from the Chief Risk Officer, Chief Compliance Officer and the Internal Audit Officer on matters under their jurisdiction, in accordance with prevailing legislation and the Articles of Association and Board Regulations.

The General Manager reports directly to the Board of Directors, or when requested to do so, to the Audit Committee and Appointments and Remuneration Committee with regard to matters within the jurisdiction of these committees.

The appointment of the Board members and General Manager are subject to approval by the CNMV by virtue of the article 108.2 of the SMA.

**Q.2.2.2. For central bank-operated systems, how do governance arrangements address any possible or perceived conflicts of interest? To what extent do governance arrangements allow for a separation of the operator and oversight functions?**

Not applicable.

### **Q.2.2.3. How does the FMI provide accountability to owners, participants and other relevant stakeholders?**

The processes for ensuring accountability to stakeholders have been developed through the senior management structure, the reporting lines between the senior management and the Board, the lines of responsibility established in the CCP and a wide information disclosure on BME CLEARING website.

Any relevant decision made by BME CLEARING's Board of Directors will be communicated to its owners, regulators and, subsequently, to its participants, final users and the public in general, as appropriate. Pursuant to the internal policies established by BME Group, under no circumstances will the confidentiality of the information to be transmitted be put at risk.

BME CLEARING is part of BME's consolidated group, a company that owns 100% of its share capital. For that reason, it must submit its accounts to its parent company on a regular and permanent basis.

Given BME CLEARING's status, CNMV shall remain informed of the development of its activities at all times.

- CNMV gives proper authorisation of the appointments of the members of the Board of Directors and the General Manager.
- According to article 106.2 of the SMA, BME CLEARING annually submits to the CNMV an estimated annual Budget with a detailed breakdown of prices and commissions to be applied. The CNMV may establish exceptions or limits on the maximum prices for these services. BME CLEARING must also submit any modification to the Budget, prices, and fees to the CNMV.
- According to EMIR, BME CLEARING must keep their risk reports updated, and submit said updates to the CNMV.
- The Articles of Association and amendments of same, are subject to authorisation from CNMV after consultation with Banco de España pursuant to Article 107.2 of the SMA.
- In addition, in accordance with CNMV Circular 9/2008, dated 10 December (modified by CNMV, Circular 6/2011 of 12 December and by CNMV Circular 5/2016, of 27 July) on accounting standards, public and confidential information statements, the annual accounts of entities managing official secondary markets, excluding the Banco de España, of entities managing multilateral trading facilities, of the Spanish Payment Systems Company, of central counterparties, of the Spanish Stock Exchanges Company, of the companies that own all the shares of the bodies that supervise official secondary markets and multilateral trading facilities, and of other securities clearing and settlement systems of markets created under the provisions set out in the SMA. BME CLEARING must submit on a monthly, quarterly and yearly basis a series of public and restricted financial statements for the Company, following the templates established by the CNMV.

According to Article 21 of EMIR, the CNMV reviews the arrangements, strategies, processes and mechanisms implemented by CCPs to comply with EMIR and evaluates the risks to which CCPs are, or might be, exposed. The CNMV at least annually informs the EMIR college of the results of the review and evaluation.

BME CLEARING website discloses to market participants its rules, procedures, and policies. It exposes information on (1) governance arrangements, specifically on the organizational structure, Remuneration Policy, Annual Accounts, Business Continuity Policy and Board of Director's Regulations; (2) rules and procedures, particularly Rule Book, General Conditions, Circulars and Instructions, Default management procedures; (3) General information on Participants requisites, Transaction, Settlement, Risk and Collateral management.

## Disclosure of governance arrangements

### **Q.2.2.4. How are the governance arrangements disclosed to owners, relevant authorities, participants and, at a more general level, the public?**

The Rule Book, the General Conditions, the Circulars and other rules approved by BME CLEARING are available on the company's webpage.

BME CLEARING Board of Directors Regulations are also available on the Company's corporate website.

The Spanish regulation that governs the functioning of BME CLEARING is available on the CNMV webpage.

**Key consideration 3: The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.**

## Roles and responsibilities of the board

### **Q.2.3.1. What are the roles and responsibilities of the FMI's board of directors (or equivalent), and are they clearly specified?**

Roles and responsibilities of BME CLEARING's Board of Directors are clearly defined in article 32 of the Company's Articles of Association and article 6 of the Board of Directors Regulations.

BME CLEARING's Board of Directors is the Company's most senior governing and administrative body and is fully authorised to direct, administer and represent the Company in the performance of the activities that comprise its corporate purpose. The Board of Directors shall entrust the running of the Company's ordinary business to the Board's delegate bodies, executives and senior management team, and shall focus its activities on the general function of promoting, directing and supervising matters that are of particular importance to the Company. In any event, the Board of Directors shall retain the approval of decisions that could have a significant impact on the risk profile of the Company.

In particular, the Board of Directors is responsible for the establishment of clear objectives and strategies for the Company; the effective monitoring of Company's senior management; the establishment of appropriate remuneration policies; the establishment and oversight of the risk management function; the oversight of the compliance function and internal control function; the oversight of outsourcing arrangements; the oversight of compliance with all the regulations applicable to the Company; and the provision of accountability to the shareholders and employees, clearing members and their customers, and other stakeholders.

BME CLEARING Rule Book empowers its Board of Directors to approve the Circulars that implement the Rule Book and the General Conditions (article 2.5) and to grant Member status (article 3.3).



**Q.2.3.2. What are the board's procedures for its functioning, including procedures to identify, address and manage member conflicts of interest? How are these procedures documented, and to whom are they disclosed? How frequently are they reviewed?**

BME CLEARING's Board of Directors regulations state that Board Members and committee members shall act with due impartiality and in no case place their own interests before those of the Company. To this end, on appointment as Board Members, they shall notify the Secretary of the Board of Directors of any conflicts of interest that could affect them or their related parties as per prevailing legislation. In particular, they shall disclose any direct or indirect stake they or their related parties, may hold in the share capital of companies with the same, similar, or complementary type of activity as that of BME CLEARING, as well as any posts or duties held by them or such related parties in these companies.

They shall keep the information they supply up to date, giving notice of the end of or any change in the situation of conflict and the emergence of new situations of this type within five days of becoming aware of the conflict of interest and, in any event, before taking any decision or action with regard to the situation.

BME CLEARING'S Board of Directors has approved a Procedure to prevent and manage Conflicts of Interest affecting members of the governing and administrative bodies of the Company and the actions to be taken in the event of these situations arising. It shall be considered that a conflict of interest exists, or could exist, when the interests of the Company and the personal interest, direct or indirect, of the members of its governing and administrative bodies' conflict.

**Q.2.3.3. Describe the board committees that have been established to facilitate the functioning of the board. What are the roles, responsibilities and composition of such committees?**

Pursuant to BME CLEARING's Articles of Association and the Board of Director's Regulations, the Board of Directors may set up executive delegate bodies and advisory committees to report, advise and prepare proposals, as it considers appropriate for the better performance of its functions, appointing the members who are to form part of them. When the Board of Directors delegates tasks to commissions or committees, it shall retain the approval of decisions that could have a significant impact on the risk profile of the Company.

The Audit Committee shall consist of a minimum of three (3) and a maximum of five (5) members appointed and removed by the Board of Directors. The majority of them must be non-executive Directors and at least one of them, must be an Independent Director and shall be appointed based on their knowledge and background in accounting. The Chairperson of the Audit Committee shall be selected from among its non-executive members.

The Audit Committee amongst other tasks, supervises the efficiency of the Company's internal control system, internal audit, and the risk management systems and discuss with auditors any significant auditing weaknesses detected in the internal control system. It maintains the relationship with external auditors in order to receive information in regard to matters which could jeopardise their independence for examination by the committee and any other matters relating to the process of account auditing, as well as other communications provided for in account auditing legislation and in the technical auditing regulations. The audit committee issues a report each year, prior to the auditor's report, stating an opinion on the independence of the auditors and on the provision of any kind of additional service.

In order to perform its tasks, the committee may seek the assistance and collaboration of independent experts and request the attendance at its meetings of company executives.

The Appointments and Remuneration Committee consists of a minimum of three (3) and a maximum of five (5) members appointed and removed by the Board of Directors. The Chairperson of the Appointments and Remuneration Committee will be appointed by the Board from among its members.

The Appointments and Remunerations Committee is responsible for submitting to the Board of Directors the proposal for the appointment, re-election or removal of Directors classified as independent, and report on the proposals for the appointment, re-election and removal of other classes of Directors; the appointment, re-election and removal of members of any of the Board committees; the appointment and removal of the Chairperson, Secretary and, as appropriate, Deputy Chairperson and Deputy Secretaries of the Board; the proposals on Directors' remuneration, and report on the proposals for appointment and removal of the members of the senior management, and the basic conditions of their contracts.

This committee shall design and develop the remuneration policy, oversee its implementation by senior management, and review its practical operation on a regular basis. They must report to the Board of Directors on its activities in the course of each year.

The EMIR 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. In accordance with article 28 of EMIR, it includes independent members of the Board of Directors, representatives of the CCP clearing members and representatives of its clients. None of the groups of representatives shall have a majority in the EMIR Risk Committee.

Specifically, the EMIR Risk Committee must advise the Board of Directors on any significant change in BME CLEARING's risk model; the default procedures; the criteria for accepting clearing members; the clearing of new classes of instruments; the outsourcing of functions; the internal policy framework for defining the types of extreme but plausible market conditions for the stress test; the liquidity plan; the material revisions or adjustments to the models, methodologies and liquidity risk management framework used to quantify, aggregate and manage its risks; the material revisions or adjustments to the policies used to test the CCP's margin and default fund methodologies and framework for calculating liquid financial resources; the systems and valuation models used for valuating when pricing data is not readily available or reliable; the review of the margin model; the review of reverse stress tests; the policy for using derivatives contracts with regard to classifying them as highly liquid financial instruments.

Therefore, the EMIR Risk Committee advises the CCP's Board of Directors on issues related with significant changes in the risk management framework. Advice on the daily operations of the CCP does not lie within the EMIR Risk Committee's remit.

The EMIR Risk Committee will periodically receive reports on the results and analysis of stress tests, back tests, sensitivity tests and reverse stress testing.

The Chairperson of the EMIR Risk Committee may invite company employees and independent external experts to attend meetings, in a non-voting capacity. The CNMV may also request that one of its representatives attend meetings, in a non-voting capacity.

The EMIR Risk Committee's Chairperson shall notify the Board of Directors of the conclusions reached during its meetings. The CNMV shall be notified if the Board of Directors decides not to follow the advice of the EMIR Risk Committee.

To help it adequately perform its functions, the EMIR Risk Committee may establish a Technical Advisory Committee for each segment of BME CLEARING at any moment in time.

## Review of performance

### **Q.2.3.4. What are the procedures established to review the performance of the board as a whole and the performance of the individual board members?**

BME CLEARING reviews on an annual basis the performance of the Chairperson of the Board of Directors. Moreover, every three years, BME CLEARING reviews the Board of Directors overall performance with the assistance of external consultants.

**Key consideration 4: The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).**

**Q.2.4.1. To what extent does the FMI's board have the appropriate skills and incentives to fulfil its multiple roles? How does the FMI ensure that this is the case?**

Pursuant to article 22 of BME CLEARING's Articles of Association, individuals appointed as Board Members must be persons of good repute and shall have the adequate expertise in financial services, risk management and clearing services.

The Board of Directors will be reported by the Appointments and Remunerations Committee on the compliance by candidates to be appointed or re-elected as Board members with the requirements laid down by law and under Articles of Association.

Furthermore, the appointment of the Board members and the General Manager are subject, by virtue of article 108.2 of the SMA, to approval by the CNMV, which will also ensure that the members appointed comply with the mentioned requirements.

**Q.2.4.2. What incentives does the FMI provide to board members so that it can attract and retain members of the board with appropriate skills? How do these incentives reflect the long-term achievement of the FMI's objectives?**

According to article 24 of BME CLEARING's Articles of Association and article 23 of the Board of Directors Regulations, the position of Director is remunerated through the payment of per diems for attending Board of Director meetings and, where applicable, Board committee meetings, without prejudice to the reimbursement of any duly accounted-for expenses that Board Members may incur when attending meetings. The amount of per diems shall be determined by the Board of Directors.

The arrangements for Board Members' remuneration shall be compatible with Directors who have executive functions within the Company being able to receive other remuneration apart from that to which they are entitled as Directors based on the aforementioned executive functions and, as appropriate, on service provision, senior management or similar contracts that may be entered into by BME CLEARING and such Directors, and may consist of allowances, variable pay, pensions or compensation of any kind.

**Q.2.4.3. Does the board include non-executive or independent board members? If so, how many?**

A third of BME CLEARING's Board Members, and no less than two, shall be classified as Independent Directors.

**Q.2.4.4. If the board includes independent board members, how does the FMI define an independent board member? Does the FMI disclose which board member(s) it regards as independent?**

The definitions of the Director classes used to classify BME CLEARING's Board members as independent, executive or proprietary are the ones applied to the Members of the Board of Directors of listed companies, according to Article 529 duodecies of the Spanish Company Law.

Updated information on the members of the Board of Directors and its specific classes is available on the company's website.

**Key consideration 5: The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.**

**Roles and responsibilities of the board.**

**Q.2.5.1. What are the roles and responsibilities of management, and are they clearly specified?**

The General Manager shall be responsible for effectively managing the Company's affairs, in accordance with the decisions and criteria adopted by the General Shareholders' Meeting and the Board of Directors. The General Manager will also assist and provide technical support to the corporate bodies when requested to do so.

The day-to-day management duties of the General Manager are, amongst others to:

- Approve the binding Instructions that will implement or apply the General Terms and Conditions and Circulars and address technical, operative and procedural matters; and
- Hold a post on the Claims Committee alongside the General Market Supervisor and the Chief Risk Officer.

For the day-to-day management of the CCP, the General Manager counts on the collaboration of the following departments, each headed by their own officer: Technology, Operations, Clients/Sales and Business Development.

The following individuals will also be in direct communication with the Company's executives, although they will be independent of management: Chief Compliance Officer, Chief Risk Officer and an internal auditing function.

Lines of responsibility are clear, consistent and well-documented: the heads of the Technology, Operations, Clients/Sales and Business Development all report to the General Manager.

The General Manager reports directly to the Board of Directors, or when requested to do so, to the Audit Committee and Appointments and Remuneration Committee.

The heads of the Risk, Compliance and Internal Audit departments report to the Board of Directors on matters within their respective areas.

**Q.2.5.2 How are the roles and objectives of management set and evaluated?**

Senior management's goals are linked to the Budgetary targets. The Board of Directors is informed about its development.

**Experience, skills and integrity**

**Q.2.5.3 To what extent does the FMI's management have the appropriate experience, mix of skills and the integrity necessary for the operation and risk management of the FMI? How does the FMI ensure that this is the case?**

The General Manager is appointed and removed by the Board of Directors, as well as the members of the Company's senior management having a direct relationship with the Board of Directors or its Committees.

The other members of the Company's senior management are appointed by the General Manager according to their knowledge and professional experience relating to the individual roles and responsibilities assigned to them in the

Company. The Company's Board of directors will be informed of any appointments and removals of these senior executives.

Where possible, when appointing other senior executives in the Company, staff working in a department with a vacant executive position will be considered if they have a proven track-record in the relevant areas.

If there are no candidates with the appropriate qualifications and professional experience to fill the post, an external selection process will take place among candidates with suitable qualifications and experience.

Furthermore, the appointment of its General Manager is subject to the prior authorisation of the CNMV, to ensure that the person meets the requirements of honourability, knowledge and experience in matters related to the operation and risk management of a CCP.

#### **Q.2.5.4. What is the process to remove management if necessary?**

The Board of Directors is responsible for the effective monitoring of Company's senior management, according to article 6 of the Board of Directors Regulations. Pursuant to article 39 of the Articles of Association, the General Manager shall be removed by the Board of Directors.

**Key consideration 6:** The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.

### **Risk management framework**

#### **Q.2.6.1. What is the risk management framework that has been established by the board? How is it documented?**

Risk management framework is documented in BME CLEARING's Rule book, General Conditions, Circulars and Instructions and it is fully compliant with EMIR requirements. Please see principle 3 for more in-depth information.

BME CLEARING has a risk-management framework comprising risk management policies, procedures, and systems that enable it to identify, measure, monitor and manage risks to which it is/may be exposed.

The CCP's Board of Directors is responsible for the establishment and oversight of the risk management function, participating actively in the risk control process, and ensuring that sufficient resources are devoted to risk management in the CCP. The Board of Directors defines, determines and documents adequate risk tolerance thresholds and the Company's capacity to assume risks". The Board of Directors performs this duty with the advice of the EMIR Risk Committee (see Q.2.3.3).

All risks are first identified by the Executive Risk Committee, which is chaired by BME CLEARING's General Manager, includes the Operations Director, the Chief Risk Officer and the Head of Risk Analytics. This committee discusses pertinent risk-related issues, identifies new risks, reviews existing risks and approves risk-management criteria, models and parameters.

The CCP's Chief Risk Officer has a proven track-record and knowledge of the CCP and extensive technical training in risk management. The Chief Risk Officer is dedicated mainly to the risk management role, and has sole responsibility for the function of risk and has been allocated sufficient resources by the CCP's Board of Directors to perform his/her duties. In particular: verifying that the policies, procedures and criteria in the risk management system and the day-to-day activities of the CCP are applied correctly; preparing the Risks Report and putting it before the Executive Risk Committee, highlighting any relevant issues related with risk management during the previous week; informing the CCP's chief technology officer of the correct technical and conceptual specifications in the event any of the risk models are changed, and verifying that the changes are correctly made; reporting to the CCP's Board.

BME CLEARING is part of the BME Group. BME CLEARING applies BME's Integrated Risk Management System (IRMS) developed in line with the COSO II framework to manage its risks.

BME CLEARING's control activities are based on BME's policies and procedures and those of BME CLEARING itself. BME's policies and procedures are established and put in place to ensure that measures to mitigate risks are implemented effectively across the Group.

The BME Group has also defined an Internal Control over Financial Reporting System (ICFRS) covering all Group companies including BME CLEARING. This system is revised by BME's Internal Audit Department which evaluates its performance. BME's statutory auditors also revise the information generated by the ICFRS.

BME's IRMS methodology establishes that the owners or individuals in charge of each global risk are executives with key roles in the processes in which risks with the greatest impact and/or likelihood could arise. Each critical risk has an owner who knows the key processes well enough to ensure they are suitably monitored and managed. This individual is responsible for periodically updating the information on risks in the IRMS tool (at least every six months) to allow them to be controlled and managed. This update includes identifying any new events and reorganising action plans, while responsibilities must be assigned to execute plans aimed at mitigating risk.

BME CLEARING also bolsters its control activities through a Compliance Function.

**Q.2.6.2 How does this framework address the FMI's risk tolerance policy, assign responsibilities and accountability for risk decisions (such as limits on risk exposures), and address decision-making in crises and emergencies?**

Any changes in risk policies and procedures are discussed by the Executive Risk Committee, the EMIR Risk Committee and, in some instances, BME CLEARING's Management Committee. Changes are submitted for approval to BME CLEARING's Board and the competent authority is informed. All these policies are set down in the Risk Report, which is updated to reflect any changes and submitted to the CNMV.

The General Manager will be responsible for the decision-making in the event of crises or emergencies which require prompt actions and decisions.

**Q.2.6.3. What is the process for determining, endorsing and reviewing the risk management framework?**

Please refer to Q.2.6.1.

The models used in BME CLEARING to manage risk, whether market risk, credit risk, or liquidity risk, are validated and reviewed independently: there is an internal audit control that reviews them, at a minimum, on an annual basis.

Moreover, several external consultancy firms carry out a review and full validation of the models, methodologies and risk management framework of BME CLEARING's segments every year.

Besides, according to Article 21 of EMIR, the competent authorities review the arrangements, strategies, processes and mechanisms implemented by BME CLEARING to comply with EMIR and evaluate the risks to which the CCP is, or might be, exposed at least on an annual basis. The competent authorities inform the college of the results of the review and evaluation.

Furthermore, BME CLEARING has established a Compliance function, which is informed of any changes to processes, policies and procedures that could affect their work, in order to assess the compliance risk associated with such changes.

### Authority and independence of risk management and audit functions.

#### **Q.2.6.4. What are the roles, responsibilities, authority, reporting lines and resources of the risk management and audit functions?**

Please refer to Q.2.6.1.

The duties of the internal auditing function are to collaborate with the Audit Committee when overseeing the effectiveness of the internal control system, risk management mechanisms, and governance mechanisms by operating independently and in compliance with professional quality standards and rules, contributing to the Company's compliance with the most stringent of corporate governance standards, and reducing the impact of the risks involved in fulfilling the Company's objectives to acceptable levels. Inter alia, Internal Audit shall assess the effectiveness of the Company's risk management processes and control mechanisms in a manner that is proportionate to the risk faced by the different business lines and independent of the business areas assessed.

BME CLEARING is part of the BME Group. The internal audit function at Group companies is carried out by the BME Internal Audit Department. They shall report any issues relating to BME CLEARING's internal audit to its Board of Directors through the Audit Committee.

BME's Internal Audit Department, which is a staff body with BME Group, has no executive responsibilities in managing the Company's ordinary businesses and reports directly to the Audit Committee, a BME Board committee. Notwithstanding the above, the Internal Audit Activity Charter establishes that this Department will also report the issues related to BME CLEARING to its Board of Directors through the Audit Committee.

#### **Q.2.6.5. How does the board ensure that there is adequate governance surrounding the adoption and use of risk management models? How are these models and the related methodologies validated?**

The efficiency of the risk-management system and any changes made thereto are verified daily (back tests), weekly and monthly by the Executive Risk Committee. Moreover, the risk management models are submitted to external assessment and the results thereof are reported to the Risks Committees of BME CLEARING.

**Key consideration 7: The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.**

### Stakeholder interests.

#### **Q.2.7.1. How does the FMI identify and take account of the interests of the FMI's participants and other relevant stakeholders in its decision-making in relation to its design, rules, overall strategy and major decisions?**



Please, refer to answer to Q.2.2.3. Furthermore, the interests of the participants are taken into account through the EMIR Risk Committee in its periodic meetings or in conversations with its members, through the visits and the contacts maintained by the Sales Department with its members, or via direct requests from Participants.

**Q.2.7.2. How does the board consider the views of direct and indirect participants and other relevant stakeholders on these decisions; for example, are participants included on the risk management committee, on user committees such as a default management group or through a public consultation? How are conflicts of interest between stakeholders and the FMI identified, and how are they addressed?**

The EMIR Risk Committee includes representatives of clearing members; and representatives of clients of clearing members. All the decisions are approved by the Board of Directors and formalised in the FMI regulations, whether in the rules or the General Conditions, which are public. BME CLEARING keeps informed the CNMV of these developments.

## Disclosure

**Q.2.7.3. To what extent does the FMI disclose major decisions made by the board to relevant stakeholders and, where appropriate, the public?**

All changes in the regulations are communicated to all the participants and published on the FMI website.

## KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING is 100 % owned by BME Group. Authorised by CNMV in accordance with EMIR, BME CLEARING necessarily relies on a sound governance system, with a well-defined organisational structure, transparent and consistent lines of responsibility and effective processes to identify, manage, monitor and report the risks.

All the information relating to the regulation that governs both BME CLEARING and BME is available on CNMV, BME CLEARING and BME webpages.

## ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 2 on Governance without any type of limit or restriction.



## PRINCIPLE 3: FRAMEWORK FOR THE COMPREHENSIVE MANAGEMENT OF RISKS

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

### Summary narrative

As a CCP authorised under EMIR, BME CLEARING has a risk-management framework comprising risk-management policies, procedures, and systems that enable it to identify, measure and manage risks. See Principle 2 for more in-depth information.

The risks identified by BME CLEARING can be grouped into those to which the CCP is exposed, and those that can arise within the CCP, classified as: systemic risk, legal risk, credit risk, liquidity risk, operational risk, model risk, general business risk, custody risk, investment risk, exchange rate risk, interest rate risk, translation risk, sovereign risk and illiquidity risk.

The CCP's Board of Directors is ultimately responsible for risk management; approving the risk-management policies, procedures and controls that are set forth in the EMIR Risk Report submitted to the CNMV of the CCP pursuant to its rules, which are revised at least once a year.

The CCP's active risk-management approach is based on certain decision, management and advisory bodies; a set of mechanisms used to control risks; clear criteria to determine risk parameters and how to post the margins established using the risk-management mechanisms; a well-defined procedure to be followed in the event of a default; control and identification of legal risk by the CCP's Senior Management and the CCP's Legal Department in coordination with Compliance Department.

Any changes in policies and procedures are discussed by the Executive Risk Committee, the EMIR Risk Committee and, in some instances, BME CLEARING's Management Committee. Changes are submitted for approval to BME CLEARING's Board, and the CNMV is informed.

The risk management system used by the CCP – developed internally by BME CLEARING's IT Department – focuses on monitoring and measuring the exposures to participants by measuring credit, market and concentration risks in real time. The efficiency of the risk-management system and any changes made thereto are verified daily (back tests), weekly and monthly by the Executive Risk Committee.

Subsequently, at least once a year and whenever significant changes are made, at least a renowned external firm is appointed to conduct an exhaustive review of how procedures and criteria are applied, and of the performance of the CCP's systems.

An overarching review of criteria and procedures is also conducted annually, the outcome of which is included in the Risk Report.

There are a Compliance and an Internal Audit Unit that identify and evaluate the CCP's exposures and legal risks. Both units are independent and report to the CCP's Board of Directors.

Members avail of information on prices, positions and risk parameters in real time, enabling them to control their risks at any time. The procedures required for Members to control their risks are set forth in and implemented through the CCP's Circulars.

The methodology for calculating Initial Margins ensures a confidence interval which covers at least 99% of losses over a liquidation period of at least 2 days (5 days for the Energy derivatives and OTC Interest Rate Derivatives).

Moreover, the fact that the CCP has established a Default Fund to share losses is a clear incentive to Members to concern themselves with the risk management performed by the CCP and support and advise the CCP in this regard through bodies such as the EMIR Risk Committee in which BME CLEARING's participants can provide their proposals for a better risk management.

BME CLEARING controls the risks it bears from and poses to other interdependent entities: MEFF, SIBE Smart, AIAF-SENAF, BROKERTEC, Trayport and MarkitWire as trading or matching platforms ; IBERCLEAR, CLEARSTREAM and EUROCLEAR as depositories; TARGET2-Banco de España as payment system, IBERCLEAR as a settlement system through TARGET-2 Securities platform, ENAGÁS TSO and GMSL (Gas Management Services Limited), provider of the nomination process for gas products.

## QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS

**Key consideration 1: An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.**

### Risks that arise in or are borne by the FMI

#### Q.3.1.1. What types of risk arise in or are borne by the FMI?

Risks the CCP poses to its participants: (1) Credit risk exposure to CCP; (2) Investment risk; (3) Legal risk; (4) Model risk; (5) Credit risk exposure to the rest of the CCP's Members; (6) Systemic risk; (7) Liquidity risk; (8) Operational risk; (9) General business risk; (10) Risk of margins posted; (11) Exchange rate risk; (12) Interest rate risk; (13) Translation risk; (14) Sovereign risk.

Risks to which the CCP is exposed: (1) Systemic risk; (2) Legal risk; (3) Credit risk: 3.a) Replacement cost risk, 3.b) Market risk, 3.c) Concentration risk; (4) Liquidity risk; (5) Operational risk; (6) General business risk; (8) Risk of margins and CCP funds in deposit; (7) Investment risk.

Please, refer to Principles 4, 5, 6, 7, 17 and 20 for further information.

### Risk management policies, procedures and systems

#### Q.3.1.2. What are the FMI's policies, procedures and controls to help identify, measure, monitor and manage the risks that arise in or are borne by the FMI?

Risk controls, policies and procedures are approved by the CCP's Board of Directors. Moreover, there is a EMIR Risk Committee in the Board of Directors of BME CLEARING, as prescribed in EMIR. It is a consultative committee of the Board, advising it on any arrangements that may impact the risk management of the Company.

All the risk management is comprised in a Risk Report, submitted to the CNMV. This report is revised at least once a year and it fully complies with EMIR.

The Risk Report sets out the mainstays of the CCP's active risk management programme:

- Certain decision, management and advisory bodies, who are responsible for risk identification, the review of the risk criteria and parameters, as well as their control, supervision and advisory duties: (1) Operations Department, responsible for daily risk management operations – basically relating to credit, market, concentration and liquidity risk; (2) Chief Risk Officer, responsible for the application of the risk management framework, as well as the daily risk management supervision; (3) Executive Risk Committee, which is provided with a risk report setting out any material risk management events and compliance with risk limits during the previous week, It meets on a monthly basis to discuss issues including a review of margin parameters. Changes are approved by the Executive Risk Committee and submitted for secondary approval to the CCP's Board. If necessary, the Executive Risk Committee can also be convened immediately. The CCP's Management Committee is informed of any decisions made; (4) Incidents Committee: Consisting of a representative from each department. This committee looks at issues reported in relation to operational risk, and meets monthly at least; and (5) EMIR Risk Committee, which is an advisory body of the Board, as stated in EMIR.
- The mechanisms used to control risk are designed to ensure that the total margins of each of the CCP's Clearing Members are commensurate to risk. They are backed up by daily settlements and risk limits: (1) Mark-to-market and the Initial Margin with a confidence level of at least 99 %, increased for large positions; (2) Individual Fund (additional margin), which might be required for various concepts: it covers any shortfall in a Member's minimum capital requirement and shores up its solvency, by category of member in a specific segment, to cover minimum intraday operations and provide additional coverage to the Default Fund in extreme conditions. Also an individual fund is required, depending on a Member's solvency and the size of the position, if the Intraday Risk Limit is surpassed; (3) Extraordinary Margin is required if 80% of the Initial Margin is exceeded (50% for the IRS segment); (4) Risk is measured under stress test conditions each day, and is covered by the Default Fund, requested independently for each segment, and updated quarterly and an additional Individual Fund from Members whose risk under extreme conditions would not be covered by the Default Fund; (5) Control of the solvency of the CCP and control of collateral management; (6) Daily back-testing to verify the coverage of the Initial Margin, and therefore the validity of risk parameters and the calculation model; (7) Liquidity control: daily verification; at least 30% of the total margins required by the CCP for all concepts and in all segments must be posted in cash and in euros; (8) Operational risk coverage, with the activation of recovery plans several times a year.
- There is a set of criteria to determine risk parameters and how to post the margins established using the risk-management mechanisms.
- There is a procedure to be followed in the event of a default. It is reviewed at least once a year, setting out the order in which margins are executed if the defaulting Clearing Member's position cannot be transferred (see Principle 13 for more detailed information).
- Finally, new legislation and regulatory changes are reviewed daily by the CCP's Senior Management and Legal Department in coordination with the CCP's Regulatory Compliance Department, in order to identify and control legal risks.

#### **Q.3.1.3 . What risk management systems are used by the FMI to help identify, measure, monitor and manage its range of risks?**

The risk management system used by the CCP – developed internally by BME CLEARING's Technology Unit – focuses on monitoring and measuring the exposures to participants by measuring credit, market and concentration risks in real time.

Currently, the system comprises the following main integrated modules:

- Limits: Calculates and controls the CCP's intraday risk (Intraday Risk Limit, Margin Call), enabling risks to be simulated by changing risk parameters and positions. SGG: Contains the register of all the CCP collateral posted, and values this collateral on a near to real time basis using intraday prices supplied by AIAF-SENAF and a renowned vendor
- CyL: This module collates risk data from the Limits and SGG modules, compares them with the collateral posted in the SGG module and calculates the margin movements in cash to be credited or debited at the session close. It also groups settlements by TARGET2 account at a Payment Agent level for the daily Multilateral Settlement on the TARGET2-Banco de España system.
- Swami guru and Swap manager: These applications are specifically designed for IRS Segment. These applications run "What-if" Stress Test scenarios and margins calculations respectively.

A forecast of the margin required at the session close is available to members through their MEFF Stations. Real-time files on trades, positions and prices to control their exposures can be downloaded. At the session close, the current system performs calculations of basic risk and stress test risk, and it generates session-close files, including those on margins and settlements.

Information on risk and margins is stored in several databases and back-up copies are kept.

**Q.3.1.4. How do these systems provide the capacity to aggregate exposures across the FMI and, where appropriate, other relevant parties, such as the FMI's participants and their customers?**

Risk is grouped by Clearing Member in all the CCP's risk-management modules, and can be broken down by account. Cash amounts are grouped by Payment Agent in order to process the multilateral settlement in the next session. The CCP and its Members communicate through standardised communication procedures such as the FIX Protocol, and BME CLEARING furnishes all its participants with CSV and XML files through a Secure File Transfer Protocol (SFTP) file server. The information Members receive in a file both intraday and at each session close is fully ungrouped and can easily be grouped by customer account or the Member's own accounts, and by Member and Clearing Member. Review of risk management policies, procedures and systems

**Q.3.1.5. What is the process for developing, approving and maintaining risk management policies, procedures and systems?**

Development and amendments to risk management policies and procedures are discussed internally by the Executive Risk Committee and presented to the EMIR Risk Committee and, in some instances, the Management Committee. Subsequently, they are submitted for approval to BME CLEARING's Board, and the CNMV is informed. Any amendments involving the posting of margins require the express approval of the CNMV and has the power and legal authority to require any information regarding this topic from the EMIR Risk Committee, at any given time, and can even request attendance to its meetings.

Changes are normally included in the General Conditions when they involve a new product or significant amendments related with a product. In general and more frequently, they are included in Circulars or Instructions, in the latter case if the changes are of a more technical nature.

If necessary, the Technology Department is requested to make systems amendments or configure new functionalities, and as the personnel in this team are qualified, changes can be quickly and reliably implemented. Weekly meetings are held between the Technology Unit and the Operations Department to monitor the various phases of work to roll out new functionalities.

Functionalities that have been rolled out are re-tested when new versions of the CCP's software are brought out due to the introduction of new functionalities.

**Q.3.1.6. How does the FMI assess the effectiveness of risk management policies, procedures and systems?**

The effectiveness of the risk-management system and any amendments made are checked daily, weekly and monthly.

Each day, (1) back-testing is performed to test risk parameters and models, and therefore the interval of the Initial Margin, and (2) the Default Fund is stress tested to confirm it is sufficient and, if there is a shortfall of funds, request additional collateral at the session close.

In addition to back-testing checking, every day, the Chief Risk Officer, with the Operations Department's collaboration also reviews the risk-management system's response times regarding: the calculation of intraday risk in less than five minutes and the calculation of session-close settlements at the time and within the time frame established. It keeps a register of the response times of each calculation, and confirms the information on session-close risk and settlement is sent to Members at the appropriate time, without delays, and has been published correctly.

On a weekly basis, the Executive Risk Committee is notified of the most noteworthy events, which it then examines along with the review of risk parameters and stress test scenarios in this Committee's monthly meeting or earlier if it is urgent.

Independent validation of the models used and the tests performed by BME CLEARING has been outsourced. The results of the CCP's tests are reported to the CNMV which in turn passes them on to ESMA and the EMIR College. This review is performed in addition to the controls carried out by the CCP's Compliance Department and the Internal Audit Department.

**Q.3.1.7. How frequently are the risk management policies, procedures and systems reviewed and updated by the FMI?**

An overarching review of criteria and procedures is conducted annually, the outcome of which is included in the Risk Report. As indicated in Q.3.1.6, an external Validation Report is issued on an annual basis.

How do these reviews take into account fluctuation in risk intensity, changing environments and market practices? The frequency of changes to functionalities associated with the CCP's exposures take into account the fact that risk control is affected by changing environments which imply modifications in internal and external regulations (EMIR, the recent inclusion of new segments in BME CLEARING, etc.).

**Key consideration 2: An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.**

**Incentives to manage risk**

**Q.3.2.1. What information does the FMI provide to its participants and, where relevant, their customers to enable them to manage and contain the risks they pose to the FMI?**

Information to contain risks consists of: (1) that obtained from models and procedures that are basically implemented through Circulars; (2) intraday and session-close data on transactions performed, open positions, prices, risk parameters, matrices for evaluating contracts in different risk scenarios, margins, and gains and losses; (3) that obtained from standard communications procedures; and (4) information on risks provided by the CCP in real time and at the session close down to the individual client account level.

Moreover, Members can make simulations on their margins.

The list of risk-related Circulars is available on BME CLEARING's website.

When a Member requires more detail on any of the CCP's procedures, an explanation is provided and examples are given to facilitate its application.

According to EMIR, the CCP has increased the information provided to Members on risk criteria, such as a detailed explanation of certain stress test scenarios.

**Q.3.2.2. What incentives does the FMI provide for participants and, where relevant, their customers to monitor and manage the risks they pose to the FMI?**

The main incentive offered to participants is that the calculation method used for margins is such that the more the risk increases, the higher is the initial margin required. This in itself is a major incentive.

Moreover, the fact that the CCP has established a Default Fund to share losses is a clear incentive to Members to concern themselves with the risk management performed by the CCP, and support and advise the CCP in this regard through bodies such as the EMIR Risk Committee. Furthermore, the CCP has committed itself with this system via the "Skin-in-the-game" principle, by which the CCP itself allocates a part of its own resources to ensure the system.

In the EMIR Risk Committee meetings, the CCP gives detailed explanations of the most relevant events associated with its risk control model, helping customers to better understand this model and how it applies to their Members.

**Q.3.2.3. What tools does the FMI use to control identified sources of credit risk (for example, offering an RTGS or DvP settlement mechanism, limiting net debits or intraday credit, establishing concentration limits, or marking positions to market on a daily or intraday basis)?**

The CCP uses the following credit risk tools to limit risk: (1) Variation Margin; (2) Initial Margin; (3) Intraday Risk Limit (IRL, maximum exposure the CCP assumes in real time with each Clearing Member); (4) End-of-day Risk (maximum overnight risk that the CCP may face with each Clearing Member); (5) Margin Call Limit (reducing the CCP's exposure with each Member in the event that 80% of the Initial Margin has been used); (6) Daily Stress tests; (7) Concentration limits and additional margin requirements for large positions; (8) Daily cash settlements on TARGET2 using net balances: in the BME CLEARING's Multilateral Settlement on the TARGET2-Banco de España system performed each day at 09:00 CET (or at 09:30 CET for the xRolling FX products), only one movement (credit or debit) is registered per each Payment Agent with a TARGET2 account; (9) DVP settlement mechanism for both the Equities and the Fixed Income Securities segments.

The CCP establishes different Solvency Limits for each Clearing Member, which represents the maximum intra-day or overnight credit awarded to each Clearing Member, on an intra-day or end-of-day basis, respectively, and is equal to a percentage of its own Equity, with a maximum capped amount (being this amount lowered at end-of-day). Exposures to a new intraday position marked to market, or to the accumulated intraday losses can be covered by the intra-day risk limit, in addition to the Individual Funds posted (see response to Q.4.4.1). The Limits Module also calculates greater margin requirements for large positions and it applies a concentration limit based on the daily average trading volume of each product.

Lastly, at the session close, BME CLEARING calculates the Margin Call Limit referred to the intraday margins to be set aside by each Clearing Member if extreme conditions or high volatility prevail during the next session (established at 80% of the Initial Margin for all segments except for the IRS segment, where a 50% is applied, and for the xRolling FX products belonging to the Financial Derivatives segment where a 60% is used). If the risk calculated exceeds the Margin Call Limit, the Member must post an Individual Fund for the difference in the corresponding BME CLEARING's next day Multilateral Settlement.

**Key consideration 3: An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.**

### Material risks

#### **Q.3.3.1. How does the FMI identify the material risks that it bears from and poses to other entities as a result of interdependencies?**

BME CLEARING controls exposure to entities with which it is interdependent, which are classified as follows: Central Securities Depositories such as IBERCLEAR, CLEARSTREAM and EUROCLEAR; trading platforms such as AIAF-SENAF and BROKERTEC, to register repos, MEFF, to register derivatives, SIBE Smart for equity trades and MarkitWire to register OTC Interest Rate Derivatives; and settlement systems including the TARGET2-Banco de España system, and IBERCLEAR, which works as a settlement system for the equity segment through T2S.

There are no agreements between BME CLEARING and other CCPs.

BME CLEARING has agreements and framework agreements with Banco de España, MEFF, Sociedad de Bolsas (SIBE), AIAF, BROKERTEC, MarkitWire, IBERCLEAR, CLEARSTREAM EUROCLEAR, GMSL and ENAGAS. These signed agreements regulate the obligations of each party and the procedures for coordinating risk management and defaults and to resolve incidents. In the aforementioned agreements, there are continuity mechanisms which are triggered if communication links are severed.

#### **What material risks has the FMI identified?**

Most of the material risks identified and laid down in the agreements fall into two broad categories: Operational risks: (1) risk of failure in communications; (2) legal risk stemming from faults or errors in the registers or settlements, errors in data transmission, or the failure to meet other coordination or communication obligations and credit or Counterparty risks (1) resulting from a participant defaulting.

Mitigation procedures are agreed to contain such risks:

- Back-up systems and alternative transmission procedures are in place.
- Legal risk: The agreements set forth the responsibilities of each party.
- Credit risk: A procedure is stipulated in the agreements to resolve incidents and ensure coordination between the FMIs. Suspension of access to the register of transactions from trading platforms, and coordination in the event of depositories default.

The CCP's data record and those received from interdependent FMIs are reconciled daily to minimise the risk of deviations. The agreements also define mechanisms for the CCP and the corresponding FMI to coordinate their response to a default, report changes in rules, and allocate responsibilities in case of operational errors.

The agreements also mention the possibility of interrupting relations should a force majeure event that was not considered when the agreements were signed arises.

#### **Q.3.3.2. How are these risks measured and monitored?**

The CCP's Technology Department has systems in place to warn of any operational incidents. Moreover, the Operations department has several controls and check-lists to mitigate operational risk.



The legal risks are analysed by the Legal Advisory Department and the Chief Compliance Officer, which team up to propose solutions to mitigate the risk or to deal with the consequences of an eventual failure to comply with the associated agreements.

#### **How frequently does the FMI review these risks?**

The effectiveness of controls is reviewed by Internal Audit at least once a year, alongside the agreements. There are regular Compliance controls, and the Executive Risk Committee meets on a monthly basis to discuss pertinent risk-related issues, identify new risks, review existing risks and approve risk-management criteria, models and parameters.

### **Risk management tools**

#### **Q.3.3.3. What risk management tools are used by the FMI to address the risks arising from interdependencies with other entities?**

BME CLEARING has no interdependencies with other CCPs, and therefore is not exposed to credit or liquidity risk arising from them. The main risks to which it is exposed are legal, liquidity risk and operational.

Liquidity and settlement risks arise from an interdependency with IBERCLEAR, which for the equity segment works as a settlement system. A liquidity control is performed daily to mitigate this risk.

As for operational risk, business continuity mechanisms are in place, e.g. if regular lines of communications are severed, alternative lines of communication have been agreed such as fax, email or telephone with the Banco de España, Depositories and Markets with which there is a link.

#### **Q.3.3.4. How does the FMI assess the effectiveness of these risk management tools? How does the FMI review the risk management tools it uses to address these risks? How frequently is this review conducted?**

Please, see response to question Q.3.1.6.

**Key consideration 4: An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.**

### **Scenarios that may prevent an FMI from providing critical operations and services**

#### **Q.3.4.1. How does the FMI identify scenarios that may potentially prevent the FMI from providing its critical operations and services?**

According to EMIR and its supplementing regulations, BME CLEARING has procedures in place to identify all sources of risks that may impact its on-going functions and takes into consideration the likelihood of potential adverse effects on its revenues or expenses and its level of capital.



## What scenarios have been identified as a result of these processes?

Having reviewed the risks to which the CCP is exposed in relation to its environment, its participants and the platforms with which it is related, BME CLEARING has identified various scenarios that could potentially put the CCP's critical operations and services at risk:

### 1. Internal technical malfunction: Failure of the CCP's systems.

The CCP has a recovery plan based on BME CLEARING Business Continuity Policy. The plan identifies critical functionalities, operations and resources. It details the scenarios that may activate the contingency plan and describes the procedures to return to normal operations. It includes regular continuity tests. There is also a Communication Management Plan which establishes the creation of a Crisis Management team.

BME CLEARING Business Continuity Policy is publicly available on BME CLEARING's website.

### 2. Malfunction of the platforms with which the CCP is interdependent: TARGET2-Banco de España, IBERCLEAR, EUROCLEAR or CLEARSTREAM platforms or a malfunction of MEFF, SIBE Smart, MarkitWire, Trayport, AIAF-SENAF, BROKERTEC, GMSL or ENAGAS.

As mentioned previously, contracts or agreements have been signed with each of these entities laying down the obligations of each party and the procedures for coordinating risk management and defaults. The CCP's Technology Department has systems in place to flag any operational incidents. In the event of a failure of communications, all BME CLEARING servers are redundant. If it was not possible to use redundant servers either, there is a procedure to send instructions via e-mail or in certain cases, there are contingency modules in place.

The effectiveness of this controls is verified annually through an internal audit and by external auditors. Please, refer to principles 17 and 20 for more information.

### 3. Lack of liquidity

BME CLEARING does not have any interoperability agreements with other CCPs. Its credit exposure is to Participants and changes on a real-time basis, while liquidity requirements are daily and arise: 1) when the CCP makes payments to its Clearing Members at 9:00 am, when BME CLEARING's multilateral settlement is processed on the TARGET2 - Banco de España system, and 2) in the settlement cycles ran by IBERCLEAR.

Liquidity is measured on a real time basis and assessed through the liquidity risk controls comprised in the CCP's Liquidity Plan. On a daily basis at each session end, the CCP measures its potential liquidity needs on D+1 considering the default of the two Clearing Members to which it has the greatest exposure under normal and stressed conditions. See principle 7 for further information.

### 4. Situations that could lead to the insolvency of the CCP

#### 4.1. Margins plus the CCP's own resources earmarked to cover credit risk are not sufficient to cover one or several defaults by Members of the CCP

BME CLEARING has a sound and robust system of lines of defense and recovery tools to cope with these situations. The three types of scenario that could lead to stress based on extreme but plausible market conditions are reviewed periodically in the Executive Risk Committee meetings.

When the creditor of the net balance is BME CLEARING and the Defaulting Member does not make an immediate payment, whatever the cause, BME CLEARING will perform certain procedures until the total net balance owed has

been paid. This Waterfall default procedure is set out in BME CLEARING's Rule Book. See Principle 13 for further information.

**1.** Losses incurred on cash investments of the CCP's own resources and Members' margins.

This risk is highly mitigated and low, as BME CLEARING's investment strategy is highly conservative, prioritizing the security of the investment over the return on cash invested (Principle 7).

**2.** Poor business management and insufficient own resources to cover general business risk.

This risk is monitored weekly by BME CLEARING Management Committee. According to EMIR, Business risk considered by BME CLEARING in relation to losses caused by a decline in revenue or increase in expenses that must be taken to capital, are covered by the minimum capital requirement of 25% of gross operating expenses. The business risks considered most significantly adverse in relation to BME CLEARING's business model and reasonably foreseeable for the company are the following: Revenue Concentration Risk; Competition Risk; Reputational Risk; Economic Risk; Regulatory and Compliance Risk; Technological Obsolescence Risk. It must be highlighted that BME CLEARING own-resources surpass by 5 times the regulatory capital established in EMIR.

**Q.3.4. How do these scenarios take into account both independent and related risks to which the FMI is exposed?**

The aforementioned scenarios establish, albeit not conclusively, that independent and related risks to which the FMI is exposed require a regulatory framework to be established beforehand and approved, that allows the regulator to avail of a series of procedures and legal powers with sufficient freedom to stop a FMI's position from worsening and spreading to the rest of the financial system.

## Recovery or orderly wind-down plans

**Q.3.4.3. What plans does the FMI have for its recovery or orderly wind-down?**

BME CLEARING has developed a comprehensive and effective recovery plan following the guidance provided by the CPMI-IOSCO report on the recovery of financial market infrastructures issued in October 2014 and the general guidance issued by the European Commission.

**Q.3.4.4. How do the FMI's key recovery or orderly wind-down strategies enable the FMI to continue to provide critical operations and services?**

BME CLEARING has performed current risk exposure analysis based on its risk strategy in order to identify recovery scenarios. According to BME CLEARING's risk strategy, credit risk exposure to the CCP's members has enough impact to consider it the basis of a systemic stress scenario (according to the Proposal for a Regulation of the European Parliament and of the Council on Recovery and Resolutions of CCPs). Additionally, three types of idiosyncratic scenarios have been identified, where BME CLEARING may be impacted.

**Q.3.4.5. How are the plans for the FMI's recovery and orderly wind-down reviewed and updated? How frequently are the plans reviewed and updated?**

The recovery plan is reviewed at least once a year, each time a significant change is introduced in any of the CCP critical services, when new critical services are identified in the Business Impact Analysis, after each internal or external audit, to analyse possible recommendations received, when determined by the Executive Risk Committee, or when a key element of the recovery plan (stress scenario, trigger or recovery tool) suffers any material change.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING has risk-management policies, procedures and systems in place, which are periodically reviewed and allow the range of risks to which it is exposed to be identified, measured, monitored, and managed, or assumed by the CCP. BME CLEARING also provides participants with incentives to manage and contain the risks they pose to the CCP. BME CLEARING regularly reviews the risks it poses to other entities (primarily other FMIs and communications service providers), along with the results of its interdependent FMIs. BME CLEARING has effective risk-management tools to mitigate such risks.

BME CLEARING has a Recovery Plan which is reviewed on an annual basis. which details the recovery and resolution tools comprised in BME CLEARING's internal rules.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 3 on the Framework for the comprehensive management of risks without any type of limit or restriction.

## PRINCIPLE 4: CREDIT RISK

***An FMI should effectively measure, monitor, and manage its credit exposure to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two largest participants and their affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions. All other CCPs should maintain, at a minimum, total financial resources sufficient to cover the default of the one participant and its affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions.***

### Summary narrative

The framework for managing credit risk is part of the risk management system described in Principle 3. As mentioned therein, this framework is modified as new products are launched, regulatory amendments arise or the environment changes, thereby altering the risk scenarios.

The CCP's products are standard. Further, the CCP is not connected to any other CCP, and is only relevant in one jurisdiction – Spain – whereby its risk profile is not complex.

The CCP measures counterparty risk both in real time and at the end of each session.

BME CLEARING uses several Credit risk mitigation tools: Variation Margin, Initial Margin, Intraday Risk Limit (IRL), Margin Call Limit, Stress tests, Concentration limits and additional margin requirements for large positions.

BME CLEARING avails of other prefunded financial resources additional to margins, in order to cover credit risk: Individual Funds, Extraordinary Margins, Default Funds, BME CLEARING's dedicated own resources ("skin-in-the game") and BME CLEARING's remaining Capital.

BME CLEARING will enforce additional financial resources to cover any default under stress circumstances.

BME CLEARING conducts daily stress tests of the Default Fund and furthermore it evaluates, on a quarterly basis, through the reverse Stress Tests carried out, the number of instances of concurrent defaults that could be covered by the Default Fund and the rest of the financial resources available to the CCP.

The main source of credit risk is the CCP's current and future exposures arising from the positions of its participants. The CCP's rules indicate the order in which margins and other financial resources should be used to cover a default (please refer to Principle 13 for more information).

## QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS

**Key consideration 1: An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.**

### Framework to manage the CCP's credit exposures

#### **Q.4.1.1. What is the FMI's framework for managing credit exposures, including current and potential future exposures, to its participants and arising from its payment, clearing and settlement processes?**

The CCP has a risk management framework consisting of: (1) certain decision, management, and consulting bodies; (2) certain control mechanisms consisting of daily settlements, daily and intra-day margins, stress testing, and real time risk controls; (3) a number of risk management systems; and (4) a series of rules, procedures and criteria on which risk management is based (please, refer to Principle 3 for more in-depth information).

#### **Q.4.1.2. How frequently is the framework reviewed to reflect the changing environment, market practices and new products?**

The framework is constantly evolving and is revised when risk scenarios change due to new product launches, amendments to regulations, or due to a changing environment. The efficiency of the risk-management system and any changes made thereto are daily verified (back tests) and monthly reviewed by the Executive Risk Committee.

Subsequently, at least once a year and whenever significant changes are made, some renowned external firms are appointed to conduct an exhaustive review of how procedures and criteria are applied, and of the performance of the CCP's systems. A resultant Validation Report is issued, according to EMIR. This review is performed in addition to the controls carried out by the CCP's Internal Audit Unit.

An overarching review of criteria and procedures is also conducted annually, the outcome of which is included in the Risk Report.

**Key consideration 2: An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.**

### Sources of credit risk

#### **Q.4.2.1. How does the FMI identify sources of credit risk?**

All risks are identified by the Executive Risk Committee. Please refer to Principles 2 and 3 for more in-depth information.

#### **What are the sources of credit risk that the FMI has identified?**

The main source of credit risk is the CCP's current and future exposures arising from the participants' open positions:

- Current exposures are the result of marking positions to market, generating the Variation Margin that is daily settled in the case of futures and interest rates OTC derivatives and the Variation Margin settled at

maturity or when the position is closed out (e.g. options, energy swaps, repos and the Equity segment transactions).

- Potential future exposures are the result of applying a potential fluctuation to a position's market value and to the collateral posted in securities by counterparties, from mark-to-market to the estimated time to close-out a position in the event that the counterparty defaults.

Another potential source of credit risk stems from Members' cash collateral investments made by the CCP. In BME CLEARING's case, this is minimal, since the amount not remaining in its account in the TARGET2-Banco de España system is invested in one-day repos secured by investment grade sovereign debt, with high solvency level counterparties, and using haircuts calculated at stress-test levels, which are at least equal to the margin intervals applied within the fixed-income securities segment (REPO).

#### **Q.4.2. How does the FMI measure and monitor credit exposures?**

The CCP measures counterparty exposures to each Clearing Member in real time and compares it to the collateral posted, by using the Limits module in its risk management system (see response to Q.3.1.3 of Principle 3).

##### **How frequently does and how frequently can the FMI recalculate these exposures?**

The risk (actual exposure and potential future exposure) associated with around 3,000 accounts is recalculated every five minutes.

BME CLEARING updates the intraday risks based on the current positions and real-time prices and compares the result with the Intraday Risk Limit (IRL), calling for additional margins (individual funds) when IRL is exceeded.

Additionally, only for the IRS segment, BME CLEARING applies two regular intraday margins calls (at 12:00 and 15:00 CET), a common practice for Interest Rate OTC Derivatives products, as these are OTC, where market prices are available even though there is no official regulated market.

##### **How timely is the information?**

The calculation takes five minutes and therefore, every position for every counterparty is revalued using real-time prices.

#### **Q.4.2.3. What tools does the FMI use to control identified sources of credit risk (for example, offering an RTGS or DvP settlement mechanism, limiting net debits or intraday credit, establishing concentration limits, or marking positions to market on a daily or intraday basis)?**

The CCP uses the following credit risk tools to limit risk: (1) Variation Margin; (2) Initial Margin; (3) Intraday Risk Limit (IRL, maximum exposure the CCP assumes in real time with each Clearing Member); (4) Margin Call Limit (reducing the CCP's exposure with each Member in the event that 80% of the Initial Margin has been used); (5) Daily Stress tests; (6) Concentration limits and additional margin requirements for large positions; (7) Daily cash settlements on TARGET2 using net balances: in the BME CLEARING's Multilateral Settlement on the TARGET2-Banco de España system performed each day at 09:00 CET (or at 09:30 CET for the xRolling FX products), only one movement (credit or debit) is registered per each Payment Agent with a TARGET2 account; (8) DVP settlement mechanism for both the Equities and the Fixed Income Securities segments.

The CCP establishes a Solvency Limit for each Clearing Member, which represents the maximum overnight credit awarded to each Clearing Member and is equal to a percentage of its own Equity. Exposures to the new intraday position marked to market or to the accumulated intraday losses can be covered by this limit, in addition to the Individual Funds posted (see response to Q.4.4.1). The sum of the Solvency Limit and the Individual Funds is referred

to as the IRL. The Limits Module also calculates greater margin requirements for large positions and it applies a concentration limit based on the daily average trading volume of each product.

Lastly, at the session close, BME CLEARING calculates the Margin Call Limit referred to the intraday margins to be set aside by each Clearing Member if extreme conditions or high volatility prevail during the next session (established at 80% of the Initial Margin for all segments except for the IRS segment, where a 50% is applied, and for the xRolling FX products belonging to the Financial Derivatives segment where a 60% is used). If the risk calculated exceeds the Margin Call Limit, the Member must post an Individual Fund for the difference in the corresponding BME CLEARING's next day Multilateral Settlement.

Concentration limits are checked on an intraday basis.

#### **How does the FMI measure the effectiveness of these tools?**

The CCP carries out a periodic control of the calculation times and immediate availability of up-to-date inputs (positions, prices, margins posted, etc.) as well as up-to-date outputs (margins required).

**Key consideration 4: A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. In all cases, a CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.**

#### **Coverage of current and potential future exposures to each participant.**

##### **Q.4.4.1. How does the CCP cover its current and potential future exposures to each participant fully with a high degree of confidence?**

BME CLEARING daily requires every Clearing Member to post an Initial Margin calculated at the account level. The margin covers both the current exposure of the position (for instruments not daily settled) and potential future exposure at a 99% confidence level and 99.5% for the IRS and Natural Gas products. The Default Fund and Individual Funds, if needed, cover the stress-test risk which means a higher degree of confidence.

##### **What is the composition of the CCP's financial resources used to cover its current and potential future exposures?**

BME CLEARING has several financial prefunded resources aimed at covering credit risk besides Initial Margin:



Default Fund: Established for each segment and is used to cover the remaining residual loss resulting from a Clearing Member's default, once the Clearing Member's Initial Margin, Individual Funds and Extraordinary Margins have already been used. A Circular for each of the CCP's segments, in accordance with EMIR art. 42, sets forth the criteria on the minimum size of this fund, the calculation parameters for the Clearing Members' contributions as well as for the minimum contributions to the fund, the replenishment of contributions and the refunding thereof in the event a Member ceases its Membership. The Default Fund is separated by segment. Thus, if a Clearing Member does not hold positions or trade in a segment, it will never be affected by the default of a Clearing Member with losses in that segment.

Default Funds are updated on a monthly basis for each segment. As a result of each update, any increase or drawdown on the fund will be disclosed to all Clearing Members by means of a notice.

In order to calculate the size of each Default Fund, BME CLEARING will cover the largest Risk in the last calendar quarter, under Stress Test conditions, on the basis of the maximum combined daily risk of the two Clearing Members with the largest risks from a same risk scenario, plus an additional 10%.

The criteria to calculate the contributions of each Clearing Member, described in each "Default Fund" Circular are based on proportionality. Contributions shall be proportional to each Clearing Member's share of its average exposure compared to the total average exposure of all the CCP's Clearing Members.

Nevertheless, pursuant to point 2 of Article 42 of EMIR the CCP establishes a minimum contribution for each Clearing Member.

Individual Fund: Fund posted only by Clearing Members in addition to the Initial Margin and that is non-mutualized in case of a Default. For instance, if the daily stress test risk is not covered by the Initial Margin, plus the Default Fund, Clearing Members affected need to post an Individual Fund.

Extraordinary Margin: It is required: (1) to all affected Members if 80% of the Initial Margin price interval is exceeded due to intraday price fluctuations (being 60% for the xRolling FX products and 50% for IRS Segment); (2) when the solvency of any Clearing Member, calculated in accordance with the Calculation of Shareholder's Equity and Solvency Circular, is in the lowest levels (S8-S9); (3) when in BME CLEARING's view, the overall state of the market or a Clearing Member's particular circumstances involve a high risk that is not sufficiently covered.

BME CLEARING's dedicated own resources ("skin-in-the game"): This layer of protection will be used when all the margins of the defaulting Clearing Member have been already used, including all its contributions to the Default Fund, and prior to using the Default Fund contributions of the non-defaulting Clearing Members.

BME CLEARING's Capital: In order to comply with EMIR and its supplementing regulations, BME CLEARING has carried out the obligatory analysis of the risks incurred, which have been subsequently classified, controlled and measured to determine that sufficient coverage is in place, according to the provisions of the regulation. As a result, current CCP capital ("skin-in-the-game" included) is around 3 times the minimum capital required by EMIR.

BME CLEARING has developed a CCP capital requirements monitoring procedure to ensure that sufficient capital is permanently available to cover the risks, in compliance with the requirements established in Article 16 of EMIR.

### **How accessible are these financial resources?**

The financial resources at BME CLEARING's disposal are easily accessible: most of the collateral is posted in cash, and non-cash collateral posted in favour of the CCP is easily converted into cash, as well as the CCP's own resources. Please refer to Principle 5 for more in-depth information.



**Q.4.4.2. To what extent do these financial resources cover the CCP's current and potential future exposures fully with a high degree of confidence?**

Initial Margins cover present exposures and at least 99% of future exposures. This high degree of confidence rises if the Default Fund and BME CLEARING's dedicated own resources are also included.

**How frequently does the CCP evaluate the sufficiency of these financial resources?**

Daily. At each session close, BME CLEARING performs a stress test to evaluate the sufficiency of these financial resources. If they are insufficient, the CCP requests an Individual Fund to the Clearing Members responsible for the excess exposure. See Q.4.4.4.

**Risk profile and systemic importance in multiple jurisdictions.**

**Q.4.4.3. Do any of the CCP's activities have a more-complex risk profile (such as clearing financial instruments that are characterised by discrete jump-to-default price changes or that are highly correlated with potential participant defaults)?**

The CCP's products are standard and are not strongly correlated with participant default events, with the exception of those listed derivatives whose underlying assets are issued by banks that are Clearing Members of the CCP. However, for these instances, BME CLEARING has concentration limits in place as regards shares and economic sectors. Furthermore, margin collateral cannot be posted using securities issued by the holder of the guaranteed obligation or any Firm belonging to the same business group of the guaranteed obligation holder. Additionally, there are stress test scenarios where a higher price fluctuation is considered when the holder of the position is the issuer of the underlying (i.e. stress test scenarios which are designed to tackle wrong-way-risk). Likewise, securities issued by that holder's Clearing Members, Non-Clearing Members or Clients shall not be valid collateral for that obligation holder.

**Is the CCP systemically important in multiple jurisdictions?**

The CCP is not connected to any other CCP, and is only important in one jurisdiction – Spain.

**Additional financial resources**

**Q.4.4.4. What additional financial resources does the CCP maintain to cover a wide range of potential stress scenarios that include, but are not limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure in extreme but plausible market conditions?**

In order to cover the default of the two Clearing Members to which BME CLEARING has the highest exposures, potential losses exceeding the Initial Margins and Default Fund shall be covered by the Individual Funds posted by these Members. Coverage of such losses is daily updated. The calculation is performed at session end and any additional Individual Fund to post by the affected Clearing Members shall be provided during BME CLEARING's multilateral settlement in TARGET2-Banco de España at 9:00 am on the following business day (or 9:30 am for the xRolling FX products).

Furthermore, the "Default Fund" Circular for each of the BME CLEARING's segments allows that in the event that a Clearing Member defaults and the CCP needs to draw down the Default Fund, for a period of 90 calendar days, starting when default is declared, the maximum aggregate amount to be contributed by the other Clearing Members shall be twice the amount of their contribution to the Default Fund prior to the default. Once the 90 days have elapsed, Clearing Members must contribute to the new Default Fund in the corresponding amount calculated for this purpose.

**Q.4.4.5. If the CCP is involved in activities with a more-complex risk profile or is systemically important in multiple jurisdictions, to what extent do the additional financial resources cover, at a minimum, the default of the two participants and their affiliates that would create the largest credit exposure in the CCP in extreme but plausible market conditions?**

BME CLEARING's profile is not complex. In any case, the CCP calculates both the Default Fund and the additional financial resources necessary to cover the default of the two Clearing Members to which the CCP has the highest exposures under stress test circumstances.

**Q.4.4.6. How frequently does the CCP evaluate the sufficiency of its additional resources?**

BME CLEARING evaluates the sufficiency of the Default Fund and individual Funds using daily stress tests.

### Supporting rationale and governance arrangements

**Q.4.4.7. How does the CCP document the supporting rationale regarding its holdings of total financial resources?**

The CCP provides evidence of the sufficiency of its financial resources in the Risk Report, in accordance with EMIR and its supplementing regulations.

Any changes to its own resources must be approved by the CCP's Board.

**Q.4.4.8. What governance arrangements are in place relating to the amount of total financial resources at the CCP?**

BME CLEARING Rulebook and General Conditions of each segment and Circulars fully comply with article 16 of EMIR and articles 1 to 5 of the Commission Delegated Regulation (EU) 152/2013 on capital requirements, and EMIR art. 42 and 43 on default fund and other financial resources.

**Key consideration 5: A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be performed at least annually.**

## Stress testing.

### **Q.4.5.1. How does the CCP determine and stress-test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions?**

The daily stress test calculations are based on the scenarios determined following the framework for defining extreme but plausible market conditions according to EMIR requirements. These scenarios are made public through the stress test circulars. Additionally, on a quarterly basis, BME CLEARING carries out reverse stress tests in order to identify under which market conditions its financial resources would be insufficient. In these tests it is assumed more than two Clearing Members defaulting, i.e. as many as needed to deplete the total available resources, where the parameters underpinning the stress test scenarios are brought to the limit. Calculations are made so that the default of the two Clearing Members posing the highest risks is covered. The results of these tests are also reported to the CCP's Chief Risk Officer for validation and eventually to the EMIR Risk Committee.

### **How frequently does the CCP stress-test its financial resources?**

Daily. Please see the previous response.

### **Q.4.5.2. How are stress test results communicated to appropriate decision-makers at the CCP?**

Stress tests are calculated by the Risk team of BME CLEARING, supervised by the Chief Risk Officer and reported to the Executive Risk Committee for its monthly review and analysis and eventually presented to the Board of Directors. Likewise, any proposed adjustment to either the stress test parameters or models are first approved by the Executive Risk Committee, afterwards presented to the EMIR Risk Committee to seek its advice, and eventually submitted for approval to the Board of Directors.

### **How are these results used to evaluate the adequacy of and adjust the CCP's total financial resources?**

Please, see Q.4.5.1.

## Review and validation.

### **Q.4.5.3. How frequently does the CCP assess the effectiveness and appropriateness of stress test assumptions and parameters?**

At least once a month, or more frequently when material changes may affect the assumptions underlying the scenarios.

### **How does the CCP's stress test programme take into account various conditions, such as a sudden and significant increase in position and price volatility, position concentration, change in market liquidity, and model risk including shift of parameters?**

The CCP's stress test programme fulfils the requirements set forth in Article 49 of EMIR.

### **Q.4.5.4. How does the CCP validate its risk management model?**

BME CLEARING's risk management model is validated internally by the Executive Risk Committee and externally by independent companies that perform an external assessment using their own stress test scenarios and data provided by the CCP to verify whether there is any divergence from the results obtained using the CCP's stress tests and models.

### **How frequently does it perform this validation?**

At least annually or at any time, if there is a change in the risk methodology of BME CLEARING that deems to be significant enough under Article 49 of EMIR.

### **Who carries this out?**

BME CLEARING's Executive Risk Committee. Meanwhile, the external validations are accomplished by the consultancy firms specialised in risk management.

**Key consideration 6: In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions.**

### **Stress test scenarios**

#### **Q.4.6.1. In conducting stress testing, what scenarios does the CCP consider?**

The calculation methodology used in stress testing is defined in the Default Fund Stress Test Circular (available on the BME CLEARING's website). This Circular defines the methodology used to determine the stress test parameters and scenarios.

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.
- Hypothetical scenarios based on both historical and non-historical but plausible extreme fluctuations, according to EMIR and its subsequent regulatory developments.

For each Segment the loss of value of each open position is calculated for each stress test scenario, according to the parameters published in the Stress Test Calculation Parameters Circular of each Segment. The losses recorded in each scenario (compared to the position's value at close of the previous day) are compared to the Initial Margins of the Accounts.

### **What analysis supports the use of these particular scenarios?**

The historical scenarios are based on past evidence. On the other hand, in order to find possible future scenarios that are more unfavourable than those recorded historically, BME CLEARING has decided to use the Peaks-Over-Threshold (POT) methodology, based on the Extreme Value Theory.

**Do the scenarios include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions?**

Please, see previous response.

**Key consideration 7: An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.**

#### Allocation of credit losses.

**Q.4.7.1. How do the FMI's rules and procedures explicitly address any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI? How do the FMI's rules and procedures address the allocation of uncovered credit losses and in what order, including the repayment of any funds an FMI may borrow from liquidity providers?**

The CCP's rules indicate the order in which margins and other resources should be used to cover a default: such procedure stipulates the following (sorted by priority order):

##### Pre-funded resources:

- Enforcement of all the Initial Margins held by the Defaulting Member;
- Enforcement of the Individual Funds posted by the Defaulting Member for each CCP Segment and, if any, the Extraordinary Margins posted;
- The Defaulting Clearing Member's contribution to the Default Fund of the CCP Segment in which the Default occurred;
- The contributions of the defaulting Clearing Member to the Default Fund of all the other CCP segments, as well as any other Margin, of whatever type (Individual Fund or Extraordinary Margin) posted by the Defaulting Member vis-à-vis BME CLEARING;
- BME CLEARING's dedicated own resources (amount equivalent to the part specifically allocated to the CCP Segment(s) in which the Default occurred);and
- The remaining Default Fund relating to the Segment(s) in which the Default took place –these are the prefunded resources-.

##### Non pre-funded resources:

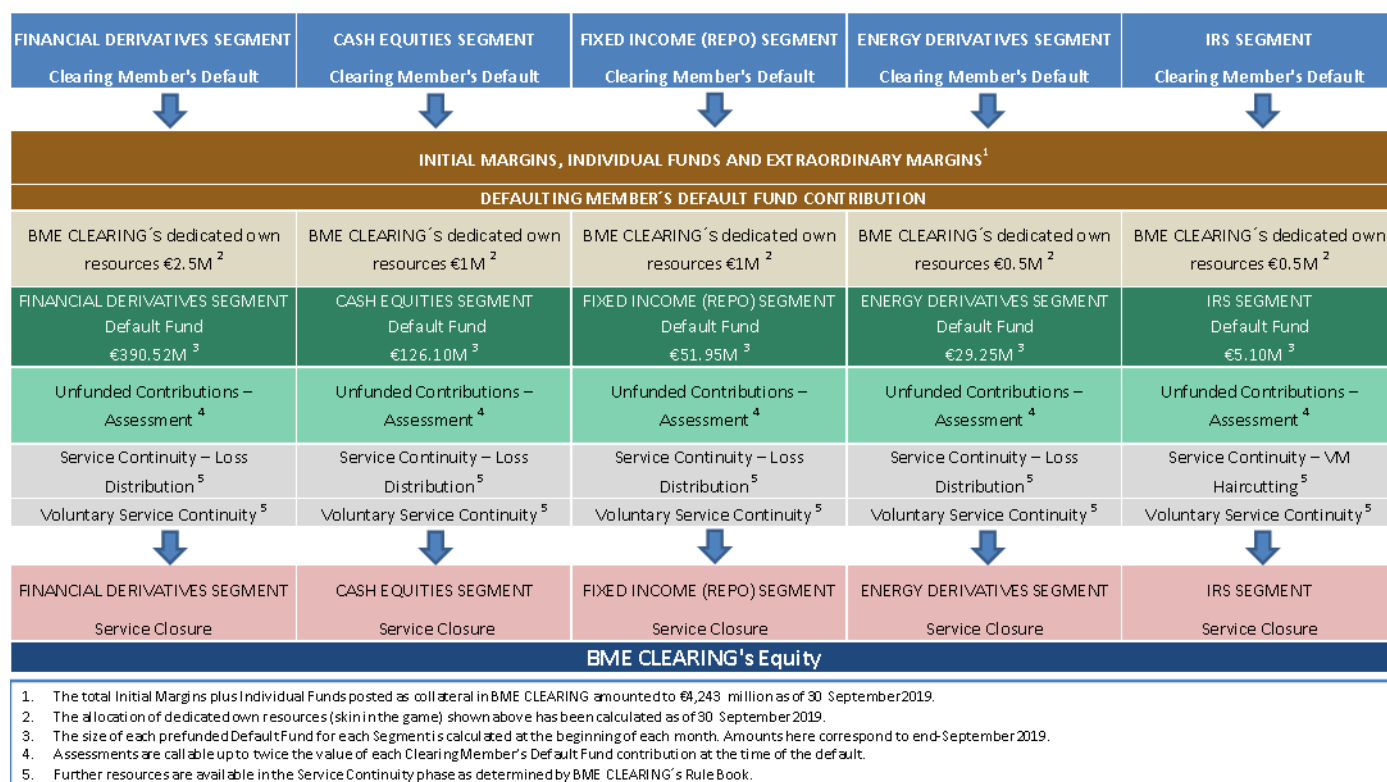
- Twice the amount of BME CLEARING's dedicated own resources;
- The additional contributions to the Default Fund (Assessment Power) to be provided by the non-defaulting Clearing Members, which are capped to twice the original default fund contribution ; and
- The contributions for service continuity and the voluntary contributions in the terms provided for in the General Conditions of the CCP Segment in respect of which the default occurred.

As for these last non pre-funded contributions, BME CLEARING may require them for the sake of service continuity in the terms provided for in the General Conditions of the CCP Segment, in respect of which the default occurred. The General Conditions of the Segment shall establish who should provide this contribution. The contribution for service continuity is additional to the contribution to the Default Fund.

As for the voluntary contributions, they can be requested from the Clearing Members, under the terms provided for in the General Conditions of the CCP Segment in respect of which the default occurred, without the entitlement to a refund on the part of BME CLEARING, although without prejudice to a claim being filed through another channel against the Defaulting Member.

The last stage of the default waterfall would assume the losses not covered with a charge to BME CLEARING remaining Equity, with the exception of the Capital and remaining Equity required from time to time under the applicable regulations.

For additional information, please refer to Principle 13.



## Replenishment of financial resources.

### Q.4.7.2. What are the FMI's rules and procedures on the replenishment of the financial resources that are exhausted during a stress event?

In the event that the non-defaulting Clearing Members' Default Fund has to be used, as provided for under Article 45 of the Rule Book, the amount utilized will be proportionally split according to the Default Fund contribution made by each Clearing Member, as compared to the total Default Fund amount of the corresponding Segment prior to the default situation.

Clearing Members must replenish the utilized part of their contribution within five Business Days after the use of the Default Fund takes place and in an amount at least equal to the amount used for each Clearing Member.

In case of a default by a Clearing Member where the Defaulting Member's Initial Margin, Individual Funds, and Default Fund contribution together with BME CLEARING's dedicated own resources, are not enough to cover such default and the Default Fund must be utilized, for a period of 90 consecutive calendar days starting on the day the default is declared, and in order to cover the losses arising from such default or any other default declared thereafter during such period of 90 calendar days from the first declaration of default, the maximum aggregate amount that the rest of Clearing Members can be assessed to replenish shall be twice the amount of their contribution prior to the declaration of the default.

At the end of the 90-day period, the Clearing Members must contribute to the Default Fund according to the new calculated level and proportions. The Default Fund replenished according to the new calculated level and proportions shall only be used to cover any Default declared after the above mentioned 90 calendar day period.

BME CLEARING's own resources' (skin-in-the-game) replenishment must be done as follows: 1) if the Default Fund has been deemed necessary to be completely used, the Skin-in-the-game must be replenished and doubled for a 90-day period after its usage, after which can be reduced to its usual amount; 2) if the skin-in-the-game is used, but the Default Fund is not, replenishment to its usual amount has to be carried out in a 90-day period after its usage.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING effectively measures, monitors and manages its credit exposures to its Clearing Members and the credit risks arising from its payment, clearing, and settlement processes. BME CLEARING maintains sufficient financial resources to cover the credit exposures to each Clearing Member, with a high degree of confidence. BME CLEARING currently avails of sufficient total financial resources to cover a wide range of potential stress scenarios that include the default of the two largest Clearing Members (and their affiliates) that could potentially cause the maximum aggregate credit exposure (under the Cover 2 principle) in extreme but plausible market conditions. The results of the stress tests are reported to the Executive Risk Committee (which is responsible for proposing decisions on the company's risk management policy), to the Board of Directors and eventually to the EMIR Risk Committee. BME CLEARING performs a validation of its overall risk management system, including the stress tests, at least annually.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 4 on Credit Risk without any type of limit or restriction.



## PRINCIPLE 5: COLLATERAL

***An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.***

### Summary Narrative

BME CLEARING only accepts high quality, liquid, low credit and market risk collateral. BME CLEARING applies prudent acceptability and valuation criteria, limits the concentration of collateral, and ensures compliance with EMIR's Article 46. Any change in the collateral management policy must be properly assessed by the EMIR Risk Committee and approved by the CCP Board and the Competent Authority. Collateral management policy also ensure that collateral is properly valued, and that haircuts have been designed to cover the stress-test fluctuations and to minimise potential procyclical effects. The systems involved in the management of collateral and their implications on risk management are robust and supported by well-defined operational procedures and trained teams.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.**

#### **Limits set to assets accepted as collateral.**

**Q.5.1.1. How does the FMI determine whether a specific asset can be accepted as collateral, including collateral that will be accepted on an exceptional basis?**

The assets accepted as collateral by BME CLEARING to cover exposures of its members are highly liquid, with relatively low credit and market risks thanks to the haircuts applied to mitigate them, and complying with EMIR art. 46.

The following assets are eligible to be accepted as collateral by the CCP:

- Cash: BME CLEARING accepts cash collateral in Euros and transferred to BME CLEARING's Central Bank account.
- Fixed-income Securities: Government debt of euro area countries (Italy, Germany, France, Holland, Portugal and Austria) and from the UK and the US.
- Equities: Securities included in the main Stock Exchange Index composed of the 35 most liquid securities (IBEX-35).

#### **How frequently does the FMI adjust these determinations?**

Eligibility criteria are assessed at least once a year. Monthly meetings of the Executive Risk Committee will assess any new collateral or changes to the existing criteria for economic or business reasons, and implementation will in any case be subject to prior approval by BME CLEARING's Board of Directors and subsequent authorisation from the CNMV.

**How frequently does the FMI accept collateral on an exceptional basis, and does it place limits on its acceptance of such collateral?**

The eligibility criteria is clearly defined in BME CLEARING's rules and no exemptions are allowed.



**Q. 5.1.2. How does the FMI monitor the collateral that is posted so that the collateral meets the applicable acceptance criteria?**

BME CLEARING daily reviews the compliance of the posted collateral with the eligibility criteria as well as its adequate maintenance within the allowed concentration limits.

**Q.5.1.3. How does the FMI identify and mitigate possible specific wrong-way risk – for example, by limiting the collateral it accepts (including collateral concentration limits)?**

BME CLEARING establishes mechanisms to limit wrong-way risk as follows.

- For Sovereign Debt: limit by issuer when nationality is the same as the nationality of the clearing member set at half of the one applied when nationalities diverge.
- For equities: Clearing Members and Clients are not allowed to post their own shares or those of their groups as collateral, even if they were eligible.

**Key consideration 2: An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.**

### Valuation practices

**Q.5.2.1. How frequently does the FMI mark its collateral to market?**

BME CLEARING marks-to-market its collateral in near to real time, every 15 minutes with prices received from qualified vendors.

**Q.5.2.2. To what extent is the FMI authorised to exercise discretion in valuing assets when market prices do not represent their true value?**

BME CLEARING may modify its valuation practices for assets accepted as collateral under extraordinary circumstances and after consulting the CNMV.

If the asset has not been quoted in the last three business days, BME CLEARING doubles the valuation haircuts, and if they have not been quoted for five days, BME CLEARING may give the security a zero value and request additional collateral replacement.

### Haircutting practices

**Q.5.2.3. BME CLEARING internal policies define the collateral haircuts, which are calculated based on a 2-day close-out period for the liquidation of the collateral and using a lookback period of 10 years. Haircuts are also calibrated to cover wrong-way-risk, concentration risk, illiquidity risk and FX risk.**

Additionally, minimum haircuts are applied as follows:

#### For Fixed income securities

Minimum haircut equal to that of the ECB for each term and sovereign debt.

#### Equity securities

Minimum haircut of 25%.

To assess the adequacy of haircuts, BME CLEARING monitors on an ongoing basis the solvency of the collateral issuers.

**Q.5.2.4. How does the FMI test the sufficiency of haircuts and validate its haircut procedures, even with respect to the potential decline in the assets' value in stressed market conditions involving the settlement of collateral? How frequently does the FMI complete this test?**

Haircuts are calculated at Stress Test levels. Furthermore, BME CLEARING reviews the adequacy of the haircuts applied to all collateral through the Haircuts' Back Tests, which are carried out on a monthly basis.

In addition, annually or whenever extraordinary circumstances may warrant a change, the Executive Risk Committee fully validates all haircut related procedures.

**Key consideration 3: In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, as far as it is possible and prudent.**

**Procyclicality.**

**Q.5.3.1. How does the FMI identify and evaluate the potential procyclicality of its haircut calibrations? How does the FMI consider reducing the need for procyclical adjustments – for example, by incorporating periods of stressed market conditions during the calibration of haircuts?**

BME CLEARING haircuts criteria minimise potential procyclical effects. BME CLEARING avoids as far as possible disruptive or big step changes in haircuts that could introduce procyclicality as the haircuts remain sufficiently stable by basing them on stress test or higher levels.

**Key consideration 4: An FMI should avoid concentration of certain assets where this would significantly impair the ability to settle such assets quickly without significant adverse price effects.**

**Assets concentration.**

**Q.5.4.1. What are the FMI's policies for identifying and avoiding concentration of certain assets in order to limit potential adverse price effects at settlement?**

BME CLEARING policies are designed to ensure a proper and balanced distribution of collateral, with enough cash collateral and avoiding excessive exposures to particular issuers, securities and sovereign maturity tranches. The main objective is to cover potential liquidity risk in the market, which could hinder the sale of the assets within the related timeframes or hinder their sale at reasonable market prices.

**What factors (for example, adverse price effects or market conditions) are considered when determining these policies?**

These policies are designed basically to address two factors: 1) a potential "liquidity squeeze" in the market, which would hinder the sale of certain asset(s), even more so if the open position to be settled were large; and 2) a dramatic fall in asset prices, which in a potential sale of securities, could mean the cash raised was insufficient to meet the CCP's payment obligations.

**Q.5.4.2. How does the FMI review and evaluate concentration policies and practices to determine their adequacy? How frequently does the FMI review and evaluate these policies and practices?**

Large positions, i.e. concentration risk, of CCP's Members are daily reviewed to verify that they remain within the pre-established ranges. Concentration Limits are established for all eligible collateral.

These policies are reviewed by the Executive Risk Committee.

**Key consideration 5: An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.**

**Cross-border collateral.**

**Q.5.5.1. What are the legal, operational, market and other risks that the FMI faces by accepting cross-border collateral?**

The legal issues surrounding enforcement of the collateral are the main risk for cross-border collateral management. There is also currency market risk involving eligible UK and US sovereign debt.

**How does the FMI mitigate these risks?**

Mitigation of legal risk involving collateral execution is achieved by the request of legal opinions providing legal comfort on the execution legal support for securities posted as collateral in the ICSDs.

Foreign exchange market risks is mitigated by the application of increased haircuts to non-euro currency denominated assets.

**Q.5.5.2. How does the FMI ensure that cross-border collateral can be used in a timely manner?**

Legal opinions have been requested when collateral execution would need to be managed subject to foreign legislations. In addition, collateral posted in ICSDs is transferred to BME CLEARING's account under title transfer arrangements.

**Key consideration 6: An FMI should use a collateral management system that is well-designed and operationally flexible.**

**Collateral management system design.**

**Q.5.6.1. What are the primary features of the FMI's collateral management system?**

Robustness, and reliability. It is designed to clearly identify collateral posted by Clearing Members, complying with EMIR segregation requirements by differentiating client collateral from member's collateral, full identification of the collateral details, connection with vendors for intraday and end of day valuation, connection with the risk management systems as well as providing for concentration limits control features.

**Q.5.6.2. How and to what extent does the FMI track the reuse of collateral and its rights to the collateral provided?**

BME CLEARING does not reuse the non-cash collateral provided by its members.

**Operational flexibility**

**Q.5.6.3. How and to what extent does the FMI's collateral management system accommodate changes in the ongoing monitoring and management of collateral?**

The system is reviewed regularly by the IT and Business Operations department. Upgrades are made regularly to incorporate new functionalities that improve performance and efficiency and processes are automated, thereby mitigating operational risk.

**Q.5.6.4. To what extent is the collateral management system staffed to ensure smooth operations even during times of market stress?**

Collateral management tasks are integrated in the business-as-usual activities performed by the CCP's Operations team, which is well-designed and balanced. The whole team is trained to perform collateral management activities and controls.

**KEY CONCLUSIONS FOR PRINCIPLE**

BME CLEARING's collateral eligibility policy is based on rigorous criteria of maximum liquidity, and low credit and market risks. In addition, to address a potential situation of market stress, BME CLEARING's applies extremely conservative valuation haircuts, in turn limiting any potential procyclical effects. Collateral management activities are supported by a robust system and well trained staff.

**ASSESSMENT OF PRINCIPLE**

BME CLEARING is FULLY COMPLIANT with Principle 5 on Collateral without any type of limit or restriction.

## PRINCIPLE 6: MARGIN

***A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.***

### Summary narrative

BME CLEARING covers its credit exposures to all open accounts in its system with a robust and effective margin calculation methodology that uses conservative margin parameters, according to Article 41 of the EMIR Regulation, and efficiently measures the portfolio margining effect for the products it clears. Margin parameters are modified on a prudential basis only, particularly when brought down, to avoid pro-cyclical effects.

BME CLEARING daily requires to every Clearing Member to post an Initial Margin calculated at the margin account level, which covers both the current exposure of the position for instruments not daily settled and the potential future exposure.

BME CLEARING uses its own margin calculation system models that capture the risk characteristics of the products cleared. They evaluate overall portfolio risk by calculating the worst possible loss that a position may suffer by using various risk factors in different scenarios of risk, and furthermore allowing the offsets between different products that are sufficiently correlated within the same segment. The margin calculation methodology is fully documented in the corresponding Circulars.

In order to prevent Clearing Members from posing too much risk relative to their financial capacity, BME CLEARING addresses margins controls by placing limits on Clearing Members (Intra-day Risk Limit and the Margin Call Limit), and has sufficient authority and operational capacity to make and complete extraordinary intraday margin calls either individually from any Clearing Member, who breach any of these established limits, or generally from all Clearing Members, in cases which BME CLEARING considers to be of a high-risk.

The levels of margins established are monitored at the end of each business day. Risk factors fluctuations (closing prices, volatilities, zero rate curves) are analysed with respect to those of the previous business day.

Backtesting is conducted daily to monitor the adequacy of the margin parameters and the margin model relative to the expected coverage. To this end, a review is carried out to determine whether the losses sustained by each account with an open position over the appropriate close-out period have been covered by the initial margins required by BME CLEARING to the account.

The Executive Risk Committee reviews, at least once a month, the appropriateness of the parameters (variation in prices, volatilities, spreads and correlations) used to determine the level of margins with stability criteria. If a decision is made to modify margin parameters, a new circular shall be issued, which must also be approved by the Board of Directors. Under exceptional circumstances, or when the back tests results may deem it necessary, the Executive Risk Committee may decide to change the margin parameters immediately at the end of any business day.

The yearly internal and external review of BME CLEARING general risk framework includes its margin system and it is reflected in the Risk Report and in the annual Validation Report.

All Circulars regulating the margin system are available to the general public on BME CLEARING's website.

## QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS

**Key consideration 1: A CCP should have a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio, and market it serves.**

### Description of margin methodology

#### **Q.6.1.1. What is the general framework of the CCP's margin system, particularly with respect to current and potential future exposures?**

BME CLEARING daily requires Clearing Members, Non-Clearing Members and Clients having Margin Accounts at the CCP to post an Initial Margin (IM), i.e. a maintenance margin calculated at the margin account and segment level (clearing service). The margin covers both the current exposure of the position (for instruments not daily settled) and the potential future exposure:

- The current exposure is the result of marking to market the position, so generating a variation margin that is daily settled in the case of futures and interest rates OTC derivatives. For instruments not daily settled, such as options, Power energy swaps, repos and the Equity segment transactions, the variation margin is a component of the initial margin, which is settled only at expiration or when the position is closed out.
- Potential future exposure is calculated by applying the initial margin intervals to the open positions. This interval must cover the potential variation in the market value from the time the position was recorded to the estimated close-out of the position in the event of a default.

BME CLEARING calculates both end-of-day and intra-day margins for each margin account.

#### **If the CCP does not use a margining system, what risk management measures does it take to mitigate its risks? To what extent do these measures deliver equivalent outcomes?**

This question is not applicable.

#### **Q.6.1.2 Is the margin methodology documented?**

The margin calculation methodology is fully documented in BME CLEARING's website through the corresponding Circulars and Instructions.

#### **Q.6.1.3. To what extent is the detail of the CCP's margin methodology made available to participants for use in their individual risk management efforts?**

The CCP's margin methodology is set out in Circulars and Instructions, which are available to the general public on BME CLEARING's website. There is a summarized information regarding the Margining process on BME CLEARING's website as well:

<http://www.bmeclearing.es/ing/Risk/MarginingProcess/MarginingProcess.aspx>

## Credit exposures

### **Q.6.1.4. What are the determinants of the credit exposures of the CCP, with respect to the attributes of each product, portfolio and market it serves?**

BME CLEARING has adopted models and parameters in setting its margin requirements that capture the risk characteristics of the products cleared.

- As regards Equity Futures and Options, some of the criteria considered are the following: (1) price fluctuation based on underlying price fluctuations considering a minimum history of 1 year plus including stress test periods; (2) volatility fluctuation (it only affects options); (3) illiquidity risk; (4) spread risk; and (5) dividend and interest risk.
- For the xRolling FX contracts belonging to the Financial Derivatives segment, the determinants are: (1) Exchange rate risk; (2) Interest Rate Risk; (3) Translation risk; and (4) Sovereign risk.
- The determinants of credit exposures for the contracts belonging to the Equities segment are: (1) price fluctuations; (2) illiquidity risk; (3) jump to default risk (control of the solvency of all the issuers of the stocks registered on a real time basis).
- For the Fixed Income Securities the determinants are: (1) fluctuation of the interest rate in the relevant term of the curve; and (2) illiquidity risk.
- For Interest Rate OTC Derivatives (1) the Interest rate fluctuations for each relevant stretch of the curve; and (2) the illiquidity risk will be considered.
- Lastly, for Energy futures and swaps the determinants of credit exposures are: (1) fluctuations in energy prices (for both, electricity and natural gas contracts), characterized by rising volatility when approaching expiration; (2) seasonality and sharp changes; as well as (3) illiquidity risk and (4) delivery risk in the case of natural gas products.

Furthermore, inherent levels of spreads, concentration risk considered in a possible default scenario and positions that present a more complex portfolio to close-out are also considered.

### **Q.6.1.5. To what extent are the CCP's margin requirements commensurate with the risks and particular attributes of each product, portfolio and market it serves?**

BME CLEARING has tailored its margining system and margin parameters criteria to the individual features of each of the CCP segments, i.e. financial derivatives (including the xRolling FX products), equities, energy derivatives, fixed income securities and Interest Rate OTC Derivatives.

## Operational components

### **Q.6.1.6. How does the CCP address the risk of a participant payment failure that would cause a shortage of required margin to the participant's position?**

BME CLEARING places a limit on Clearing Members' intraday risk in order to prevent Clearing Members from posing too much risk relative to their financial capacity.

The Intraday Risk Limit (IRL) is the maximum that a Clearing Member may owe the CCP during a trading session. The Clearing Member's Solvency Limit (between 5% and 10% of its Equity, depending on the Member's solvency, and subject to a number of caps published in BME CLEARING's Intra-day Risk Limit Circular), plus Individual Funds and Extraordinary Margins delimits the IRL.

Intraday risk is calculated every five minutes for Positions in approximately 3,000 active accounts opened at the CCP. Intraday Risk includes concentration risk. If a Position in an underlying exceeds the Average Daily Volume, greater margin requirements are applied. Haircuts considered at the time of the valuation shall take into account real-time concentration risks.

Any change in a Clearing Member's solvency or Equity affecting its Solvency Limit shall be immediately recorded by the CCP's system. Solvency is monitored in real time. Capital shall be limited according to the market capitalization calculated daily.

#### **Q.6.1.7. How does the CCP enforce timelines for margin collections and payments?**

BME CLEARING operates in the CET (Central European Time) time zone.

BME CLEARING performs multilateral settlement in the TARGET2 platform at 9:00 CET (and 9:30 CET for the xRolling FX products) using a settlement procedure 4 (standard multilateral settlement). In this multilateral settlement, variation margin, PAI, deferral variation margin, premiums and cash margins are settled.

As for intra-day margin calls due to extraordinary price movements, Clearing Members have up to 30 minutes to post the required margins through a payment order or an appropriate direct debit order in accordance with the TARGET2 settlement procedure 3 (bilateral settlement).

#### **If the CCP has participants from different time zones, how does the CCP address issues posed by differences in local funding markets and operating hours of relevant payment and settlement systems?**

BME CLEARING's Members mostly operate in the CET and GMT Time zones. However, for the xRolling FX products, transactions can be registered during 23 hours a day and therefore 4 main different time zones are affected (Madrid time, London time, New York time and Tokyo time). However, BME CLEARING has established procedures to tackle this issue by being able to receive collateral, if needed, during the whole 23-hour timeframe. BME CLEARING has an open account at each of the following (I)CSDs to this end: IBERCLEAR, Euroclear Bank and Clearstream Banking Luxembourg.

**Key consideration 2: A CCP should have a reliable source of timely price data for its margin system. A CCP should also have procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.**

#### **Sources of price data**

##### **Q.6.2.1. What price data does the CCP use for its margin calculation model?**

None of the financial instruments in the segments currently cleared by the CCP displays any complexity or uncertainty as to price-setting. Depending on the instrument, the prices will be calculated either using daily closing prices provided directly from the Market, market spreads or underlying market prices. Expected dividends will be taken into account and there are several controls and methodologies to be used when market prices are not available.



For the Interest Rate OTC Derivatives segment as well as for the Natural Gas products prices are drawn from clearly identified and agreed market price sources (brokers) used by market participants. All market data relating to building the curves come from a renowned data provider and market data from a recognized broker.

**Q.6.2.2. How does the CCP determine that the price data it uses for its margin system is timely and reliable, including prices provided by a third party where relevant?**

Please, see the previous response.

### Estimation of prices

**Q.6.2.3. When prices are not readily available or reliable, how does the CCP estimate prices to calculate margin requirements?**

As mentioned in Q.6.2.1, when market prices are not available theoretical prices will be calculated according to standard pricing models which minimize risks of errors.

Financial Derivatives: when necessary, expected dividends are inferred. In some cases, an external company provides such dividend estimations. For Options, the Black-76, Black & Scholes and the Binomial valuation models are used. Volatility levels are extracted from the trades and market prices, extrapolating, from these volatilities, prices for illiquid series (certain strike prices or maturities).

Energy Derivatives: prices of the less liquid contracts are interpolated or extrapolated. To minimize the risk in the case of extrapolated prices of more distant maturities, calls are made to market participants requesting theoretical prices.

Equities: for less liquid assets a wider Bid/Ask on the latest price published by the platform is applied, penalized upwards and downwards using coefficients to correct for the lack of price quality.

For the Interest Rate OTC Derivatives Segment prices are obtained from agreed market price sources used by market participants.

**Q.6.2.4. How does the CCP validate models used to estimate prices or margin requirements when price data are not readily available or reliable?**

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. This is done on a reasonable cost basis.

BME CLEARING's database uses the following sources: Data from the trading platforms with which the Company interacts (MEFF EXCHANGE and AIAF-SENAF); data from the Spanish stock exchange trading platform (SIBE) for IBEX 35 shares and the rest of Equities; brokers' valuations for the energy segment; and another vendor for all other information on pricing, like non Spanish Sovereign Debt and yield curves for the Interest Rate OTC Derivatives segment.

At least on an annual basis there is a model validation of market prices and benchmark prices (mark-to-model) for a broad spectrum of financial products.

**How does the CCP ensure the independence of the validation process?**

BME CLEARING's price data source used has received a positive assessment from the three current external validating firms.

**Key consideration 3:** A CCP should adopt initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement must be met for the corresponding distributions of future exposure. The model should (a) use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the CCP (including in stressed market conditions), (b) have an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limit the need for destabilising, procyclical changes.

### Initial margin model

#### **Q.6.3.1. What is the design of the CCP's initial margin model?**

BME CLEARING's initial margin model is designed to have an internationally renowned and robust initial margin calculation system and conservative margin parameters.

Describe the model in detail, including the method used to determine potential future exposure.

BME CLEARING uses its own margin calculation models:

- MEFFCOM2 for Financial Derivatives (except for the xRolling FX products) and Power segments. It is similar to the "SPAN" model, considered to be an industry standard, and evaluates overall portfolio risk by calculating the worst possible loss that a position may occur in various price and volatility change scenarios (22 theoretical scenarios, which can be increased for large positions). It allows for intragroup offsets (Intra commodity spreads) for products within the same group (e.g. futures and options with the same underlying and several expiries) and intergroup offsets (Inter commodity spreads) for different product groups (margin classes) whose risk is sufficiently correlated.
- And extension of the MEFFCOM2 is used for the Equities and the Repo segments, adapted to several position balances and several settlement scenarios.
- A method based on historical scenarios that combine HVaR and Expected Shortfall models for both the Interest Rate OTC Derivatives segment and the xRolling FX products belonging to the Financial Derivatives segment. The maximum expected loss on a portfolio over a specific time horizon resulting from both models is chosen, assuming a certain confidence level.

It is fully documented in the Procedure for Margin Calculation Circular for each segment.

For Margin parameters, see Q.6.3.2 and Q.6.3.3.

## What is the level of coverage of the initial margin model?

### For Exchange-traded Derivatives and Equities:

BME CLEARING's existing model has been enhanced with the following criteria:

- Ensure a confidence interval always covering at least 99% of losses for each of the CCP's financial instruments. Time horizon for the calculation of historic volatility shall be at least one year, and include periods of stress (high volatility)

Notwithstanding the above, BME CLEARING may also apply an internal criteria:

- 99.9% confidence interval
- The highest volatility of (1) the implied volatility of options in the past 21 sessions, and (2) 21-day historical volatility is used, calculated on the last 63 business days, based on 3 criteria: change in closing price, high low range volatility (the Parkinson number) and high/low, open/close volatility (the Garman-Klass estimator).

Such criteria are intended to ensure that the margin requirement forestalls a short-term spike in volatility.

For the xRolling FX products included in the Financial Derivatives segment a confidence level of 99% is used, according to the Historical VAR methodology, which corresponds to the 25th worst case scenario for 10 years of historical data (lookback period used).

### For Fixed Income Securities:

BME CLEARING uses a confidence interval always covering at least 99.9% of losses while using a time horizon of the last 10 years for the calculation of historic volatility, which undoubtedly includes periods of stress. Again, the short-term historical volatility (21-day) may also be used, only to increase the Initial Margin intervals, if necessary.

### For the Energy derivatives:

BME CLEARING will apply the following criteria, depending on the products cleared within this segment:

- For Electricity contracts, a confidence interval of 99% will be used, and eventually increased by the margin required by Article 28 of the Delegated Regulation (EU) 153/2013 (a 25% buffer). The time horizon for the calculation of the historic volatility is at least 1 year (provided that it includes a stress test period).
- For Natural Gas contracts, a confidence interval of 99.5% is used (also increased by the above 25% buffer to avoid pro-cyclical effects) and for the same historical lookback period likewise the electricity contracts. Additionally, a 5-day close-out period is used for Natural Gas contracts (whilst 2 days are used for electricity contracts).

### For Interest Rate OTC Derivatives:

BME CLEARING applies a minimum confidence interval of 99.5% in a 10-year HVAR scenario method; this corresponds to the 12th worst scenario. In addition, BME CLEARING also applies an additional historical scenarios method, known as Expected Shortfall. This is only effective if it implies that a higher margin is required than above. In this model, the margin is determined as the average of the 6 worst scenarios, equating to a confidence interval exceeding 99.75%.

#### Q.6.3.2. What are the assumptions of the margin model?

- Portfolio risk must be measured at portfolio level.
- Non-correlated instruments cannot be offset.
- Some manner of offset should be allowed for instruments that are correlated, subject to the requirements of prudence.
- Any potential future variation in prices and all potential future variation in volatility for options should be estimated.
- Conservative margin parameters should be used.
- The worst result obtained is considered to be the estimate of exposure.

#### Q.6.3.3. How does the CCP estimate the key parameters and inputs of the margin model (such as the closeout period and the confidence interval)?

Confidence interval: established according to EMIR Article 41 requirements.

Close-out period: BME CLEARING considers that it uses a conservative closeout period for positions, which allows for smooth closeout without any major impact on prices, and according to EMIR Article 41:

- Two days for financial derivatives (including xRolling FX products), equities, fixed-income securities and electricity contracts belonging to the Energy segment.
- At least 5 days for the natural gas contracts belonging to the energy segment and 5 days for interest rate OTC derivatives proprietary position (7 days for client positions)

To prevent risk of concentration and liquidity, when the size of a position is greater than the average daily trading volume of an underlying, considering the last 63 business days, this is deemed an additional exposure and therefore, further margins are required.

#### Closeout and sample periods

#### Q.6.3.4. How does the CCP determine an appropriate closeout period for each product?

Please, see answer to Q.6.3.3.

**In particular, how does the CCP account for potentially increased settlement periods during stressed market conditions? What factors are considered in this analysis (for example, market liquidity, impact of a participant's default on prevailing market conditions, adverse effects of position concentration, and the CCP's hedging capability)?**

The liquidation strategy of BME CLEARING contemplates the use of derivatives for hedging in a default case. Therefore, such strategy allows the CCP to mitigate the impact of a default when liquidating positions, achieving the liquidation period goal of "n" days, according to that established in question Q.6.3.3 above.

Less market liquidity or greater spreads would be covered by the illiquidity add-ons applied by the CCP when calculating margin intervals for each product as well as the requirement of higher margins in the case of concentrated positions (large positions).

BME CLEARING considers the same liquidation period when calculating IM parameters or Stress Test parameters. For Clearing Members who have accounts with a large position in one or more underlyings, stress test risk is now increased in the same ratio as the initial margin. Therefore, in case there's a large position in one underlying, the increase of days in the liquidation period will be the same for both measures of risk, being acceptable to use the same ratio "initial margin after concentration add-on / initial margin before concentration add-on". For concentration risk purposes, to those Clearing Members belonging to the same company group, all the client accounts of the subsidiary company are incorporated.

For the xRolling FX contracts belonging to the Financial Derivatives segment the Concentration Risk Adjustment at a Clearing Member level is calculated as the difference between the Adjustment for position size at a Clearing Member level and the sum of the Adjustments for position size applied to each Clearing Member's account and Non-Clearing Member's account at the end of date. The obtained value is multiplied by the ratio between (1) the worst stress test scenario (historical or hypothetical) and (2) the sum of IM base of each Clearing Member's account at the end of date.

#### Equities segment:

For each account of the Clearing Member and for each security or ISIN and position block, the buy and sell positions are separated. Then, all buy (and sell) positions are aggregated for each ISIN at the Clearing Member level. At this point the threshold will apply in order to see if there is any concentrated position for a specific ISIN at such level. The Stress Test risk for the Clearing Member in the ISIN affected will be increased by the corresponding %.

#### IRS Segment:

If position in each representative bucket exceeds the maximum notional amount in the market per bucket, an adjustment for position size is applied.

#### **Q.6.3.5. How does the CCP determine an appropriate sample period for historical data used in the margin model?**

BME CLEARING calculates historic volatility based, at least, on a twelve-month lookback period. BME CLEARING currently uses indeed a lookback period of more than 1 year (since June 2016, the 'Brexit referendum' period) as the basis for the financial derivatives margin calculations, which therefore includes a stressed period, according to Article 25 of Delegated Regulation (EU) 153/2013. The same historical sample is used for the Equities segment. BME CLEARING additionally uses a time horizon of the last 63 days, as parameter of an additional criterion, used only to increase initial margin requirements. It could lead to highest results than the current historical time horizon if there's a sharp increase in volatility in the last days of the history length.

For the xRolling FX contracts belonging to the Financial Derivatives segment, the Fixed Income Securities segment and the Interest Rate OTC Derivatives, the time horizon is at least always to the last 10 years, or more than the last 10 years, if needed.

For the Energy derivatives (both electricity and natural gas contracts), a minimum of a twelve-month lookback is used, currently starting the historical data on January 2017, thus also considering a stress test period.

BME CLEARING ensures that the data used for calculating historical volatility capture a full range of market conditions, including periods of stress.

According to EMIR and its supplementing regulations, BME CLEARING ensures that the data used for calculating historical volatility capture a full range of market conditions, including periods of stress.

Therefore, "Periods of stress" have been defined as those periods in which maximum volatility exceeds 50% of the average volatility for the period, or in which the implied volatility increases by more than 50% over 1 or 2 days.

**What factors are considered (for example, reflection of new, current or past volatilities, or use of simulated data for new products without much history)?**

Current and past volatilities are considered.

Financial instruments without a historical observation period are based on conservative assumptions. BME CLEARING would apply a margin buffer at least equal to 25% of the calculated margins.

**Q.6.3.6. How does the CCP consider the trade-off between prompt liquidation and adverse price effects?**

Please, refer to Q.6.3.3.

**Procyclicality and specific wrong-way risk**

**Q.6.3.7. How does the CCP address procyclicality in the margin methodology? In particular, does the CCP adopt margin requirements that, to the extent practical and prudent, limit the need for destabilising procyclical changes?**

BME CLEARING has a system that establishes stable margin parameters, addressing reasonable and prudent procyclicality.

Margins are modified on a prudential basis only, particularly when brought down, to avoid pro-cyclical effects. If the review results in a proposal to a reduction in the margin, this proposal must pass at least two consecutive monthly reviews before it can be applied. By contrast, if the review advises raising the margin parameter because it produced a significant outcome, this margin parameter is increased.

Regarding the procedures for adjusting margin requirements in response to changing market conditions, BME CLEARING will use the following criteria:

- a) Apply a margin buffer at least equal to 25% of the calculated margins which it allows to be temporarily exhausted in periods when calculated margin requirements are rising significantly;
- b) Ensure that its margin requirements are not lower than those that would be calculated using volatility estimated over a 10 year historical lookback period.

BME CLEARING uses criterion (b) for the Fixed Income Securities and the Interest Rate OTC Derivatives segments as well as for the xRolling FX contracts. In the other segments, BME CLEARING uses:

- Criterion (a) when the financial instrument has a history of less than 10 years.
- The average of criteria (a) and (b) if 10 years or more of reliable historical data are available.

**Q.6.3.8. How does the CCP identify and mitigate specific wrong-way risk?**

The CCP does not accept securities issued by the holder of the secured obligation as collateral, nor does it accept securities issued by its Clearing Members, non-Clearing Members or clients. It limits concentration in the rest of underlyings by capping the number of shares posted as collateral by a client or member for its Proprietary Account to 100% of the Average Daily Trading Volume. This limit will also apply at a Clearing Member level.

BME CLEARING has also included in its Stress Tests' scenarios the effect of the default of a Clearing Member that issues cleared securities by including a downward price scenario where the underlying issued by the defaulting Clearing Member falls by a 50%.

There is also a specific analysis for the Fixed Income segment in relation to the sovereign debt risk premium. BME CLEARING runs a specific wrong-way risk calculation for the repo segment, on a monthly basis.

**Key consideration 4: A CCP should mark participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.**

**Q.6.4.1. What is the design of the CCP's variation margin model? Describe the model in detail, including the method used to measure current exposure, frequency of mark-to-market and schedule of margin collection, and intraday margin call capabilities.**

The current exposure is the result of marking to market the positions. For instruments not daily settled, the variation margin is a component of the initial margin, settled only at expiration or when the position is closed out. The Variation Margin is collected on a daily basis.

BME CLEARING calculates intraday risk almost in real time – every 5 minutes. In that calculation the CCP updates margins based on the open positions, prices and risk parameters then prevailing. If the margin calculated by BME CLEARING increases in relation to the posted collateral, the CCP may call an intraday additional margin; if the margin decreases, the CCP will not return any collateral until the next day through BME CLEARING's Multilateral Settlement on the TARGET2-Banco de España platform at 9 am (or 9:30 am for xRolling FX products).

The mark-to-market of the settlements is performed at the end of the market session. BME CLEARING carries out an Intra-day Risk Limit (IRL) monitoring. To control this limit, the margin on the position (IM) and the mark-to-market adjustments (VM) are calculated in real time. Please see answer to Q.6.1.6 for further information.

**Q.6.4.2. Does the CCP have the authority and operational capacity to make and complete intraday margin calls for initial and variation margin?**

BME CLEARING has sufficient authority and operational capacity to make and complete intraday margin calls.

Moreover, BME CLEARING has sufficient authority and operational capacity to make and complete extraordinary intraday margin calls either individually from a Clearing Member who breaches any of the established limits criteria or generally from all Clearing Members, in cases which BME CLEARING considers to be high-risk. The purpose is to enable BME CLEARING to recover a sufficient margin level in situation of extreme volatility.

Furthermore, and only for the Interest Rates OTC Derivatives segment, BME CLEARING makes two Intraday Variation Margin Calls in each session (12:00 and 15:00 hours, Central European Time) This Intraday Variation Margin Call will be posted in accordance with the provisions of the Posting of Margins Circular. With the end-of-day settlements, BME CLEARING will return the Intraday Variation Margin called and request the amount of Variation Margin calculated at session end, which must be posted in the aforesaid multilateral settlements.



**Key consideration 5:** In calculating margin requirements, a CCP may allow offsets or reductions in required margins across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorised to offer cross-margining, they must have appropriate safeguards and harmonised overall risk-management systems.

## Portfolio margining

### **Q.6.5.1. Does the CCP allow offsets or reductions in required margins across products that it clears or between products that it or another CCP clear?**

BME CLEARING allows offsets in required margins across products that are sufficiently correlated and within the same segment.

#### **If so, is the risk of one product significantly and reliably correlated with the risk of the other product?**

BME CLEARING only allows offsets when it has verified that two products are sufficiently correlated (average correlation equal to or greater than 70%).

BME CLEARING only considers combinations of underlyings which correlation is stable in times of stress test. Therefore, on a daily basis BME CLEARING proves resilience against stressed periods where margin portfolio has to cover the risk of fluctuation from all scenarios up to the last 10 years (period that includes stressed scenarios). Margin credit percentage will be reduced, if necessary, in order to assure that. If a lack of coverage is detected, in case prices move in opposite direction, being both movements extreme fluctuations, offsetting won't be allowed.

Additionally to quantitative criteria, BME CLEARING uses a qualitative criteria based on economic rationale before offsetting different products. An economic justification for correlation exists: (1) for equity derivatives the offsettable underlyings belong to the same economy and to the same country index; (2) for fixed income products, currently there's only a single issuer, the Kingdom of Spain but as soon as new European sovereign debts are cleared within the Fixed Income Securities segment, BME CLEARING shall be able to offset, when applicable, different ISINs belonging to the same or different countries.

#### **How does the CCP offset or reduce required margins?**

BME CLEARING only allows offset between financial instruments carrying similar risks and within the same segment, on a bilateral basis. Margin credit will be the 1% percentile of the correlation series.

For the OTC Interest rates Derivatives segment as well as for the xRolling FX contracts, BME CLEARING does not use any explicit correlation parameter or statistical dependency parameter between different pairs of tenors, curves or fx rates, respectively, since historical deviations between 2 different EURIBOR curves or tenors (or fx rates for the xRolling FX products) are incorporated directly in the BME CLEARING's model for each case. Therefore, there aren't explicit correlation parameters, but implied correlations based on the historical data considered.

### **Q.6.5.2. How does the CCP identify and measure its potential future exposure at the product and portfolio level?**

The margin per each product is reduced by a margin credit percentage, between 15% and 70% (percentage applied is a function of correlation), to obtain portfolio margin.



For the xRolling FX products BME CLEARING applies a floor in its model of up to 80%, in order to limit margin offsets and according to Article 27.4 of Delegated Regulation (EU) 153/2013. The minimum initial margin of the portfolio shall be 20% of the sum of the initial margin for each currency pair, excluding the existence of any arbitrage strategy between currency pair positions in the portfolio analyzed.

**How does the CCP's portfolio margining methodology account for offsets or reductions in required margin across products that it clears?**

Please, refer to Q.6.5.1.

### Cross-margining

**Q.6.5.3. In the case of cross-margining between two or more CCPs, how have the CCPs harmonised their approaches to risk management? What legal and operational arrangements govern the cross-margining arrangements?**

BME CLEARING does not have any cross-margining arrangements with other CCPs at present.

### Robustness of methodologies

**Q.6.5.4. How does the CCP confirm the robustness of its portfolio and cross-margining methodologies?**

As stated in Q.6.5.1, BME CLEARING only considers margin credits for combinations of underlyings which correlation is stable in times of stress test.

BME CLEARING has also outsourced a service with external companies whereby the latter perform its own risk analysis, using its own parameters and methods and the positions registered in BME CLEARING's books, in order to cross-check many of the margin calculations made by the CCP. The results are compared with those obtained by BME CLEARING, concluding that the results of BME CLEARING's risk analysis are in line to those obtained by these companies.

**How does the CCP's methodology account for the degree of price dependency, and its stability in stressed market conditions?**

Please, refer to Q.6.5.1.

**Key consideration 6:** A CCP should analyse and monitor its model performance and overall margin coverage by conducting rigorous daily backtesting – and at least monthly, and more-frequent where appropriate, sensitivity analysis. A CCP should regularly conduct an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, a CCP should take into account a wide range of parameters and assumptions that reflect possible market conditions, including the most volatile periods that have been experienced by the markets it serves and extreme variations in the correlations between prices.

## Backtesting and sensitivity analysis

### **Q.6.6.1. Describe in detail the backtesting methodologies and model performance, including both target confidence level and the result of overall margin coverage.**

Backtesting is conducted daily to monitor the adequacy of the margin parameters and the margin model relative to the expected coverage. This review is carried out to determine whether the losses sustained by each margin account with an open position over the appropriate close-out period have been covered by the Initial Margin required to the margin account.

BME CLEARING has a target confidence level of its backtesting of over 99%.

The methodology followed for the Back Test calculations is as follows:

Given “t” days as a close-out period, which may differ for each segment (or product), the algorithm compares the initial margin required at “D” for each margin account against the change in value of the position between D and D+1, D+2, ... D+n, considering that the open position is the one recorded at the end of D.

The worst result obtained is then compared to the initial margin required and the net difference amount is calculated.

### **How does such testing address portfolio effects within and across asset classes within the CCP and cross-margining programmes with other CCPs?**

Backtesting is conducted on an account-by-account basis, including the overall portfolio of a participant within a specific segment. Therefore, the potential losses, which are the target of the study, are analysed as the total loss of the portfolio, and compared to the required margins for that margin account during a specific business day; as indicated, the required margins are calculated at portfolio level. The calculation is done by product or underlying in order to know where the resulting loss is concentrated, being finally aggregated at the margin account level.

BME CLEARING does not have any cross-margining arrangements with other CCPs at present.

### **How frequently is the backtesting conducted?**

Backtesting is conducted daily.

### **Q.6.6.2. Describe in detail the sensitivity analysis of model performance and overall coverage of the CCP's initial margin methodology.**

The CCP performs sensitivity analysis on all actual portfolios and also selects the most representative portfolios, deemed those most exposed to changes in the risk factors modelled.

BME CLEARING identifies in each of the segments the two Clearing Members that would sustain the biggest losses under each of the scenarios contemplated.

The idea is (1) to observe the standalone impact of adverse price movements (interest rates in the case of the Fixed Income Securities segment or IRS segment; FX rates for the xRolling FX products), volatility and correlation and, lastly, a combination thereof; and (2) change all the IM parameters (generalised sensitivity test), increasing the confidence interval up to stress test levels or higher, reaching non plausible market conditions.

Additionally, a simultaneous default of a Clearing Member and its securities cleared is tested: The portfolios most affected by different scenarios where a Financial Institution (also being a Clearing Member of the CCP) defaults and its underlying security has a downward price fluctuation of 100%.

Sensitivity analysis calculations are made at the account level.

The risk of a Clearing Member is the sum of the risk of its proprietary account(s) plus the risk on its clients' accounts plus the risk of its Non-clearing Members, to the extent the former is a General Clearing Member.

A risk per Clearing Member is calculated for each of the scenarios derived from the sensitivity analysis performed. The highest-risk scenario determines the Potential Losses of the Clearing Member in that specific Segment.

#### **How frequently is the analysis conducted?**

Once a month the CCP quantifies the impact on its models of abrupt changes in the risk factors using historical and hypothetical stress test scenarios in order to analyse the coverage afforded by the margin model.

### **Margin model performance**

#### **Q.6.6.3. What are the identified potential shortcomings of the margin model based on backtesting and sensitivity analysis?**

No shortcomings have been identified.

#### **Q.6.6.4. What actions would the CCP take if the model did not perform as expected?**

Given that the results of these tests are largely based on hypothetical scenarios that have not occurred as such in the past, any decision to propose the modification of the parameters or models or to require any extraordinary margins must be exhaustively pre-justified by the CCP's Executive Risk Committee and eventually presented to the CCP's Board for approval before reporting the changes to the CNMV.

#### **Q.6.6.5. How does the CCP disclose the results of its backtesting and sensitivity analysis?**

Back testing results are daily disclosed through end-of-day data files to each Clearing Member of the CCP, with the information broken down by account holder. The global percentage of ratio coverage for each segment is disclosed to the CCP's Board of Directors on a monthly basis and to the EMIR Risk Committee on a quarterly basis.

Sensitivity Analysis is reported to both the Executive Risk Committee and the CCP's Board of Directors on a monthly basis. Results are sent to the EMIR Risk Committee on a quarterly basis.

### **Key consideration 7: A CCP should regularly review and validate its margin system.**

#### **Q.6.7.1. How does the CCP regularly review and validate its margin system including its theoretical and empirical properties? How frequently is this done?**

The review of the margin model is included in the risk management framework, and therefore, it is done by the Executive Risk Committee at least on a monthly basis.

BME CLEARING conducts an annual global review of its general risk system, including its margin models and methodologies. The objective of the review is to carry out a methodical and global examination of its entire risk system, in order to comprehensively verify that the system works as it should and to identify where room for improvement exists.

External companies have also been designated to cross-check, at least annually, this risk global review.

**Q.6.7.2. How does the CCP incorporate material revisions and adjustments of the margin methodology, including parameters, into its good governance arrangements?**

Revisions and adjustments of the margin methodology follow the procedures of the risk management framework: they are discussed by the Executive Risk Committee, the EMIR Risk Committee and, in some instances, BME CLEARING's Management Committee. Changes are submitted for approval to BME CLEARING's Board and the CNMV is always informed. Please refer to Principle 2 for more in-depth information.

Regarding the margin parameters, the Executive Risk Committee reviews, at least once a month, the appropriateness of the parameters (variation in prices, interest rates, volatilities, spreads and correlations) used to determine the amounts of margins in keeping with stability criteria. If a decision is made to modify margin parameters, a new margin parameters circular must be issued, which must also be approved by the Board of Directors.

The Executive Risk Committee may decide to change exceptionally the margin parameters immediately at the end of any business day, if it deems it necessary after corporate shocks or a significant event, based on the quantitative data provided through backtesting and/or through daily monitoring of the adequacy of the margin parameters.

**Q.6.7.3. How and to whom does the CCP disclose both the method and the results of this review and validation?**

Please refer to Q.6.6.5 and Q.6.7.2.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING has a calculation algorithm and margin parameters that establish margins that are conservative and proportional to the risks and attributes of the segments and the products it clears. BME CLEARING obtains the price data needed for its margin system from reliable and timely sources, and it has procedures and sound valuation models for addressing unlikely circumstances in which price data are not readily available or not reliable.

Margin parameters target an established single-tailed confidence level of at least 99 percent. Margin analysis is conducted at portfolio level, on an account-by-account basis in the CCP. BME CLEARING only offsets products (in terms of margins required) within the same segment and only when a sufficient correlation between those products exists.

Risk analysis is carried out on a daily basis, with the obligation to collect variation margins at 9:00 CET (or 9:30 CET for xRolling FX products) every day, together with the obligation to also update the initial margins on a daily basis. At the same time, BME CLEARING has also set risk limits that are applied either intraday or at the end of the market session, in order to cover the overnight risk and to assess a stress situation for the following business day, respectively.

BME CLEARING analyses the performance of its margin models on a daily basis through the back tests. BME CLEARING also performs a sensitivity analysis and it regularly reviews its overall risk system.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 6 on Margins without any type of limit or restriction.

## PRINCIPLE 7 LIQUIDITY RISK

***An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.***

### Summary Narrative

The main sources of liquidity risk at BME CLEARING are 1) problems during Multilateral Settlement, 2) delays caused by enforcing the margins of a Defaulting Member under the worst market scenario (stress test), 3) Equities and Repo segments settlements, and 4) Default of the two major Clearing Members.

Liquidity needs are reviewed on a daily basis, not just for a normal scenario on D+1 at 9 am but also considering the default of the two Members posing the greatest risk under stressed conditions or the two with the largest liquidity shortfalls.

The main liquid resources available to BME CLEARING comprise the balance of the cash collateral posted by Members to cover their obligations with the CCP. Additionally, the following liquid resources are immediately available as well:

- 1) a part of its Capital posted in BME CLEARING's Guarantee Fund Account at Banco de España-TARGET2;
- 2) a part of the remaining BME CLEARING's Capital, which may be invested in overnight buy sell back transactions;

All these liquidity sources are reviewed on a daily basis and the CCP has real time alerts which advise of any changes which might pose a risk to meeting liquidity needs. Furthermore, the CCP checks at the aggregate level, both on an intraday basis and at the end of the session, that according to BME CLEARING's Cash Collateral in BME CLEARING General Circular, at least 30% of all margins required is posted in cash. If such circumstance is not met at an aggregate level, each Clearing Member who does not meet it will have the obligation to do it. Secondly, the same Circular also establishes a minimum cash amount per Clearing Member, so that the total amount of Default Fund contributions required by BME CLEARING to each Clearing Member, in all segments, must be posted in cash (in Euro).

Additionally, the CCP has access to the ECB intraday facility.

BME CLEARING does not have any agreements with liquidity providers although it has a relationship with Entities, Members of the CCP, with whom it may carry out daily investments (at least 4 different Entities, for diversification purposes, when possible). The CCP shall be able to use these four Entities to sell bonds and repos in order to obtain liquidity.

On a daily basis, BME CLEARING accomplishes a Liquidity Stress Test. This calculation is intended to cover the default of the two Clearing Members which may cause the highest potential liquidity shortfall under stress test circumstances and based on the daily stress test risk calculations carried out by the CCP. Further, on a quarterly basis, BME CLEARING performs reverse stress tests, which are designed to pinpoint the market conditions, which need not necessarily be plausible, in which the CCP's liquid financial resources may be insufficient.

## QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS

**Key consideration 1: An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.**

### **Q.7.1.1. What is the FMI's framework for managing its liquidity risks, in all relevant currencies, from its participants, settlement banks, nostro agents, custodian banks, liquidity providers and other entities?**

According to EMIR Article 44, the CCP's has procedures in place to manage liquidity risk and ensure it is able to meet payment obligations under normal and exceptional circumstances. These procedures are detailed in BME CLEARING's Liquidity Plan.

BME CLEARING is only exposed to liquidity risk in Euros, as it does not make settlements and payments in any other currency.

Liquidity risk is managed through BME CLEARING's accounts opened at the TARGET2-Banco de España system.

BME CLEARING avails of the following Liquid Resources:

- Cash collateral posted by all Clearing Members, CCP main funding mechanism (in aggregate terms, at least 30% of BME CLEARING margins required must be posted in cash and moreover Clearing Member's default fund contributions must also be posted in cash);
- A part of its Capital posted in BME CLEARING's Guarantee Fund Account at Banco de España-TARGET2;
- The rest of its Capital invested in buy sell back transactions with counterparties with a solvency level between levels S1 and S6, according to the Calculation of Shareholder's Equity and Solvency Circular;
- In the case of a default, the bonds posted as collateral by the defaulting Clearing Member by means of a transfer of title, may be converted into cash by entering into a repo transaction with a different counterparty.
- Access to intraday financing from the Banco de España-TARGET 2 (more remote would be access to overnight funding that would only be applicable to an extreme case and pursuant to express authorization from the European Central Bank's Governance Council).
- BME CLEARING always has sufficient liquid resources as the majority of posted collateral is in cash.

### **Q.7.1.2. What are the nature and size of the FMI's liquidity needs, and the associated sources of liquidity risks, that arise in the FMI in all relevant currencies?**

**Liquidity needs may arise as follows:**

- Problems during Multilateral Settlement: Any delay caused by a Member could also directly expose other participants to liquidity risk if any balance is retained and cannot be released during BME CLEARING's Multilateral Settlement at 09:00 hours (or 9:30 hours for xRolling FX products). This problem in Multilateral Settlements can also have two knock-on effects described below
- A delay caused by a Clearing Member who has a negative Variation Margin and/or pays option premiums. In this instance, the counterparties of the balance of this defaulting Clearing Member are Clearing Members who have a positive Variation Margin and/or collect premiums.

- A delay caused by a Clearing Member required to provide an Initial Margin. In this case, the Multilateral Settlement may be made by reducing the debit balance of the defaulting Clearing Member and the credit balance of the BME CLEARING account. The CCP will face a default, but not a liquidity shortfall.
- Delays caused by enforcing the margins of a Defaulting Member under the worst market scenario (stress test): When unwinding the position of a Defaulting Member and enforcing their margins under the worst case scenario considered in stress test conditions, liquidity risk would increase if a large percentage of the margins of the said Member were posted as securities. However, BME CLEARING's exposure to liquidity risk in such circumstances is low, given that at present most of margins required are posted in cash.
- Liquidity needs related to the Equity and Repo segments settlement processes:
  - During the Night Time T2S settlement cycle, no liquidity needs stem as credits and debits take place at the same time. Only small differences, positive or negative, on the cash amount settled between the buy and sell sides may arise.
  - During the Real time T2S settlement period, and in order to make the settlement process more efficient, BME CLEARING uses its own liquidity resources to previously pay for the securities that will deliver afterwards. This gap between receiving and delivering securities and cash takes only a few seconds. This use of liquidity is optional, since in its absence, T2S technical netting would work, with no CCP liquidity resources being used.
  - A liquidity need may arise, also temporarily, when BME CLEARING, pays for some securities but cannot deliver them immediately as there is a liquidity shortfall on the receiving settlement firm during the settlement process. This shortfall is not associated with a default but rather with technical issues.
- Default of the major two Clearing Members:

For the equity segment, the default of the two major Clearing Members would cause the biggest liquidity need, since the CCP would have to settle all its buy open positions in order to unwind them. These liquidity needs are daily evaluated into the Liquidity Plan.

#### **Q.5.1.3. How does the FMI take into account the potential aggregate liquidity risk presented by an individual entity and its affiliates that may play multiples roles with respect to the FMI?**

BME CLEARING calculates liquidity risk at a Clearing Member, Company Group, and Payment Agent level.

**Key consideration 2: An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.**

#### **Q.7.2.1. What operational and analytical tools does the FMI have to identify, measure and monitor settlement and funding flows?**

An operational tool, the CCP's risk management module, LIMITES, gives the most updated intraday estimate of liquidity needs for the next Multilateral Settlement at TARGET2, 9:00 am the next business day (or 9:30 am for the xRolling FX products).

On an intraday basis the BME CLEARING's Collateral Management System (SGG) monitors the status of the collateral posted and consults in real time the amount of cash collateral posted and, if these are invested, how and with which depositary.



For the equity and Repo segments, at the end of day, BME CLEARING calculates liquidity needs once D+1 settlement instructions have been calculated.

**Q.7.2.2. How does the FMI use those tools to identify, measure and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity?**

LIMITES risk management tool calculates on a real time basis Variation Margin and Premiums for the next Multilateral Settlement at TARGET2, in order to calculate liquidity needs if a Clearing Member cannot meet its payments.

At the end of the day the CCP's system calculates:

- The definitive Variation Margin and Premiums amounts for the next Multilateral Settlement.
- The risk assuming scenarios where a stress situation occurs on D+1. BME CLEARING performs daily estimates of the potential liquidity needs in the event of a default by the two Clearing Members to which it has the largest exposures under stressed conditions.
- Liquidity needs in D+1 for the Equities and Repo segments for the open positions settlements.

BME CLEARING calculates the risk for each Clearing Member (taking into account its affiliates) and compares it with its liquid resources, both in real time and at the end of the day.

The CCP's Equity and the cash collateral are not invested until the Multilateral Settlement has been carried out in the Banco de España-TARGET2 system. When settlement confirmation has been received, part of the CCP's liquidity resources is still not invested in order to cover Equities and Repo segments liquidity needs.

Should there be a lack of liquid resources, normally due to there being a significant weight of shares posted as collateral, depending on the amount of the shortfall, the CCP may ask the Member(s) involved to restructure the collateral provided to reduce the weight of the shares and put up more liquid collateral, i.e. cash or sovereign debt (the latter posted by means of a transfer of title), to remedy this shortfall.

**Key consideration 4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.**

**Sufficient liquid resources**



**Q.7.4.1. How does the CCP determine the amount of liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments and meet other payment obligations on time?**

BME CLEARING:

- Does not carry out settlements in other currencies. Only operates with the Euro using cash accounts in the TARGET2-Banco de España.
- Does not have an extremely complex risk profile and is not systemically important in multiple jurisdictions.
- For liquidity needs calculation see answer to Q.7.2.2.

**What potential stress scenarios (including, but not limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions) does the CCP use to make this determination?**

In compliance with Article 44 of EMIR, BME CLEARING performs daily estimates of potential liquidity requirements in the event of a default by the two Clearing Members (including any firm in the same business group as the Clearing Member) posing the greatest exposure in stress test conditions, based on two criteria: (1) the two clearing members with the largest stress test amounts and (2) the two clearing members with the largest liquidity shortfall (these might not be the same as the previous two).

**Q.7.4.2. What is the estimated size of the liquidity shortfall in each currency that would need to be covered, following the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions?**

Initial Liquidity shortfall calculation is intended to cover the liquidity of the two Clearing Members which may cause the highest liquidity shortfall under stress test circumstances:

Initial liquidity shortfall = Max (Expected debit in the worst-case scenario for the Clearing Member in all segments + Liquidity Needs due to the Equity and Repo segments settlements – Collateral posted in cash (€) by the Clearing Member; 0)

**How frequently does the CCP estimate this?**

Daily.

**Risk profile and systemic importance in multiple jurisdictions**

**Q.7.4.3 Do any of the CCP's activities have a more complex risk profile (such as clearing financial instruments that are characterised by discrete jump-to-default price changes or that are highly correlated with potential participant defaults)?**

No. In general, BME CLEARING's risk profile is not excessively complex.

**Is the CCP systemically important in multiple jurisdictions?**

No. BME CLEARING is not systemically important in multiple jurisdictions.

**Q.7.4.4. If the CCP is involved in activities with a more complex risk profile or is systemically important in multiple jurisdictions, has the CCP considered maintaining additional resources sufficient to cover a wider range of stress scenarios that would include the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions?**

See answer to Q.7.4.3.

**Key consideration 5:** For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable margin held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has margin that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.

#### Size and composition of qualifying liquid resources

**Q.7.5.1. What is the size and composition of the FMI's qualifying liquid resources in each currency that is held by the FMI?**

BME CLEARING will disclose information regarding size and composition of its margins only under a Clearing Member's petition. Such information is not publicly disclosed otherwise. Additionally, BME CLEARING Chief Risk Officer sends to the EMIR Risk Committee a Quarterly Liquidity Risk Report.

**In what manner and within what time frame can these liquid resources be made available to the FMI?**

Cash margins are immediately available for the CCP. According to Article 30.1 of the CCP Rule Book should it be required for position settlements, for the execution of collateral posted in securities or for any other activity linked to BME CLEARING's liquidity needs in its performance as CCP, BME CLEARING shall be entitled to temporarily use the Collateral posted for margins, both cash and securities posted by way of transfer of ownership or the assets resulting from the investment of this collateral.

#### Availability and coverage of qualifying liquid resources

**Q.7.5.2. What prearranged funding arrangements has the FMI established to convert its readily available collateral and investments into cash?**

Cash margins are immediately available for the CCP, as mentioned on the previous answer. Moreover, BME CLEARING's own resources are kept in cash or can be instantly converted into cash if they are invested in short-term sovereign debt repo transactions, as the case may be.

**How has the FMI established that these arrangements would be highly reliable in extreme but plausible market conditions?**

Having most of the margins posted in cash makes it 100% reliable.

**Has the FMI identified any potential barriers to accessing its liquid resources?**

There are no potential barriers to access BME CLEARING liquid resources.

**Q.7.5.3. If the FMI has access to routine credit at the central bank of issue, what is the FMI's relevant borrowing capacity for meeting its minimum liquid resource requirement in that currency?**

BME CLEARING does not have access to routine credit at the central bank of issue.

**Q.7.5.4. To what extent do the size and the availability of the FMI's qualifying liquid resources cover its identified minimum liquidity resource requirement in each currency to effect settlement of payment obligations on time?**

As explained in the response to question Q.7.1.1., BME CLEARING only works with Euros – the only material currency for the CCP.

**Key consideration 6: An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as margin for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.**

**Size and composition of supplemental liquid resources**

**Q.7.6.1. What is the size and composition of any supplemental liquid resources available to the FMI?**

The Intra-day financing from the Banco de España-TARGET2 could be seen as a supplementary liquid resource to BME CLEARING. Apart from this, BME CLEARING does not have any supplemental liquid resources.

**Availability of supplemental liquid resources**

**Q.7.6.2. How and on what basis has the FMI determined that these assets are likely to be saleable or acceptable as collateral to obtain the relevant currency, even if this cannot be reliably prearranged or guaranteed in extreme market conditions?**

See response to question Q.7.6.1.

**Q.7.6.3. What proportion of these supplemental assets qualifies as potential collateral at the relevant central bank?**

See response to question Q.7.6.1.

**Q.7.6.4. In what circumstances would the FMI use its supplemental liquid resources in advance of, or in addition to, using its qualifying liquid resources?**

See response to question Q.7.6.1.

**Q.7.6.5. To what extent does the size and availability of the FMI's supplemental liquid resources, in conjunction with its qualifying liquid resources, cover the relevant liquidity needs identified through the FMI's stress test programme for determining the adequacy of its liquidity resources (see key consideration 9)?**

Not applicable.

**Key consideration 7:** An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.

#### Use of liquidity providers

**Q.7.7.1. Does the FMI use a liquidity provider to meet its minimum required qualifying liquidity resources?**

BME CLEARING does not have any agreements with liquidity providers although it does have a relationship with Entities, with an investment grade solvency level, currently Members of the CCP, with whom it carries out daily investments (at least 4 different Entities, when possible, for diversification purposes). Also, in order to avoid the concentration risk, the CCP shall be able to use these four Entities to sell bonds and repos in order to obtain liquidity. Exposure against each of them is controlled based on each Entity's Equity and carefully monitoring that such individually exposure does not exceed 10% of each Entity's Equity.

**Who are the FMI's liquidity providers?**

See previous answer.

How and on what basis has the FMI determined that each of these liquidity providers has sufficient information to understand and to manage their associated liquidity risk in each relevant currency on an ongoing basis, including in stressed conditions?

BME CLEARING has a long historical relationship with these Entities.

#### Reliability of liquidity providers

**Q.7.7.2. How has the FMI determined that each of its liquidity providers has the capacity to perform on its commitment in each relevant currency on an ongoing basis?**

See previous responses.

**Q.7.7.3. How does the FMI take into account a liquidity provider's potential access to credit at the central bank of issue?**

See previous responses.

**Q.7.7.4. How does the FMI regularly test the timeliness and reliability of its procedures for accessing its liquid resources at a liquidity provider?**

See previous responses.

**Key consideration 8: An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.**

**Q.7.8.1. To what extent does the FMI currently have, or is the FMI eligible to obtain, access to accounts, payment services and securities services at each relevant central bank that could be used to conduct its payments and settlements and to manage liquidity risks in each relevant currency?**

BME CLEARING has access to accounts and payment services on the Banco de España-TARGET2 system, which it uses to complete its payments and settlements through its own accounts.

**Q.7.8.2. To what extent does the FMI use each of these services at each relevant central bank to conduct its payments and settlements and to manage liquidity risks in each relevant currency?**

See previous response.

**Q.7.8.3. If the FMI employs services other than those provided by the relevant central banks, to what extent has the FMI analysed the potential to enhance the management of liquidity risk by expanding its use of central bank services?**

BME CLEARING does not use any other liquidity services other than those provided by the relevant central bank.

**Q.7.8.4. What, if any, practical or other considerations to expanding its use of relevant central bank services have been identified by the FMI?**

BME CLEARING has always considered that using central bank services is the most efficient and the safest way. Therefore, BME CLEARING has always used central bank money

**Key consideration 9: An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.**

## Stress test programme

### **Q.7.9.1. How does the FMI use stress testing to determine the amount and test the sufficiency of its liquid resources in each currency?**

As answered in Q.7.4.2., BME CLEARING accomplishes a daily Liquidity Stress Test. This calculation is intended to cover the default of the two Clearing Members which may cause the highest liquidity shortfall under stress test circumstances and based on the Default Fund stress test risk calculations carried out by the CCP.

The result is compared to the CCP's pre-funded liquid resources (CCP's Equity plus cash margins).

In case part of BME CLEARING equity plus cash margins would not be enough to cover the liquidity needs, BME CLEARING would have forced each affected Clearing Member to swap shares for bonds or cash in order to adjust its proportion to the shortfall. This adjustment must be done during the following business day.

CCPs shall regularly assess the design and operation of their liquidity management framework, including considering the results of the stress tests.

BME CLEARING calculates liquidity tests in ordinary and stress test conditions on a daily basis. The CCP also performs a quarterly Liquidity Reverse Stress Tests to determine under which extreme market conditions and default scenarios, the CCP's liquid resources would become insufficient.

### **How frequently does the FMI stress-test its liquid resources?**

BME CLEARING performs daily stress tests to verify it has sufficient liquidity resources.

### **Q.7.9.2. What is the process for reporting on an ongoing basis the results of the FMI's liquidity stress tests to appropriate decision-makers at the FMI, for the purpose of supporting their timely evaluation and adjustment of the size and composition of the FMI's liquidity resources and liquidity risk management framework?**

BME CLEARING's Risk team calculates on a daily basis the liquidity needs under normal and stressed conditions. The results are immediately reported to the Chief Risk Officer and the Operations Managing Director. These daily results are then incorporated to the internal Risk Report, which is done on a weekly basis and it is reported to the Executive Risk Committee, when the Chief Risk Officer may deem it necessary. Therefore, the Executive Risk Committee will be immediately informed of any material deviations in the results of these daily tests. In any case, each month this committee also analyses the model and parameters used to verify they are appropriate given the monthly results analyzed.

## Stress test scenarios

### **Q.7.9.3. What scenarios are used in the stress tests, and to what extent do they take into account a combination of peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions?**

The Stress Test scenario for each Clearing Member is the worst scenario calculated according to Articles 42-43 of the EMIR and Article 54 of the CDR 153/2013.

### **Q.7.9.4. To what extent do the scenarios and stress tests take into account the FMI's particular payment and settlement structure (for example, real-time gross or deferred net; with or without a settlement margin;**

**DVP model 1, 2 or 3 for SSSs), and the liquidity risk that is borne directly by the FMI, by its participants, or both?**

Stress test scenarios take into account the settlement of margins at 9:00 and 9:30 for FX contracts, both at TARGET2-Banco de España platform, and T2S settlement process in place for the Equity and Repo segments.

**Q.7.9.5. To what extent do the scenarios and stress tests take into account the nature and size of the liquidity needs, and the associated sources of liquidity risks, that arise in the FMI to settle its payment obligations on time, including the potential that individual entities and their affiliates may play multiples roles with respect to the FMI?**

In its liquidity stress tests, BME CLEARING analyses the multiple roles of Entities involved: Clearing Members, Payment Agents, and counterparties of cash margins investments.

### Review and validation

**Q.7.9.6. How frequently does the FMI assess the effectiveness and appropriateness of stress test assumptions and parameters?**

The effectiveness of the risk-management system and any amendments made are checked daily, weekly, monthly and annually.

BME CLEARING Chief Risk Officer reviews on a daily basis to whether the CCP has sufficient liquidity resources to cover liquidity needs. Results are included in the Weekly Risk Report.

On a monthly basis, the Executive Risk Committee reviews the assumptions made on the stress test scenarios and parameters used for those calculations.

Furthermore, at least annually, and in accordance with Article 49 of EMIR, different external firms accomplish independent validation reports on the models, parameters, tests and procedures used to calculate the specific financial resources and of other risk control mechanisms.

**Q.7.9.7. How does the FMI validate its risk management model? How frequently does it perform this validation?**

See previous response.

**Q.7.9.8. Where and to what extent does the FMI document its supporting rationale for, and its governance arrangements relating to, the amount and form of its total liquid resources?**

See previous response.

**Key consideration 10:** An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These 70 CPSS-IOSCO- applicable principles to financial market infrastructure – April 2012 rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources



it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

### Same day settlement

#### **Q.7.10.1. How do the FMI's rules and procedures enable it to settle payment obligations on time following any individual or combined default among its participants?**

BME CLEARING's Rule Book is designed to ensure that the CCP has sufficient resources to cover defaults by one or two Clearing Members in extreme but plausible market conditions, and that BME CLEARING must always make payments to Clearing Members that are complying with their obligations with BME CLEARING.

#### **Q.7.10.2. How do the FMI's rules and procedures address unforeseen and potentially uncovered liquidity shortfalls and avoid unwinding, revoking or delaying the same day settlement of payment obligations?**

The Multilateral Settlement at 9:00 CET (or at 9:30 CET for the FX products) in the BME CLEARING's Account in TARGET2-Banco de España is the main point where the CCP may require liquid resources if the former cannot be processed due to any Clearing Member's default. In order to ensure that a payment in BME CLEARING's Multilateral Settlement is not revoked at its value date due to a Member default, which leads to the settlement not being completed due to a lack of cash in the defaulting Member's account, BME CLEARING keeps a pre-funded account on the TARGET2-Banco de España system which it can draw from if necessary, and also all cash margins that are not invested at such a time.

### Replenishment of liquidity resources

#### **Q.7.10.3 How do the FMI's rules and procedures allow for the replenishment of any liquidity resources employed during a stress event?**

Pursuant to its Rule Book, "if BME CLEARING needs to execute Margins that have been posted as securities, or needs to meet payment obligations corresponding to the Position Settlement for a Defaulting Member, it may temporarily use the margin amount that has been deposited as cash". These liquid resources will be fully replenished once the stress event has passed.

## KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING does not have a complex risk profile, whereby it always has sufficient liquid resources from the collateral participants post through the Multilateral Settlements. All liquidity risk is managed using the cash accounts that BME CLEARING has at the TARGET2-Banco de España system. BME CLEARING therefore does not need to rely on any additional liquidity providers.

These collateral posted by participants represent almost all the qualifying liquid resources available to BME CLEARING. Since most of these resources comprise cash and fixed-income securities (that can be used to arrange repo transactions in IBERCLEAR), the liquidity available to BME CLEARING is immediate or practically immediate.

Nevertheless, BME CLEARING performs daily estimates of potential liquidity needs both under normal and stress conditions. It also performs quarterly reverse stress tests.

## ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 7 on Liquidity risk without any type of limit or restriction.

## PRINCIPLE 8: SETTLEMENT FINALITY

***An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.***

### **Summary narrative**

BME CLEARING has been designated by Spanish authorities as a securities settlement system for the purposes of Law 41/1999, implementing Directive 98/26 on settlement finality in payment and securities settlement systems. This designation is duly notified to ESMA.

In accordance with the above referred Directive and Law, BME CLEARING Rule Book clearly defines the moment of receipt of transfer orders within BME CLEARING system, protecting the legal effects the interposition of BME CLEARING, the obligations arising thereof and the netting in the event of insolvency proceedings against a Member.

Additionally, and as regards the Equity segment, BME CLEARING has entered into contractual arrangement so as to ensure appropriate coordination of the moment of entry of transfer orders with the Central Securities Depository to whom BME CLEARING forwards transfer instructions related to Trades executed in multilateral trading venues.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: FMI's rules and procedures should clearly define the moment when the settlement is final.**

#### **Point of settlement finality**

**Q.8.1.1. At what point is the settlement of a payment, transfer instruction or other obligation final, meaning irrevocable and unconditional? Is the moment of settlement finality defined and documented?**

As per irrevocability, article 26 of BME CLEARING Rule Book defines the moment of irrevocability of the interposition of BME CLEARING with the entry of the relevant obligations in the Central Register of the Trades Register managed by BME CLEARING.

The same article further states that from the same moment on (the entry in said Central Register) (i) the obligations arising from Trades, and (ii) the obligations arising from netting when it is so determined in the corresponding General Conditions for the relevant type of Account or Trade, shall be legally enforceable and shall be binding on third parties as defined by article 11 of Law 41/1999, of 12 November, on securities payment and settlement systems, and Directive 98/26/CE, of the European Parliament and of the Council, of 19 May, on the finality of settlement in securities payment and settlement systems.

Any right and action on collateral posted in the fulfilment of margining requirements by Members or Clients, as the case might be, as well as their execution and enforcement by BME CLEARING or its beneficiary Members, will be also protected from insolvency according article 110 of the Securities Markets Act (consolidated text approved by Royal Legislative Decree 4/2015) and developed by BME CLEARING Rule Book (Articles 29 and 30).

"The posting and execution of Collateral to be used for Margins shall comply with the provisions of this Rule Book and take place in accordance with Law 41/1999 (...) and in accordance with the provisions of Royal Decree Law 5/2005 (...)"

### **How and to whom is this information disclosed?**

BME CLEARING shall make available to the Members details of the positions registered in each Account opened in the Central Register, in accordance with the provisions of the General Conditions of each Segment and corresponding Circulars.

Members shall make available to their Clients details of the positions registered in each Individual Segregated Account and Second-Tier Register Account.

Regarding position settlement through settlement systems, the Settlement System will notify BME CLEARING, and the latter will notify its Members, of the outcome of the Settlement Instructions generated by the CCP, as described further here below.

#### **Q.8.1.2. How does the FMI's legal framework and rules, including the applicable insolvency law(s), acknowledge the discharge of a payment, transfer instruction or other obligation between the FMI and its participants, or between participants?**

The obligations and responsibilities held by BME CLEARING, Members and Clients in respect of settlements of the cash or securities deliveries are stipulated in BME CLEARING's chapter 7 of the Rule Book, in the corresponding General Conditions of each Contract entered into by the CCP, as well as in specific Circulars. All of them are in line with the system applicable to the market or settlement system corresponding to the Trades that must be executed on the underlying asset.

In addition, as regards the equity segment, the agreement entered into by BME CLEARING and the Central Securities Depository managing the settlement system establishes appropriate coordination mechanisms for the exchange of information, including the obligation of participants of the settlement system to be connected with BME CLEARING (in accordance with Article 37 of the Rule Book).

#### **Q.8.1.3. How does the FMI demonstrate that there is a high degree of legal certainty that finality will be achieved in all relevant jurisdictions (for example, by obtaining a well-reasoned legal opinion)?**

The provisions of Law 41/1999, Securities Markets Act and Law 22/2003 (as amended) are sufficient evidence of the highest degree of legal certainty within the Spanish jurisdiction.

As per other jurisdictions, where necessary and according to article 5 of the Commission Delegated Regulation (EU) no 153/2013 supplementing EMIR, BME CLEARING has sought independent legal opinions from relevant European jurisdictions in order to analyse the soundness of the rules, procedures and contractual arrangements of the CCP and potential conflicts of law issues so as to mitigate legal risk resulting from such issues.

### **Finality in the case of links.**

#### **Q.8.1.4. How does the FMI ensure settlement finality in the case of linkages with other FMIs?**

- a) For an SSS, how is consistency of finality achieved between the SSS and, if relevant, the LVPS where the cash leg is settled?

Not applicable to BME CLEARING.

- b) For a CCP for cash products, what is the relation between the finality of obligations in the CCP and the finality of the settlement of the CCP claims and obligations in other systems, depending on the rules of the relevant CSD/SSS and payment system?

As explained above, the obligations and responsibilities held by BME CLEARING, Members and Clients in respect of settlements of the cash or securities deliveries are in line with the system applicable to the market or settlement system corresponding to the Trades that must be executed on the underlying asset.

As regards the Equity segment, following the obligations established in article 3.4 of Directive 98/26/EC and article 11 of Law 41/1999, BME CLEARING has entered into a contractual arrangement so as to ensure appropriate coordination of the moment of entry of transfer orders with the Central Securities Depository to whom BME CLEARING forwards transfer instructions related to Trades executed in multilateral venues. As required by article 37 of BME Rule Book, the same agreement provides for the exchange of information to monitor the effectiveness of the settlement of trades, resources required to report any default incurred by Members or Clients of BME CLEARING or participants in the settlement system.

**Key consideration 2: An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.**

#### Final settlement on the value date

##### **Q.8.2.1: Is the FMI designed to complete final settlement on the value date (or same day settlement)?**

In the Financial Derivatives, Energy Derivatives and Interest Rate Derivatives Segments, the open Positions Settlement will be done on the expiry date of the corresponding Financial Instruments, via the delivery of securities or in cash, according to the related General Conditions. The Settlement of Positions in cash will be performed by BME CLEARING.

BME CLEARING and the Clearing Members shall pay each other the cash settlements, directly or via the Clearing Members payment agent and shall deliver each other the securities arising from the corresponding Settlements and from the Settlement of open Positions registered in the Accounts of the Central Register of Clearing Members and Non-Clearing Members.

According to the corresponding General Conditions of each Contract and developing Circulars, any cash payment or transfer between the BME CLEARING account on the TARGET2 system and the account of a Clearing Member or its Payment Agent on the same platform is assigned a value date depending on the hour of the day in which the payment is made. The settlement of the corresponding cash is thus always final on the stipulated value date, thereby avoiding any counterparty being exposed to liquidity risk.

##### **How does the FMI ensure that final settlement occurs no later than the end of the intended value date?**

In principle, the whole functioning of BME CLEARING is designed to achieve the effectiveness of settlement on value date. Rights and obligations of Members, as well as the terms of other FMI linkages foresee pursue this objective.

##### **Q.8.2.2. Has the FMI ever experienced deferral of final settlement to the next business day that was not contemplated by its rules, procedures or contracts? If so, under what circumstances?**

BME CLEARING has not experienced any deferral of final settlement to the next business day that was not contemplated by its rules, procedures or contracts.

**If deferral was a result of the FMI's actions, what steps have been taken to prevent a similar situation in the future?**

Not applicable.

#### **Intraday or real-time final settlement.**

##### **Q.8.2.3 Does the FMI provide intraday or real-time final settlement? If so, how?**

BME CLEARING does not perform intraday settlements, with the exception of the Interest Rate Derivatives segment. Nevertheless, when a Clearing Member is requested to provide some particular kind of collateral during a market session, the Member is required to make an intraday transfer to BME CLEARING account on TARGET2. This payment must be made with a value date of the same day and the settlement finality must also be the same day. Transfer orders within TARGET2 are subject to their own settlement rules as defined by the Eurosystem.

##### **How are participants informed of the final settlement?**

Please, refer to Q.8.1.1.

##### **Q.8.2.4. If settlement occurs through multiple-batch processing, what is the frequency of the batches and within what time frame do they operate?**

Night time settlement, which takes place in several cycles, and real-time settlement are processed by IBERCLEAR in accordance with Target2 Securities procedures and time-table.

##### **What happens if a participant does not have enough funds or securities at the settlement time?**

The Settlement System will notify BME CLEARING of the SI not settled or partially settled in each settlement cycle. There is a Fails Management Procedure when a seller instruction cannot be settled at the end of its theoretical settlement date (TSD) which will be applied following the last settlement Cycle of the Intended Settlement Date (Failed Transactions).

If there is a Settlement incidence due to a lack of cash, BME CLEARING will substitute the Clearing Member in its cash delivery obligations, it will receive the Securities and deliver the cash corresponding to the delivery instructions, the instructions for the receipt of Securities and the payment of cash of the Member causing the incident will be left as unsettled.

If in the immediately following session, the Settlement Incidence persists, BME CLEARING may adopt as many measures as required to resolve such Settlement Incidence, including the sale of the Securities which had been delivered to it.

If the seller continues not to deliver the Securities on the afternoon of TSD+4, the Buy-in will commence. On TSD+5, if it was not possible to perform the Buy-in, a Cash Settlement shall be made on the failed sell.

##### **Are transactions entered in the next batch? If so, what is the status of those transactions and when would they become final?**

Please see previous response.

**Q.8.2.5. If settlement does not occur intraday or in real time, how has the LVPS or SSS considered the introduction of either of these modalities?**

Not applicable to BME CLEARING.

**Key consideration 3: An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.**

**Irrevocable nature of payments.**

**Q.8.3.1. How does the FMI define the point at which unsettled payments, transfer instructions or other obligations may not be revoked by a participant? How does the FMI prohibit the unilateral revocation of accepted and unsettled payments, transfer instructions or obligations after this time?**

Please, refer to Q.8.1.2.

Once transfer orders entered into a system by participants have been received and accepted pursuant to system rules, they cannot be revoked by the instructing party. They shall be outright, binding and legally enforceable against the participant with the payment obligation and binding on third parties, whereby they cannot be contested or rendered null and void for any reason.

Clarity on the definition of the moment of irrevocability of transfer orders (and obligations arising thereto) is established in article 26 of BME CLEARING Rule Book.

**Q.8.3.2 Under what circumstances can an instruction or obligation accepted by the system for settlement still be revoked (for example, queued obligations)?**

As regards Multilateral settlement, no amount of a settlement can be revoked by any participants. However, if BME CLEARING had to amend any amount of a settlement, it may submit a request to Banco de España (as operator or TARGET2) to defer the settlement period thereof. Any deferral must be as short as possible to avoid delaying other settlement cycles arising after 9:00 hours.

Similarly, BME CLEARING is also able to complete a bilateral settlement with a sole Clearing Member or its Payment Agent when extraordinary intraday margins are required from the Member in question and BME CLEARING records a direct debit against the Member's account in TARGET2. Once the debit order has been processed, payment may remain unsettled if there are insufficient funds in the account. In this instance, BME CLEARING may revoke the instruction. BME CLEARING may use this system as well for collateral devolution, when applicable. Both actions (debit order and revocation) are governed by the rules of TARGET2.

**How can an unsettled payment or transfer instruction be revoked?**

According to TARGET2 system, transactions are executed and settled simultaneously i.e. without a gap: if there are sufficient funds in the cash account, the system automatically process the payment, at which time it will be registered as settled and therefore no cash transfers can be revoked.

**Who can revoke unsettled payment or transfer instructions?**

Please, see the answer to the previous question.

## Review of performance

### **Q.8.3.3. Under what conditions does the FMI allow exceptions and extensions to the revocation deadline?**

If during the established settlement period, an Entity cannot meet its payment obligations, BME CLEARING may trigger a mechanism through which BME CLEARING would have access to a collateral account from which it can draw down to cover the debit balances unpaid by the defaulting Member.

### **Q.8.3.4. Where does the FMI define this information?**

This revocation of transfer orders is performed in accordance to the rules governing TARGET2.

### **How and to whom is this information disclosed?**

This information is not made public.

## KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING's legal and regulatory framework clearly states the moment when the settlement is final and it has robust procedures in case of a settlement failure. These possibilities ensure BME CLEARING is amply able to settle any amount in the required manner and time period and always pursuant to its own legal framework, its Rule Book and those of Banco de España.

## ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 8 on Settlement Finality without any type of limit or restriction.



## PRINCIPLE 9: MONEY SETTLEMENTS

***An FMI should conduct its money settlements in central bank money if possible and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.***

### Summary narrative

BME CLEARING conducts all its cash settlements for each market session in central bank money, it does not perform settlements through commercial banks. BME CLEARING only accepts EURO currency for all its settlement processes.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should conduct its money settlements in central bank money, if possible and available, to avoid credit and liquidity risks.**

#### **Q.9.1.1. How does the FMI conduct money settlements?**

BME CLEARING conducts all its cash settlements for each market session in central bank money via a standard Multilateral Settlement mechanism on the TARGET2 platform.

The CCP Clearing System allows Clearing Members to segregate settlements at TARGET2 at the collateral account level. However, unless the Clearing Member specifies otherwise, the cash credit and debit balances of each Clearing Member are offset and aggregated per Payment Agent, i.e., per BME CLEARING Clearing Member with an account on the TARGET2 platform or, alternatively, another firm holding an account in TARGET2 with an agreement with the Clearing member for such purpose.

This process does not pose credit risk or liquidity problem to BME CLEARING.

BME CLEARING may be exposed to operational risk, although this is mitigated by the reconciliations carried out in the balances of these accounts, either at the moment a transaction takes place or at the end of the day when preparing and checking the corresponding cash journal for each account.

Likewise, all intraday movements of cash collateral arising from requests for extraordinary margins or collateral replacements must be carried out in Central Bank accounts.

This settlement procedure is regulated in chapter 8 of BME CLEARING's Rule Book and General Circulars.

Additionally, for the CCP cash segments (Equities segment and Fixed Income segment), for the settlement of the cash legs of settlements, BME CLEARING settles open positions through DVP/RVP in IBERCLEAR, who acts as its direct participant in T2S for BME CLEARING. All the settlements taking place in central bank money.

If the FMI conducts settlement in multiple currencies, how does the FMI conduct money settlement in each currency?

BME CLEARING only accepts the EURO currency for all its settlement processes.

#### **Q.9.1.2. If the FMI does not settle in central bank money, why is it not used?**

Not applicable: BME CLEARING only settles in central bank money.

**Key consideration 2: If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.**

**Q.9.2.1. If central bank money is not used, how does the FMI assess the credit and liquidity risks of the settlement asset used for money settlement?**

Not applicable to BME CLEARING as only central bank money is used.

**Q.9.2.2. If the FMI settles in commercial bank money, how does the FMI select its settlement banks? What are the specific selection criteria the FMI uses?**

Not applicable to BME CLEARING.

**Key consideration 3: If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.**

**Q.9.3.1. How does the FMI monitor the settlement banks' adherence to criteria it uses for selection? For example, how does the FMI evaluate the banks' regulation, supervision, creditworthiness, capitalisation, access to liquidity and operational reliability?**

Not applicable to BME CLEARING as only central bank money is used.

**Q.9.3.2. How does the FMI monitor, manage and limit its credit and liquidity risks arising from the commercial settlement banks? How does the FMI monitor and manage the concentration of credit and liquidity exposures to these banks?**

Not applicable to BME CLEARING.

**Q.9.3.3. How does the FMI assess its potential losses and liquidity pressures as well as those of its participants if there is a failure of its largest settlement bank?**

Not applicable to BME CLEARING.

**Key consideration 4: If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.**

**Q.9.4.1. If an FMI conducts money settlements on its own books, how does it minimise and strictly control its credit and liquidity risks?**

BME CLEARING does not conduct money settlements on its own books.

Key consideration 5: An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at least before the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.

**Q.9.5.1. Do the FMI's legal agreements with its settlement banks state when transfers occur, that transfers are final when effected, and that funds received are transferable?**

BME CLEARING has no legal agreements with settlement banks.

**Q.9.5.2. Are funds received transferable by the end of the day at the latest? If not, why? Are they transferable intraday? If not, why?**

Not applicable.

#### KEY CONCLUSIONS FOR PRINCIPLE

As BME CLEARING conducts all cash settlements in central bank money it is less likely to be exposed to credit or liquidity risk. In addition, BME CLEARING currently only settles in Euros and therefore does not need to engage commercial banks.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 9 on Cash Settlements without any type of limit or restriction.

## PRINCIPLE 10: PHYSICAL DELIVERIES

***An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.***

### Summary narrative

BME CLEARING physical deliveries are not covered by this principle, because they consist in securities, or debt instrument deliveries, or gas title transfer notifications, that are in book-entry form, not in paper form. Therefore, answers to the following key considerations will be relative to: (1) the delivery of securities of the Equity segment or at expiration or maturity of Futures and Options, (2) delivery of bonds from the Repo segment, and (3) delivery of gas products from the Energy segment.

### QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS

**Key consideration 1: An FMI's rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.**

#### **Q.10.1.1. Which asset classes does the FMI accept for physical delivery?**

For Financial derivatives segment the following securities are accepted as deliverable:

- For Equity Futures and Options, BME CLEARING simply informs Sociedad de Bolsas, as manager of the electronic trading platform, of the underlying stock trades that result from Options exercise and Futures maturity. Those trades will be registered in BME CLEARING Equities segment. Therefore, BME CLEARING Financial Derivatives segment is not responsible for this settlement.
- For the futures contract on the 10-year notional bond, BME CLEARING has obligations and responsibilities in relation to delivering, throughout IBERCLEAR, the underlying bonds. DvP is between BME CLEARING and each Clearing Member with open position at maturity.
- For the Equity Segment, which includes Shares, Pre-emptive rights on shares, Warrants, Certificates and Investments in Exchange-traded Funds, and for the Fixed Income Segment, which includes repo trades, transactions are settled in T2S through IBERCLEAR. DvP is between BME CLEARING and each Clearing Member.

For the gas derivatives of the Energy Segment, delivery takes place through the valid issuance of Gas Title Transfer Notifications for each Delivery Day. The Notifications Service Provider shall send to the Transmission System Operator via telematic procedures, the information on Natural Gas Title Transfers on the Virtual Balancing Point corresponding to Natural Gas Contracts cleared in BME CLEARING.

#### **Q.10.1.2. How does the FMI define its obligations and responsibilities with respect to the delivery of physical instruments or commodities? How are these responsibilities defined and documented? To whom are these documents disclosed?**

They are defined in BME CLEARING Rulebook, General Conditions and Circulars.

**Q.10.1.3. How does the FMI engage with its participants to ensure they have an understanding of their obligations and the procedures for effecting physical delivery?**

BME CLEARING supports its Clearing Members by ensuring they are aware of Delivery Calendar, understand the Delivery Procedure, and their obligations.

**Key consideration 2: An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.**

**Q.10.2.1. How does the FMI identify the risks and costs associated with storage and delivery of physical instruments or commodities? What risks and costs has the FMI identified?**

Storage costs are not applicable to BME CLEARING. About delivery risk management, BME CLEARING controls the open position, takes care that the delivery procedures are fulfilled in the right time in the delivery timetable, and doesn't offset positions that expires at the end of day with the rest of positions.

**Q.10.2.2. What processes, procedures and controls does the FMI have to monitor and manage any identified risks and costs associated with storage and delivery of physical instruments or commodities?**

See previous response.

**Q.10.2.3. If an FMI can match participants for delivery and receipt, under what circumstances can it do so, and what are the associated rules and procedures? Are the legal obligations for delivery clearly expressed in the rules and associated agreements?**

Associated rules are the General Conditions and their corresponding Circulars. BME CLEARING sends settlement instructions to IBERCLEAR (and IBERCLEAR to T2S as BME CLEARING is an indirect participant or T2S), where participants for delivery and receipt are matched.

**Q.10.2.4. How does the FMI monitor its participants' delivery preferences and, to the extent practicable, ensure that its participants have the necessary systems and resources to be able to fulfil their physical delivery obligations?**

It is mandatory that Clearing Members are participants of the CSD (IBERCLEAR) where delivery is done, or at least they have an agreement with a CSD participant. BME CLEARING is working on offering its Clearing Members the possibility to send settlement instructions to any account in another T2S CSD that has established a link with IBERCLEAR.

## KEY CONCLUSIONS FOR PRINCIPLE

This principle does not really apply to BME CLEARING as no settlements involve a real physical delivery, understood as the delivery of securities or bonds in paper form, or gas in physical form.

## ASSESSMENT OF PRINCIPLE

This principle is not applicable to BME CLEARING.

## PRINCIPLE 12: EXCHANGE-OF-VALUE SETTLEMENT SYSTEMS

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

### Summary narrative

BME CLEARING is not an exchange-of-value settlement system. As a CCP, it enters in (1) DVP Equity segment and Fixed Income transactions, and (2) Bono10 transactions, when there's open position at maturity that goes to delivery. These transactions registered at BME CLEARING are settled in T2S through IBERCLEAR, the Spanish CSD (Central Securities Depository). Settlement instructions shall be settled, once the securities and the cash balances are in the corresponding accounts. Settlement is final and cannot be revoked.

BME CLEARING and IBERCLEAR have signed an agreement which outlines the coordination of the rules on finality of settlement.

According to Article 50 "Settlement" of Regulation (EU) 648/2012 ("EMIR Regulation"), BME CLEARING clearly states its obligations with respect to deliveries of financial instruments in its Rulebook, General Conditions and Circulars.

### QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS

**Key consideration 1: An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.**

**Q.12.1.1. How do the FMI's legal, contractual, technical and risk management frameworks ensure that the final settlement of relevant financial instruments eliminates principal risk? What procedures ensure that the final settlement of one obligation occurs if and only if the final settlement of a linked obligation also occurs?**

BME CLEARING acts as a CCP for transactions in the Equities segment, Futures on 10 Year Spanish Sovereign Debt and Repos on Sovereign Debt. In all these cases, exchange-of-value settlements take place in T2S through IBERCLEAR.

Principal risk is eliminated by conditioning the final settlement of one obligation upon the final settlement of the linked obligation, using the DvP mechanism offered by T2S.

**Q.12.1.2. How are the linked obligations settled – on a gross basis (trade by trade) or on a net basis?**

Equity Segment trades: BME CLEARING offers participants omnibus accounts with gross settlement and omnibus accounts with net settlement. Settlement is done by ISIN and position account.

10 Year Bond Futures maturity: is settled on a net basis, by ISIN and Clearing Member level

Repo segment: trades are currently settled on a net basis.

**Q.12.1.3. Is the finality of settlement of linked obligations simultaneous? If not, what is the timing of finality for both obligations?**

The settlement system used by IBERCLEAR, T2S, is a DvP system, with simultaneity in its finality.

The Settlement Instructions (SI) generated by the CCP are sent to T2 through IBERCLEAR for full or partial Settlement in the night-time settlement or real-time settlement.

Positions registered at the CCP will be closed once the Settlement of Positions is undertaken, and the responsibilities of BME CLEARING and of the Member or Client which was its counterparty will cease with respect to those Positions.

**Is the length of time between the blocking and final settlement of both obligations minimised? Are blocked assets protected from a claim by a third party?**

T2S platform continuously checks the securities and cash balances. If there are securities in the account that may be settled at the Intended Settlement Date, and cash in the counterparty account, it blocks both balances and simultaneously sends cash to the seller and securities to the buyer.

The length of time between the blocking of securities and cash, and the subsequent release and delivery is minimum, and in such a period blocked securities are not subject to a claim by a third party.

**Q.12.1.4. In the case of a CCP, does the CCP rely on the DvP or PvP services provided by another FMI, such as an SSS or payment system?**

As it has been mentioned, BME CLEARING relies on the DvP services provided by T2S through IBERCLEAR. In fact, the SIs which are generated in the net accounts and sent to IBERCLEAR may be DvP; Receipt versus payment (RvP); Delivery with payment; Receipt with payment; Delivery Free of Payment; Receipt Free of Payment; Payment free of delivery; Collection free of delivery or; Payment instructions free of delivery.

For the gross accounts, two SIs per account are created with the buy aggregates on the one hand and the sell aggregates on the other. The SIs which are generated in the gross accounts and sent to the Settlement System may only be DvP or RvP.

**If so, how would the CCP characterise the level of its reliance on such services?**

BME CLEARING only settles in T2S through the Spanish Central Securities Depository, IBERCLEAR, so it is highly reliant on its services.

**What contractual relationship does the CCP have with the SSS or payment system to ensure that final settlement of one obligation occurs only when the final settlement of any linked obligations occurs?**

BME CLEARING has signed a contract with IBERCLEAR which states that all transactions registered at BME CLEARING shall be settled in T2S through IBERCLEAR and in compliance with its regulations.

Please refer to Q.12.1.1 and to Principle 20 for further information.



#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING transactions are settled in T2S through IBERCLEAR. This CSD settlement system uses a DvP settlement system, eliminating principal risk.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 12 on Exchange-of-value settlement systems without any type of limit or restriction.

## PRINCIPLE 13: PARTICIPANT-DEFAULT RULES AND PROCEDURES

***An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.***

### Summary narrative

BME CLEARING has clear rules and procedures (Default management protocol) to be applied in the event of a Default, in order to safeguard the correct running of the CCP and to reduce the potential effects of the Default on the non-defaulting Members.

Default rules and procedures in place are reviewed at least annually by the Executive Risk Committee.

The Rule Book includes the following aspects: causes of default; measures to be adopted in the event of default; discretion of the measures; modifications in normal settlement practices; management of trades in different stages of the process; and treatment of Proprietary and client accounts and Positions.

As these measures are discretionary, the Rule Book does not mention completely the sequence of events to be followed. However, as aforementioned, transfers will be preferable over closures.

Non-Defaulting Members will not be affected in the event of Default unless the CCP “skin-in-the-game” is drawn down. In the event that the Default Fund should need to be used, the amount withdrawn shall be allocated proportionally to the Clearing Members, depending on the amount of the contributions made by each of them for each CCP Segment in the most recent update or replenishment.

Clearing Members shall be obliged to restore their Default Fund contributions and make any additional Default contributions requested by BME CLEARING for each CCP Segment, following the procedures, within the periods and the limits provided pursuant, as the case may be, to a Circular and/or to the General Conditions of each segment.

Key aspects of Default rules and procedures are publicly available to the general public.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.**

### **Participant default rules and procedures**

**Q.13.1.1. Do the FMI's rules and procedures clearly define an event of default (both a financial and an operational default of a participant) and the method for identifying a default?**

Chapter 9 of the BME CLEARING Rule Book regulates Defaults. In particular, article 38 of the Rule Book clearly defines Causes of Default.

### How are these events defined?

- Failure to post or to maintain Margins in due time and form, or failure to pay in due time and form the cash amounts resulting from the corresponding Settlements or Position Settlements or any other amount owed by a Member, Direct Clearing Client or Client to BME CLEARING or to the Member through which they act in BME CLEARING.
- In the case of a Direct Clearing Client, when the Agent Member notifies BME CLEARING that the Direct Clearing Client has defaulted on its obligations to the Agent Member (even when these obligations arise from the conditions additional to the minimum content clauses laid down in this Rule Book).
- Failure to deliver the securities, financial instruments or assets, or cash resulting from the Position Settlement, when this could imply a risk for BME CLEARING or the Member.
- The initiation, or request for initiation made by a Member, Direct Clearing Client or Client, of bankruptcy or insolvency (whatever the name given thereto), in relation to the Client, Direct Clearing Client or Member, its Parent or another relevant company within its group, or the adoption by a judicial or administrative authority of a universal decision to wind up the Client or Member, its Parent or any other relevant company within its group.
- The existence of any circumstance in relation to the Member, Direct Clearing Client or Client, its Parent or any other relevant company within its group, which may generate a risk for the economic solvency of the Member or BME CLEARING, including among other default by a Client, Direct Clearing Client or Member on its obligations in other markets, settlement systems or central counterparties.
- In the event of declaration of Default of its General Clearing Member and declaration of Default of its Agent Member, failure by the Non-Clearing Member or by the Direct Clearing Client, respectively, to comply with the requisites of the interim regime established in the Rule Book.
- Default by the Member in charge of processing the Default of a Non-Clearing Member or Client on the obligations provided hereunder in this respect.
- Breach, by the Member, by the Direct Clearing Client or by the Client, of the rules of conduct applicable to it pursuant to the Spanish SMA.
- Default by a Clearing Member on the obligation to hold an account or to designate a payment agent to hold an account in the payment system established by BME CLEARING for Cash Settlements.
- Any other Default by the Member, Direct Clearing Client or Client on its obligations, other than those mentioned in the preceding points, established in the BME CLEARING's Rule Book and developed through the corresponding Circulars, or in its agreement with BME CLEARING or with a Member that could imply a risk for BME CLEARING or the Member.

#### Q.13.1.2. How do the FMI's rules and procedures address the following key aspects of a participant default:

- a) the actions that the FMI can take when a default is declared;

The measures to be taken in the event of Default, as outlined in BME CLEARING's Rule Book, are aimed at containing losses, ensuring operations are not disrupted and that Non-Defaulting Clearing Members are not exposed to losses that they cannot anticipate or control:

- Temporary Suspension of the Defaulting Member.
- Immediately restrict the registration of new Trades of the Defaulting Member.
- Undertake any Trades for the purpose of reducing unhedged risks, until total coverage thereof.
- Close-out the Defaulting Member's Positions.
- The transfer to another Member or closing out, as applicable, of the individual segregated Accounts (both, agency and principal to principal) the omnibus segregated accounts, together with the corresponding second-tier register accounts, where applicable, and of the indirect clearing omnibus segregated accounts and indirect clearing gross omnibus segregated accounts. In the event of close-out of accounts, the close-out netting regime established in the Rule Book will be applicable.
- BME CLEARING may sell off, in whole or in part, the Defaulting Member Collateral of any kind posted in favour of BME CLEARING.
- Obtain, on behalf and at the expense of the Defaulting Member, any kind of professional advice or assistance which BME CLEARING may reasonably require in connection with the management of the Default, including a mandate to manage the closing of Positions to another firm.
- BME CLEARING must inform the Defaulting Member of the measures adopted, as soon as possible; fully cooperate with the Competent Authorities; and co-operate, as long as there is reciprocity, in the exchange of information with any market, CCP (through the European Association of Clearing Houses, EACH), or settlement system in which the Defaulting Member should be acting, and co-operate with any Competent Authority, in connection with the measures adopted by BME CLEARING with regard to the Defaulting Member.

The closing of positions, close-out netting, transfer of accounts of the Defaulting Member and the settlement of costs, expenses and balances resulting from the Default are explained in Articles 43, 44 and 45 of the Rule Book.

b) the extent to which the actions are automatic or discretionary;

All of these measures are discretionary, as the Rule Book expressly states that "the following measures may be adopted". Moreover, it states that the CCP may take any other measure required by the exceptional circumstances resulting from the Default and which is deemed necessary, even if not expressly contemplated in the Rule Book, and informing the Competent Authorities thereof.

c) changes to normal settlement practices;

A Member's Default may affect normal settlement practices depending on the solution offered to customers and Clearing Members, as appropriate.

d) the management of transactions at different stages of processing;

Articles 42 to 45 of the Rule Book detail how defaults shall be managed with a high level of thoroughness and legal certainty.

e) the expected treatment of proprietary and customer transactions and accounts;

Article 42 and 43 of the Rule Book clearly establishes the measures to be taken for each type of account.

In the event of Default by a Clearing Member, if BME CLEARING decides to close the Proprietary Account of a Defaulting Clearing Member, the appropriate close-out netting shall be carried out and the resulting Final Net Balance calculated.

To proceed to the position closure of the Account of the Defaulting Member, as stated in BME CLEARING's Default Protocol, there will be an assessment of the complexity, size of the open position and structure of the proprietary position of the Defaulting Clearing Member. If the position is non-complex and small, it is unwound in the market. If it is complex and/or large, it is put out to price in order to unwind it. Two or three entities will be asked to quote prices and the affected Member will also be asked to provide a quote. If the latter has a taker for the position, this taker will be considered a potential candidate. If the affected Member does not have a taker for the position, its valuation will be used as a benchmark in assessing the quotes provided by the other two or three entities; and if the quotes provided by the two/three entities vary widely, additional entities may be asked to submit prices. The CCP will calculate the balance resulting from the closing out of the position.

If the Defaulting Clearing Member keeps an ISA Agency or is the holder of an ISA PtoP:

BME CLEARING shall, at the request of each Client, attempt to transfer these Accounts to another or other Non-Clearing or Clearing Members, for ISA Agency Client Accounts, or to another or other Clearing Members, for ISA PtoP Client Accounts, as designated by each Client, having previously notified the CNMV. To perform this transfer, agreement between the Member or Members to which the Accounts shall be transferred and the Clients whose Accounts are to be transferred shall be required.

In the event that all or some of the ISA Agency Client Accounts cannot be transferred because the Initial Margins corresponding to all or some of the Accounts do not suitably cover BME CLEARING's risk, the latter may, at its discretion, request the Clients Account holders of these ISA Agency Accounts to contribute the amounts required to adequately cover this risk as an adjustment to the Initial Margins.

When the transfer cannot be made BME CLEARING', at its discretion, fully or partially Close-out the Positions of the corresponding ISA Agency or ISA PtoP Client Accounts.

BME CLEARING shall, at the request of the Clients, manage the transfer of OSA Client Accounts, and where appropriate their corresponding Second-Tier Register Accounts, together with the Collateral of these Accounts, to another or other Clearing Members, designated by all the Clients of the OSA Account, having previously notified the CNMV. To perform this transfer, agreement between the Member or Members to which the Accounts and the corresponding Collateral shall be transferred and Clients whose Accounts are to be transferred shall be required. The General Conditions which, for certain Segments, have established specific rules regarding the requirement of keeping of Second-Tier Registers in respect of the OSA, or in relation to the requirement of Margins from the Second-Tier Register Clients, may stipulate additional conditions for the transfer of Accounts.

In cases where OSA Client Accounts and their corresponding Second-Tier Register Accounts cannot be transferred, or where the Collateral deposited for all or some of the OSA Clients Accounts is not sufficient to suitably cover BME CLEARING's risk, the latter may, at its discretion, fully or partially Close-out the Position of the corresponding OSA Client Accounts

BME CLEARING, where circumstances so permit, may initiate the measures it considers convenient to attempt to transfer the Indirect Clearing OSA and GOSA Clients Accounts, and the Collateral corresponding to these Accounts, having previously notified the CNMV.

In cases where, due to the circumstances, it is decided not to attempt the transfer of the Indirect Clearing OSA and GOSA, or when such a transfer is not possible, BME CLEARING may at any time fully or partially Close-out the net Position.

a) the probable sequencing of actions;

See answer to Q.13.1.2.a and BME CLEARING Default Management Protocol available on BME CLEARING website

b) the roles, obligations and responsibilities of the various parties, including non-defaulting participants; and

The roles, obligations and responsibilities of the various parties are adequately detailed in Chapter 9, Default, of the Rule Book. All causes, scenarios, measures and proceedings are highly exhaustive and thoroughly detailed.

c) the existence of other mechanisms that may be activated to contain the impact of a default?

The impact of a default, with a high probability, shall be covered by the sum of the Initial Margin, the Individual Funds and the contribution to the Default Fund of the Defaulting Member.

If the cost of managing the default is not fully covered, first BME CLEARING's skin-in-the-game is used and later, if needed, will be followed by the contributions made to the Default Fund by the rest of the Non-Defaulting Clearing Members.

Furthermore, in case there are losses not yet covered from the default, members of BME CLEARING could have to provide further unfunded default fund (assessment power) contributions as well as additional voluntary contributions in order to help restraining a default. These latter contributions, as per what is stated in article 45.8 C 8 are not subject to a right of the member to claim its reimbursement from BME CLEARING. However, without prejudice of the aforementioned, the Member will be able to claim by any other means to the defaulting member.

### Use of financial resources

#### **Q.13.1.3. How do the FMI's rules and procedures allow the FMI to promptly use any financial resources that it maintains for covering losses and containing liquidity pressures arising from default, including liquidity facilities?**

BME CLEARING invests its own capital and cash margins, main liquidity resource, in one-day repo transactions, which means that they can be accessed without delay to manage any defaults.

#### **Q.13.1.4. How do the FMI's rules and procedures address the order in which the financial resources can be used?**

The Default waterfall to be followed when closing-out positions is defined in article 45.8 of the Rule Book.

When the creditor of the Final Net Balance is BME CLEARING and the Defaulting Member or the Defaulting Direct Clearing Client does not make an immediate payment, for whatever the cause, BME CLEARING will perform with respect to each Segment, except when otherwise established, the procedures indicated below, on a successive basis in the order listed, until the total Final Net Balance owed has been paid:

1. The execution of the Collateral posted to cover the Initial Margins related to the Positions held by the Defaulting Member or by the Defaulting Direct Clearing Client, to the extent to which this has not already been executed as part of the Closing-out of all the Positions and subsequent application of the Close-out netting procedure, used to calculate the corresponding Final Net Balance.

2. The execution, in this order, of the Collateral corresponding to the Individual Funds for each Segment, and, if any, to the Extraordinary Margins posted by the Defaulting Member or by the Defaulting Direct Clearing Client and the Collateral held in the Buffer Account.
3. The execution of the Defaulting Clearing Member's contribution to the Default Fund or the Defaulting Direct Clearing Member's contribution to the Default Fund (posted by its Agent Member) of the Segment in which the Default occurred, and if it is insufficient and they exist, the Collateral corresponding to the contributions of the Defaulting Clearing Member or of the Defaulting Direct Clearing Client to the Default Funds of all the other Segments in which the Default of the Clearing Member or the Default of the Direct Clearing Client has not given rise to a Final Net debit Balance, as well as the Collateral posted by the Defaulting Member or Direct Clearing Client vis-à-vis BME CLEARING to cover any other Margin, of whatever type, Individual Fund or Extraordinary Margin.
4. The assumption, with a charge to BME CLEARING dedicated own resources, of a loss equivalent to the part specifically allocated to the Segment(s) in which the Default occurred.
5. The execution of the rest of the Collateral posted by the non-defaulting Clearing Members and Direct Clearing Members to cover their contributions to the Default Fund of the Segment(s) in which the Default occurred.
6. The requirement from the Clearing Members and from the Agent Members of the Direct Clearing Clients, on their behalf, of additional contribution to the Default Fund
7. The possible requirement of a contribution for service continuity in the terms provided for in the General Conditions of the Segment, in respect of which the default occurred.
8. Voluntary contributions may be requested from the Clearing Members, in the terms set down in the General Conditions of the Segment in which the Default occurred, with no entitlement to a refund from BME CLEARING.
9. BME CLEARING's activities will cease with respect to the Segment(s) in which the Default occurred, with the simultaneous closing of all the Positions existing at that time or in the Segment(s) in question. To this effect, the Final Net Balance of each Position shall be obtained, and the resulting payments must be made in accordance with whether the balances of the Clients, Members and BME CLEARING are debit or credit balances.
10. The assumption of the losses not covered with a charge to BME CLEARING remaining equity, with the exception of the capital and remaining equity required from time to time under the applicable regulations.
11. If BME CLEARING cannot reasonably continue its business operations, as a result of losses arising from the assumption of Default, it will proceed in accordance with applicable legislation.

Should the procedures envisaged in article 45.8 generate any losses, as a result of the use of the Default Fund or of the mandatory contributions referred to in section C.7 above, and even of the voluntary contributions, if any, both for Members and for BME CLEARING, both parties may file a claim against the Member or Client whose Default generated the need to perform the foregoing procedures. In this case, the recoveries that may be obtained by any of the Members or by BME CLEARING shall be earmarked to repay BME CLEARING and the Members of the corresponding Segment in the following order: 1) the voluntary contributions referred to in no. 8; 2) the mandatory contributions referred to in no. 7; 3) the obligatory contributions referred to in no. 6 and no. 5 and 4) the contributions of section 4, all from section C of article 45.8. The refund shall be distributed on a pro rata basis with respect to the amounts contributed or required from each one. In the event that BME CLEARING or any Member recovers any amount corresponding to the contributions they made, this must be delivered to BME CLEARING for distribution in accordance with the provisions established herein.

#### **Q.13.1.5. How do the FMI's rules and procedures address the replenishment of resources following a default?**

See Q.4.7.2 response and the Default Fund Circulars of each segment for more in-depth information.



**Key consideration 2: An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.**

**Q.13.2.1. Does the FMI's management have internal plans that clearly delineate the roles and responsibilities for addressing a default? What are these plans?**

Yes. BME CLEARING's senior management has a protocol in place in the event of Default by a Member, the Default Management Procedure mentioned before, which clearly outlines the steps to be taken and those people responsible and envisages the establishment of a Crisis Committee comprising four people (the CEO of the CCP, a representative from the legal department and two other people).

**Q.13.2.2. What type of communication procedures does the FMI have in order to reach in a timely manner all relevant stakeholders, including regulators, supervisors and overseers?**

The authorities must be notified of all defaults, as well as the Member, the General Clearing Member and, if applicable, EACH. Notification shall first be made by telephone, then formally by email.

**Q.13.2.3. How frequently are the internal plans to address a default reviewed? What is the governance arrangement around these plans?**

The plans are reviewed at least annually by the Executive Risk Committee.

**Key consideration 3: An FMI should publicly disclose key aspects of its default rules and procedures.**

**Q.13.3.1. How are the key aspects of the FMI's participant default rules and procedures made publicly available?**

Chapter 9 of the BME CLEARING's Rule Book details all default rules and procedures. Furthermore, in compliance with EMIR, BME CLEARING has the Default Management Protocol. Both documents are available to the public on BME CLEARING's website.

How do they address:

a) the circumstances in which action may be taken;

Please, refer to Q.13.1.1.

b) who may take those actions;

Article 41 of the Rule Book stipulates that the declaration of Default of a Client corresponds to the Member; the declaration of Default of a Non-Clearing Member shall correspond to its General Clearing Member; and BME CLEARING shall be responsible for declaring the Default of Clearing Members and/or Direct Clearing Members.

c) the scope of the actions which may be taken, including the treatment of both proprietary and customer positions, funds and assets;

The scope of the measures to be taken is outlined in BME CLEARING's Rule Book. Refer to Q.13.1.2.

d) the mechanisms to address an FMI's obligations to non-defaulting participants; and

The procedure to be followed in the event of Default of a Clearing Member is explained in article 45.6 "Settlement of costs, expenses and balances resulting from default" - "Default by Clients".

e) where direct relationships exist with participants' customers, the mechanisms to help address the defaulting participant's obligations to its customers?

BME CLEARING has direct relationships with its Members' customers. Articles 39 and subsequent outline the procedures to be taken in the event of a declaration of default.

**Key consideration 4: An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.**

**Q.13.4.1. How does the FMI engage with its participants and other relevant stakeholders in the testing and review of its participant default procedures? How frequently does it conduct such tests and reviews? How are these tests results used? To what extent are the results shared with the board, risk committee and relevant authorities?**

Whenever a significant change on default procedures is willing to be made, BME CLEARING will ask for advice to the EMIR Risk Committee, which, amongst others, is formed by several representatives of the Clearing Members and its clients. Once the CCP has analyzed such change, it will be presented to the Board of Directors and to the Competent Authorities for approval. Finally, the Members of BME CLEARING will be informed through the corresponding CCP's Rules and Regulations as well as the Circulars governing this matter.

BME CLEARING also performs fire drills for all segments at least once a year. The Board of Directors, the EMIR Risk Committee, the Members who have taken part in these fire drills and the competent authorities will be notified of the outcome of such tests.

**Q.13.4.2. What range of potential participant default scenarios and procedures do these tests cover? To what extent does the FMI test the implementation of the resolution regime for its participants?**

Please, see Q.13.4.1.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING has clearly defined and efficient rules and procedures to manage the default of a participant. These rules and procedures are sufficiently detailed and have an adequate degree of discretion to enable the CCP to take the necessary measures to contain any losses and pressure on liquidity and to continue fulfilling its duties and obligations, should a default take place.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 13 on Participant-default rules and procedures without any type of limit or restriction.

## PRINCIPLE 14 SEGREGATION AND PORTABILITY

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

### Summary narrative

BME CLEARING's account structure offer is based on the segregation and portability requirements laid down in Article 39 of Regulation (EU) No 648/2012 ("EMIR") and on the registration provisions included in article 104. 4 of the Spanish Securities Market Act. Furthermore, BME CLEARING has incorporated to its account structure general offer a variety of accounts for the registration of the assets and positions of indirect clients, which observe the requisites established in Commission Delegated Regulation (EU) 2017/2155 of 22 September 2017 amending Delegated Regulation (EU) No 149/2013 with regard to regulatory technical standards on indirect clearing arrangements, and in Commission Delegated Regulation (EU) 2017/2154 of 22 September 2017 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards on indirect clearing arrangements.

The structure of BME CLEARING's records and accounts, as regulated in Chapter 6, "Registration", of its Rule Book, enable participants to hold different types of accounts in the Central Register managed by BME CLEARING, segregating their proprietary assets and positions from those of their clients, which might be registered either in individually segregated accounts or omnibus segregated accounts, as defined in Articles 21 and 22 of the Rule Book. Further, according to Article 23.1 of the Rule Book, the General Conditions can regulate additional types of accounts for each segment, as a result of specialisms of the holder or differentiation between gross and net margin calculations.

The CCP has portability arrangements in place to ensure that the positions and collateral of clients of a Member in default may be transferred.

Spanish law applies except where indicated in relation to depositing securities as collateral in the central securities depositories CBL and EUROCLEAR, as explained in principle 1, Legal basis.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: A CCP should, at a minimum, have segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.**

### **Customer protection from participant default**

**Q.14.1.1. What segregation arrangements does the CCP have in place to effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant?**

The structure of BME CLEARING's accounts enables Members to separate their assets and Positions (registered in their proprietary accounts) from those held on behalf of their clients (registered in client's accounts which might be individual segregated accounts or omnibus segregated accounts).

A first classification of the accounts held in the Central Register managed by BME CLEARING permits to distinguish:

- Proprietary accounts: where proprietary positions and collateral of the corresponding Member are registered individually.
- client accounts: in which, according to the client's choice in relation to the type of client account, the trades and positions made on behalf of clients are registered, in addition to the margins and collateral posted. client accounts may be:
  - a) (ISA): kept on behalf of a sole client.
  - b) Omnibus Segregated Accounts (OSA): kept on behalf of multiple clients.
- Indirect Clearing accounts: in which trades, positions, margins and collateral held on behalf of indirect clients are recorded. Indirect Clearing Accounts might be:
  - a) Omnibus Segregated client Account- Indirect Clearing (Indirect Clearing OSA), held on behalf of multiple indirect clients (which have opted for this type of Account) of one or more direct clients.
  - b) Gross Omnibus Segregated client Account- Indirect Clearing (Indirect Clearing GOSA), held on behalf of multiple indirect clients (which have opted for this type of Account) of a sole direct client, and permitting the separated registration of the trades and positions of each of the indirect clients and the registration of collateral held on behalf of all these indirect clients are registered.

The Trade Register of BME CLEARING, together with the Central Register managed by the CCP, is also composed of the Second-Tier Register Accounts, managed by those Clearing Members with the capacity to run a Second-Tier Register (Article 104.4 of the Securities Market Act and Articles 19 and 24 of BME CLEARING's Rule Book) in the cases where the General Conditions for each CCP Segment require these accounts in relation with Omnibus Segregated Accounts in the Central Register.

According to article 110 of the Securities Market Act, once a member has been declared bankrupt, BME CLEARING, after notification to the CNMV, shall arrange for the transfer of positions registered for clients, together with the collateral (portability).

BME CLEARING internal regulations contain a detailed description of the account structure, the record keeping obligations, the segregation of assets and positions in the corresponding records, and the procedures applicable in the event of default, including the porting of the assets and positions held by the Clearing Members for the account of the clients.

#### **Q.14.1.2. What are the CCP's portability arrangements?**

Article 43 of the Rule Book specifies the procedures to follow to close out positions and transfer client accounts in the event of default, differentiating between Clearing Member and Non Clearing Member default. Additionally, the Default Management Protocol contains the protocol dictating what action and measures to take, under articles 38 and subsequent of the Rule Book, in the event of a Member default.

If the Defaulting Clearing Member holds Individual Segregated Accounts (Article 43.I.B) of the Rule Book), Omnibus Segregated Accounts (Article 43.I.C of the Rule Book), Indirect Clearing Omnibus Segregated Account (Article 43.I.D) of the Rule Book) and Indirect Clearing Gross Omnibus Segregated Account (Article 43.I.E) of the Rule Book) the Rule Book establishes the mechanisms for transferring or close-out netting Positions and collateral – in accordance with the provisions of EMIR and enhancing regulation. BME CLEARING, at the request of each client, will try to transfer the client accounts to other clearing or non-clearing members, designated by each client, after previously informing the CNMV. To perform such transfer, agreement between the Member or Members to which the accounts shall be

transferred and the customers whose accounts are to be transferred is required. The collateral corresponding to these accounts will also be transferred.

In the event that the Defaulting Member is a Non Clearing Member, the Rule Book also establishes the mechanisms for transferring or close-out netting Positions and collateral of the clients held in the different accounts that the Non Clearing Member can manage: Individual Segregated Accounts (Agency model) (Article 43.II.B) of the Rule Book), Indirect Clearing Omnibus Segregated Account (Article 43.II.C) of the Rule Book) and Indirect Clearing Gross Omnibus Segregated Account (Article 43.II.D) of the Rule Book). After reporting the situation to the CNMV, BME CLEARING will transfer these accounts to the General Clearing Member who shall be obliged to accept them.

**Q.14.1.3. If the CCP serves a cash market and does not provide segregation arrangements, how does the CCP achieve protection of customers' assets?**

This does not apply to BME CLEARING, as it has segregation arrangements in place.

Has the CCP evaluated whether the applicable legal or regulatory framework achieves the same degree of protection and efficiency for customers that would otherwise be achieved by segregation and portability arrangements?

The regulatory framework applied by BME CLEARING is based on segregation and portability arrangements as described in the questions above.

### Customer protection from participant and fellow customer default

**Q.14.1.4. If the CCP offers additional protection to customers to protect their positions and collateral against the concurrent default of the participant and a fellow customer, how does the CCP ensure that such protection is effective?**

As explained, Clearing Members' positions and collateral are registered in the corresponding Proprietary Accounts of the Central Register managed by BME CLEARING segregated from clients' assets and positions. Assets and positions held on behalf of clients in ISAs are segregated from those belonging to other clients (Article 23 of the Rule Book). Positions and collateral held by Members on behalf of clients opting for omnibus segregation are reflected in the Central Register through the Omnibus Segregated Accounts (Article 21 of the Rule Book) and, where the General Conditions require the maintenance of this type of account for a particular Segment of the CCP, the positions and collateral of the clients are simultaneously registered in Second-Tier Register Accounts (article 24 of the Rule Book) managed by the Members Carrying a Second-Tier Register, which must be in agreement with the corresponding OSAs of the Central Register,

In light of the aforementioned, Members' Positions and assets and those of their clients are fully separated.

Clearing Members must post collateral to cover the required margins directly with BME CLEARING and in its favour; Non-Clearing Members shall post collateral to cover the required margins in favour of BME CLEARING but through their General Clearing Member; and clients that are holders of an ISA Agency, an Indirect Clearing OSA or an Indirect Clearing GOSA shall post collateral in favour of BME CLEARING but through the Member through which they have opened their account. Members must keep a separate record of the collateral posted by Non-Clearing Members and clients through them in favour of BME CLEARING. Besides, in accordance with articles 31 of the Rule Book, is those cases where the General Conditions so establish for a particular Segment of the CCP, Members holding those accounts must require margins from their clients holding Second-Tier Register Accounts and from clients of an ISA PtoP, and those clients are obliged to post the collateral before and in favour of the Member.

Collateral will only be liable vis-à-vis BME CLEARING or vis-à-vis the member on whose favour they were posted and only with regards to the obligations arising from the registered trades towards BME CLEARING or the member, as applicable (Article 109.3 of the Securities Market Act and Articles 30.1 and 31.1 of the Rule Book).

The structure of BME CLEARING's accounts described in the previous sections enables Clearing Members to separate in their accounts, in both the Central Register managed by BME CLEARING and the accounts in the Second-Tier Register that they manage as Member Carrying a Second-Tier Register, their assets and Positions from those held on behalf of their clients.

### Legal basis.

#### **Q.14.1.5. What evidence is there that the legal basis provides a high degree of assurance that it will support the CCP's arrangements to protect and transfer the positions and collateral of a participant's customers?**

The Legal Department identifies issues resulting from the presence of a foreign element in the legal relationships of the CCP (i.e.: nationality of participants, cross-border margins) and carries out a complete analysis of the relevant material legal aspects deriving thereof. Furthermore, independent legal opinions have been obtained, when necessary, in order to ascertain the validity and enforceability of BME CLEARING provisions (cross-border margins).

BME CLEARING has a founded, clear, transparent and enforceable legal framework for each relevant aspect of its activities, being the most relevant legal provisions as follows: i) EMIR and implementing regulations; ii) Securities Market Act, which consolidated text was approved by Royal Legislative Decree 4/2015 of 23 October, Articles 103 to 113; iii) Royal Decree 827/2017, of September 1<sup>st</sup> modifying RD 878/2015, of 2 October; iv) Act 41/1999, of 12 November, on the securities payment and settlement systems (which transposes into national Law the provisions of Directive 98/26/EC, of 19 May 1998 on settlement finality in payment and securities settlement systems); and v) Royal Decree-Law 5/2005 of 11 March, on urgent reforms to encourage, among others, productivity and improve public procurement (which transposes into national Law the Directive 2002/47/EC of 6 June 2002, on financial collateral arrangements).

BME CLEARING's activities as a CCP are detailed in its Rule Book and the General Conditions which have the status of order and discipline regulation of the Securities Market. Members and clients expressly accept the exclusive submission to Spanish Laws and to BME CLEARING rules and regulations, including regulations on segregation and portability, by means of the corresponding contractual relationship with the Member.

Therefore, except where expressly mentioned in relation to, in particular, cross border margins, the rights and obligations arising for the parties from BME CLEARING provisions on segregation and portability are governed by Spanish Law, which is the Law applicable (Article 14 of Regulation (EC) No 593/2008).

In addition to the provisions of EMIR, the Spanish Securities Market Act (Article 109.3) establishes the legal basis for segregation and portability. The collateral provided by the members and clients in accordance with the Rule Book in connection with any transactions shall be valid only vis-à-vis the entities in whose favour it was provided and only for the obligations deriving from such transactions (legal segregation). In addition to this provision, Article 14 of Act 41/1999 also states that the cash and securities provided as collateral can only be used to fulfil the secured obligations, even in the event insolvency proceedings are opened.

BME CLEARING regime is recognized as a system for the purposes of the already mentioned Act 41/1999. Further, Article 8 of Directive 98/26/CE sets out that, in the event of insolvency proceedings being opened against the system operator or 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. A similar provision is included in Article 15.1 of Act 41/1999. Therefore, in the event of insolvency of Clearing Members, the rights and obligations that arise from BME CLEARING provisions, including segregation and portability provisions, shall be governed by Spanish Laws.

Q.14.1.6 What analysis has the CCP conducted regarding the enforceability of its customer segregation and portability arrangements, including with respect to any foreign or remote participants?

**In particular, which foreign laws has the CCP determined to be relevant to its ability to segregate or transfer customer positions and collateral?**

BME CLEARING has more than 20 years' experience in calculating margins and managing the positions of individual clients on a segregated basis, for both domestic and foreign Members.

The relevant jurisdiction for all the foregoing aspects is the Spanish jurisdiction, whose laws are exclusively applicable, except as indicated below.

With respect to forms of posting margins, BME CLEARING has envisaged in its Circulars the possibility of posting collateral in the form of sovereign public debt registered in Clearstream Banking Luxembourg, Société Anonyme (CBL) and in Euroclear Bank SA/NV (EUROCLEAR) by means of transfer title or pledge, as the case may be or through their respective collateral Management Services. Legal, material and procedural aspects relating to the posting of such collateral are subject to the law of Luxembourg and the law of Belgium, as the case may be.

**How have any identified issues been addressed?**

To mitigate the legal risk deriving from being subject to different legal frameworks, legal opinions were sought from a Luxembourg law firm (for CBL) and a Belgian law firm (for EUROCLEAR). These legal opinions were monitored by BME CLEARING's Legal Department.

Additionally, BME CLEARING has independent legal opinions on the validity and applicability of CCP regulation in the Spanish, French and English jurisdictions in relation to the following matters: Membership, Insolvency, Security, set-off, Setting and clients' accounts.

Key consideration 2: A CCP should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer accounts or in omnibus customer accounts.

**Q.14.2.1. How does the CCP segregate a participant's customers' positions and related collateral from the participant's positions and collateral?**

The structure of BME CLEARING's accounts described in the previous sections enables Members to separate in their accounts their assets and positions from those held on behalf of their clients.

What type of account structure (individual or omnibus) does the CCP use for the positions and related collateral of participants' customers?

BME CLEARING offers the following levels of segregation in compliance with EMIR and enhancing regulation.

**1. CLIENTS' INDIVIDUAL SEGREGATION**

**a) INDIVIDUAL SEGREGATED ACCOUNT (AGENCY MODEL)**

- Any individual or legal entity can hold an Individual Segregated Account (Agency model) in the Central Register managed by BME CLEARING; holders of this type of account are direct counterparties of BME CLEARING;
- Positions are netted in the Central Register managed by BME CLEARING;
- collateral posted in favour of BME CLEARING through Clearing Members are fully segregated at all times from collateral in any other account including a Member's Proprietary Account;



- If a Member decides to close the Individual Segregated Account (Agency model) due to the client defaulting, the outstanding balance will be repaid to the client through the insolvency administrator, and receivables must be assumed by the Member;
- Members can manage as many ISAs (agency model) as they wish; and
- In case of default of the client, its Member shall be jointly and severally liable with the client to BME CLEARING.

#### b) INDIVIDUAL SEGREGATED ACCOUNT (PRINCIPAL TO PRINCIPAL MODEL)

- Members are the holders of this type of account;
- Any individual or legal entity can request its Member to open an Individual Segregated Account (Principal to principal model) in the Central Register managed by BME CLEARING;
- Clients are direct counterparties of their Members;
- Positions are netted in the Central Register managed by BME CLEARING;
- Collateral posted in favour of BME CLEARING by the Member are fully segregated at all times from collateral in any other account including a Member's Proprietary Account.
- If so required by the General Conditions for a particular Segment of the CCP, clients must post collateral in favour of Member accountholder.
- If a Member decides to close the Individual Segregated Account (Principal to principal model) due to the client defaulting, the outstanding balance will be repaid to the Member, for the account of the client; Receivables must be assumed by the Member.
- Members can manage as many ISAs (Principal to principal model) as they wish; and
- In case of default of the client, its Member shall be directly liable to BME CLEARING.

## 2. CLIENTS' OMNIBUS SEGREGATION

### OMNIBUS SEGREGATED ACCOUNT

- Numerous clients in an account held by a Member. Clients in this type of account are not direct counterparties of BME CLEARING. The Member accountholder is their counterparty;
- Gross positions are posted in the Central Register managed by BME CLEARING, although margins are calculated using the resulting net position;
- Collateral posted in favour of BME CLEARING by the Member holding the accounts, are fully segregated at all times from margins in any other account including a Member's Proprietary Account;
- If so required by the General Conditions for a particular Segment of the CCP, Members must carry Second-Tier Register Accounts in relation to every Omnibus Segregated Account for the registration of the trades and margins of each client and may require clients to post margins in favour of the Member.
- If a Member defaults and BME CLEARING decides to close the Omnibus Segregated Account, the outstanding balance will be repaid to the Member through the insolvency administrator, for the account of the clients. Receivables must be assumed by the Member and the CCP reserves the right to take any pertinent action against the Member to recover any balances receivable resulting from the closure of the account; and



- Each Member may hold as many Omnibus Segregated Accounts as it wishes; and since clients do not have a direct relationship with BME CLEARING, Members can arrange their legal affairs with clients in a different manner. Clients can therefore be grouped under different criteria (e.g. CASS clients, TTCA clients, etc.)

Besides, and as explained above, BME CLEARING offers several types of Indirect Clearing accounts (Indirect Clearing OSA and Indirect Clearing GOSA) in which trades, positions, margins and collateral held on behalf of indirect clients are recorded.

#### **What is the rationale for this choice?**

BME CLEARING offers such levels of segregation in compliance with Article 39 of EMIR and enhancing regulation.

#### **Q.14.2.2. If the CCP holds collateral supporting customers' positions, what does this collateral cover (for example, initial margin or variation margin requirements)?**

The collateral posted supporting client's positions cover the risks associated with positions of each account, and covers the initial margin and variation margin pending, to be settled at the end-of-day.

#### **Q.14.2.3. Does the CCP rely on the participant's records containing the sub-accounting for individual customers to ascertain each customer's interest?**

BME CLEARING operates according to the book entries made in accounts opened at the Central Register. The same information must also be reflected in the Second-Tier Register run by Members holding Omnibus Segregated Accounts (Article 24 of the Rule Book). Therefore, trades made by clients who have an account opened in the Second-Tier Register shall be entered in the corresponding Omnibus Segregated account of the Central Register and, simultaneously, in the corresponding account of the Second-Tier Register.

#### **If so, how does the CCP ensure that it has access to this information?**

The information registered in the Central Register must at all times coincide with the information held by each Member in its Second-Tier Register. In accordance with BME CLEARING's Rule Book (Article 24 of the Rule Book) and with Circular on Members with the capacity to run a Second-Tier Register, the latter must have the capacity to report to BME CLEARING the identity of each account in their Second-Tier Register and the transactions, open positions, settlements, and deposited and required collateral corresponding to each account.

The objective is for the CCP to be able to maintain the required correspondence between accounts in Central Register and accounts in the Second-Tier Register.

#### **Are customer margins obtained by the CCP from its participants collected on a gross or net basis?**

Except for those cases where the General Conditions set out particular rules for a certain Segment, the margins required for each account are collected on a net basis.

#### **To what extent is a customer's collateral exposed to "fellow customer risk"?**

No individual segregated account in the CCP's Central Register is exposed to risk from any other account and by extension neither is any of its deposited collateral. However, for OSAs, fellow client risk does exist for collateral posted by clients with positions and collateral within the same omnibus account.

**Key consideration 3: A CCP should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.**

**Q.14.3.1. How do the CCP's portability arrangements make it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants?**

Portability arrangements are activated provided there is no excessive risk for BME CLEARING. The measures adopted by BME CLEARING to make the transfer of accounts viable are the following:

- Priority will be given to accounts showing losses.
- If there are large open positions, accounts are separated into accounts with a significant open position and retail accounts. While the former will be transferred where possible, the latter will not be transferred and will therefore be netted and closed.
- The transfer of omnibus segregated accounts' positions shall be considered, together with the segregated accounts in the Second-Tier Register and the collateral corresponding to each of these accounts.
- BME CLEARING will contact the holders of the individual accounts before transferring them.

**Q.14.3.2. How does the CCP obtain the consent of the participant(s) to which positions and collateral are to be ported?**

In the event of Default of a Non-Clearing Member who holds ISAs (Agency Model), BME CLEARING, shall transfer, previously informing the CNMV thereof, such Accounts to its General Clearing Member which shall be obliged to accept them. The General Clearing Member and the Defaulting Non-Clearing Member shall inform the latter's clients of the situation, indicating the General Clearing Member to which the transfer shall be made, by any usual means of communication. Transfer of the Accounts to the new General Clearing Member shall involve transfer of the collateral corresponding to the clients holding such Accounts.

In the event of Default by a Clearing Member holding ISAs and Omnibus Segregated Accounts, BME CLEARING, previously informing the CNMV thereof, shall manage, at the request of the clients, the transfer of the ISAs, and OSAs and, if applicable, of the corresponding Second-Tier Register Accounts, together with the collateral corresponding to such Accounts, to another Clearing Members, designated by the clients with ISAs, or by the group of clients within the Omnibus Segregated Accounts, holders of Second-Tier Register Accounts. To perform such transfer, agreement between the Member or Members to which the ISAs, OSAs and related Second-Tier Register Accounts and the relevant collateral shall be transferred and the clients whose Accounts are to be transferred shall be required. The General Conditions which, for certain CCP Segments, had established specific rules in relation to the requirement of keeping of Second-Tier Registers in respect of the Omnibus Segregated Accounts, or in relation to the requirement of margins from the Second-Tier Register clients, may stipulate additional conditions to transfer Accounts.

BME CLEARING shall inform interested Members of the situation and of its intention to transfer the Accounts, with indication of the Members to which they would be transferred, by any usual means of communication. The clients and Non-Clearing Members shall be informed by the Member to which the Accounts are transferred.

Are the consent procedures set out in the CCP's rules, policies or procedures? If so, please describe them.

Article 43 of the Rule Book describes the different scenarios in which positions may be transferred.

In addition, the Default Management Protocol contains the protocol dictating what action and measures to take, under articles 38 and subsequent of the Rule Book, in the event of a Member default.

**If there are any exceptions, how are they disclosed?**

Any exceptions to these procedures will be reported to the CNMV and other Competent Authorities where applicable.

**Key consideration 4: A CCP should disclose its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the CCP should disclose whether customer collateral is protected on an individual or omnibus basis. In addition, a CCP should disclose any constraints, such as legal or operational constraints, that may impair its ability to segregate or port a participant's customers' positions and related collateral.**

**Q.14.4.1. How does the CCP disclose its segregation and portability arrangements?**

All documents on segregation and portability mentioned in this Principle are in the private domain and available on BME CLEARING'S website under the Regulations section. Furthermore, a disclosure document on segregation and portability stating the costs and level of protection associated with each level of segregation is available in our web site under the Account Structure section as mandated by article 39.7 of EMIR.

**Does the disclosure include whether a participant's customers' collateral is protected on an individual or omnibus basis?**

Yes.

**Q.14.4.2. Where and how are the risks, costs and uncertainties associated with the CCP's segregation and portability arrangements identified and disclosed?**

Article 43 of BME CLEARING'S Rule Book describes the different cases that may arise in respect of closing out positions and transferring accounts in a situation of declaration of default. Additionally, article 45 specifies the corresponding settlements of costs, expenses and balances. In this respect,

- The main costs and risks to be considered are those relating to the inability of transferring a position and the subsequent need to settle this position, with the result that the collateral posted in the account in question is not sufficient to cover the cost of closing out the position.
- Another major risk relating to portability caused by default relates to market performance. If movements are sharp and in the opposite direction to the sign of a specific position, the risks and costs described above are accentuated.
- Another risk facing BME CLEARING is the possibility of not being able to contact a client to manage its position in the event of participant default. This risk is clearly higher for OSAs where the identification of each client lies with the participant.

In any risk situation, BME CLEARING may first contact the CNMV or any other competent authority if necessary. A disclosure document on segregation and portability stating the costs and level of protection associated with each level of segregation is available in our web site under the Account Structure section as mandated by article 39.7 of EMIR.

**How does the CCP disclose any constraints (such as legal or operational) that may impair the CCP's ability to fully segregate or port a participant's customers' positions and collateral?**

First, BME CLEARING will inform the CNMV of the situation by telephone. Subsequently, BME CLEARING will contact any clients and Participants that could be affected by telephone or e-mail.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING has been using an account structure in which all final clients of each direct CCP participant are fully identified, for more than 20 years. This allows any default to be efficiently managed, either by transferring each client's positions and collateral or closing out these positions. In any case, BME CLEARING will always be able to guarantee that the collateral deposited by a final client duly identified in the Central Register is protected against default by any client or Member.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 14 on Segregation and Portability without any type of limit or restriction.

## PRINCIPLE 15: GENERAL BUSINESS RISK

***An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.***

### Summary narrative

Business risk referred to in Article 5 of Commission Delegated Regulation 152/2013 (Capital requirements for BUSINESS RISK) expressly refers to the risk assumed by a CCP due to its efficiency and potential changes in general business conditions which are likely to impair its financial position as a consequence of a decline in its revenues or an increase in its expenses resulting in a loss that must be charged against its capital.

The business risks considered by BME CLEARING are the following:

- Revenue concentration risk
- Economic risk
- Reputational risk
- Regulatory and compliance risk
- Technological obsolescence risk

Article 5 of Commission Delegated Regulation 152/2013 establishes that the capital requirement for business risk shall be equal to the approved BME CLEARING estimate of Capital necessary to cover losses and shall be subject to a minimum amount of 25% of its annual gross operating expenses.

BME CLEARING continually monitors and manages its business risk and calculates “What If” scenarios.

BME CLEARING holds liquid net assets funded by equity so that it can continue operations as a going concern if it incurs general business losses.

Finally, BME CLEARING’s equity investment policy is very conservative. It invests its Equity, if applicable, in overnight repos which can easily be converted into cash.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.**

### **Participant-default rules and procedures**

#### **Q.15.1.1. How does the FMI identify its general business risks?**

BME CLEARING is part of the BME Group. Integrated risk management at BME affects the entire company which is why risk management has been adapted to its organisational structure and corporate culture.

Risk control and management policy, laid down by the Board of Directors and managed by the Management Committee, falls to be implemented by the BME's Risk Committee in its capacity as the body responsible for monitoring and analysing the risks arising from the various activities carried on by the Group companies in the framework of a scheme of management coordinated through Business Units and Corporate Areas. BME's Risk Committee is also responsible for producing the corporate Risk Map, subsequently to be maintained by the various officers responsible for managing identified risks and by the Internal Audit Department.

BME's Risk Committee has constructed an Integrated Risk Management System (IRMS) following the methodological framework specified in the COSO II paper. Therefore, the process of identifying, assessing, managing and monitoring risk adheres to the principles of the COSO II paper.

What general business risks has the FMI identified?

The business risks considered most significantly adverse in relation to BME CLEARING's business model and reasonably foreseeable for the company are the following:

- Revenue concentration risk:
  - Due to concentration of underlyings: concentration of revenues in specific underlyings.
  - Due to concentration of clearing firms: concentration of significant clearing firms; risk of key Clearing Members exiting the CCP.
- Economic risk: It can be separated into two main risk subgenres:
  - Competition risk: potential impact of another company entering the market or gaining business power in the sector.
  - Environment risk: potential impact of general economic negative scenarios such as a declining gross domestic product or ongoing recessions.
- Reputational risk. Counterparty and operational risks or the failure to adhere to international standards may result in BME CLEARING's reputation being seriously damaged or its Members may decide to leave or reduce their activity at the CCP. Furthermore, a campaign focused on improving the company's reputational risk could cause an increase in reasonable expenses.
- Regulatory and compliance risk. This occurs when any international or domestic regulatory changes reduce BME CLEARING's competitiveness.
- Technological obsolescence risk: risk of expenses being increased due to a necessity of keeping up with technological progress, such as software replacing or updating.

**Q.15.1.2. How does the FMI monitor and manage its general business risks on an ongoing basis?**

BME CLEARING continually monitors and manages its business risk and calculates "What If" scenarios, as follows:

- Revenue concentration risk:

- Due to concentration of underlyings: Pertinent Business Risks are classified according to underlyings that generate most business for BME CLEARING. The “What If” factor applied is the destruction of 100% of the business generated by each underlying.
- Due to concentration of clearing firms: Pertinent Business Risks are classified according to the clearing firms that generate most business for BME CLEARING. This concentration has been stable for the last three years at least. The “What If” factor applied is the destruction of 100% of the business generated by each clearing firm.
- Economic risk:
  - Competition risk: An estimation of a 20% reduction in business due to this concept is considered.
  - Environment risk: An annual business loss of 12.5% in the business model as a result of this concept is included.
- Reputational risk. BME CLEARING estimates the reasonable cost of an image campaign to revive the company’s reputation after a system failure, even though the probability of an event of this nature occurring was 0.10% (and therefore it was fairly unforeseeable).
- Regulatory and compliance risk. The Legal Department, the Compliance Department and BME CLEARING senior management closely monitor all international and domestic legal developments. On the basis of international experiences currently underway (e.g. France, Italy...) we have estimated a 20% business loss due to regulatory changes leading to the levy of fees or taxes on derivatives trading.
- Technological obsolescence risk: BME CLEARING estimates the reasonable increase in expenses required to overcome eventual technological deficiencies as the annual amortization charge on purchases made or the development of specific software. The closest indications for an estimate relate to the sale of BME software items in various countries.

**Key consideration 2: An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.**

**Q.15.2.1. Does the FMI hold liquid net assets funded by equity so that it can continue operations and services as a going concern if it incurs general business losses?**

BME CLEARING business risk is covered by part of BME CLEARING capital, held in liquid net assets.

**Q.15.2.2. How does the FMI calculate the amount of liquid net assets funded by equity to cover its general business risks?**

After running the “what if” scenarios mentioned in answer to Q.15.1.2, risk estimated is covered by the minimum capital requirement set at 25% of gross operating expenses, which is taken into account by BME CLEARING.

**How does the FMI determine the length of time and associated operating costs of achieving a recovery or orderly wind-down of critical operations and services?**

Looking at the maturity structure of BME CLEARING's CCP as a whole and its total exposure to each maturity, BME CLEARING estimates a time span of six months for winding down or restructuring its activities.

**Key consideration 3: An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.**

**Recovery or orderly wind-down plan**

**Q.15.3.1. Has the FMI developed a plan to achieve a recovery or orderly wind-down, as appropriate? If so, what does this plan take into consideration (for example, the operational, technological and legal requirements for participants to establish and move to an alternative arrangement)?**

BME CLEARING Rule Book includes new recovery tools and has procedures in place for an orderly wind-down. Additionally, BME CLEARING has in place a recovery or orderly wind-down plan, in line with the EACH work in that subject, expecting that an international consensus on procedures would be also eventually reached.

**Resources**

**Q.15.3.2. What amount of liquid net assets funded by equity is the FMI holding for purposes of implementing this plan? How does the FMI determine whether this amount is sufficient for such implementation? Is this amount at a minimum equal to six months of the FMI's current operating expenses?**

BME CLEARING's Equity, held in liquid net assets, represents more than 3 times the regulatory capital required by Art.16 of EMIR, which covers an orderly wind-down, general business risk, operational risks as well as market, credit and counterparty risks. Therefore, BME CLEARING, in compliance with the EMIR Regulation (EU) 648/2012, 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.

**Q.15.3.3. How are the resources designated to cover business risks and losses separated from resources designated to cover participant defaults or other risks covered under the financial resources principles?**

According to EMIR requirements in Art.16 and Art.45, BME CLEARING's Equity covers:

- business risks and losses
- participant defaults ("skin-in-the game")
- other risks covered under the financial resources principles

As Article 2.4 of Commission Delegated Regulation (EU) No 152/2013 states that "CCPs shall use the most recent audited information from their annual financial statement", the estimate for annual revenues and expenses shall



only replace the most recent audited information in the annual financial statements if it gives rise to higher capital requirements.

Therefore, the level of capital required under Regulation 648/2012 is monitored weekly, and capital required to cover each risk is calculated on a monthly basis, from the most recent BME CLEARING's financial statements.

**Q.15.3.4. Does the FMI include equity held under international risk-based capital standards to cover general business risks?**

BME CLEARING holds enough Equity according to EMIR (Art.16).

**Key consideration 4: Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.**

**Q.15.4.1. What is the composition of the FMI's liquid net assets funded by equity?**

In 31 August 2019, BME CLEARING had net Equity totalling €44.22 million, from which €5.5 million corresponds to the BME CLEARING's skin-in-the-game.

How will the FMI convert these assets as needed into cash at little or no loss of value in adverse market conditions?

BME CLEARING has a very conservative policy which focuses closely on the immediate liquidity of its cash investments. Part of its total net assets, in €, are invested in overnight repos which can be practically considered as cash.

**Q.15.4.2. How does the FMI regularly assess the quality and liquidity of its liquid net assets funded by equity to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions?**

BME CLEARING invests its Equity in overnight repos of Spanish Sovereign Debt. BME CLEARING believes that these investments are of a high quality and highly liquid. There is no doubt that these liquid net assets could meet current and projected operating expenses under a range of scenarios, including in adverse market conditions.

**Key consideration 5: An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.**

**Q.15.5.1. Has the FMI developed a plan to raise additional equity?**

BME CLEARING has not developed a plan to raise additional equity.

However, BME CLEARING is a fully-owned subsidiary of the BME Group "Bolsas y Mercados Españoles" <http://www.bolsasymercados.es/>. At 31 December 2018, the BME Group had net Equity of €399.2 million. Should the Board decide that BME CLEARING needed additional Equity the obvious move would be to request this from its parent company, which as we have seen, has sufficient liquid assets for such a purpose.

What are the main features of the FMI's plan to raise additional equity should its equity fall close to or fall below the amount needed?

See our response to the previous question. As we have stated on various occasions in our responses to this Principle, BME CLEARING's Capital, largely comprising liquid net assets, is significantly greater than the EBA's capital requirements.

**Q.15.5.2. How frequently is the plan to raise additional equity reviewed and updated?**

See response to question Q.15.5.1.

**Q.15.5.3. What is the role of the FMI's board (or equivalent) in reviewing and approving the FMI's plan to raise additional equity if needed?**

See response to question Q.15.5.1.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING identifies as well as monitors and manages general business risk constantly by using various management control instruments.

BME CLEARING holds sufficient liquid net assets funded by Equity which are sufficient to guarantee a recovery or orderly wind-down of its operations.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 15 on General Business Risk without any type of limit or restriction.

## PRINCIPLE 16: CUSTODY AND INVESTMENT RISKS

***An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.***

### Summary narrative

BME CLEARING doesn't use custodian banks. Only the Spanish CSD, IBERCLEAR, and European renowned ICSDs, EUROCLEAR and CBL.

BME CLEARING follows a conservative investment strategy. The funds are posted in cash in the CCP's cash account in TARGET2-Banco de España or invested in financial instruments with low credit and market risks. BME CLEARING uses an account strictly for its own resources and another one for collateral or third-party funds.

Clearing Members have discretion regarding investing or keeping the cash in the CCP's third-party account. To this end, BME CLEARING shall invest the Collateral posted 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.

The CCP has no funds (own or third-party) posted in commercial banks.

Most of the CCP's financial resources, which consist of margin collateral required to Members, and provided by them in cash, may be invested in repos of Spanish sovereign debt or in sovereign debt of other euro area countries (Germany, France, the Netherlands, Austria, Belgium, Italy and Portugal) with a high solvency; 1 day, normally overnight; and with counterparties also with a high solvency level. BME CLEARING has a standard ISDA GMRA contract that it signs with counterparties to the investments.

Investment of cash collateral, currently in Spanish sovereign debt repos in IBERCLEAR is performed as outlined in the "Investment of cash margins" section in the "Posting of Margins" Circulars.

The criteria limiting the investment with each counterparty is established by Circular. These limits may be exceeded only with express authorisation by the CCP or because the cash invested in the counterparty corresponds to its own cash collateral posted as a Clearing Member.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.**

#### **Q.16.1.1. If the FMI uses custodians, how does the FMI select its custodians?**

BME CLEARING doesn't use custodian banks. Only the Spanish CSD, IBERCLEAR, and European renowned ICSDs, EUROCLEAR and CBL.

**What are the specific selection criteria the FMI uses, including supervision and regulation of these entities?**

BME CLEARING requires that all the systems managed by these entities are sufficiently well-designed and operationally flexible, to mitigate any type of risk. BME CLEARING ensures that ICSDs have a sound legal basis by verifying that they are duly supervised and regulated. BME CLEARING also requires a legal opinion, which it obtains to have greater legal security. As for creditworthiness, BME CLEARING does not use any depository with a low solvency level.

**How does the FMI monitor the custodians' adherence to these criteria?**

In terms of operational flexibility, BME CLEARING oversees that the daily processes established with the depositories are stable and robust and do not lead to errors. On the legal front, once the abovementioned legal opinion is requested, BME CLEARING does not apply any other regular control. With the legal opinion, it considers that the ICSDs have sound legal basis. Lastly, BME CLEARING checks solvency levels regularly.

**Q.16.1.2. How does the FMI verify that these entities have robust accounting practices, safekeeping procedures, and internal controls that fully protect its and its participants' assets?**

The three Central Securities Depositories that BME CLEARING uses (IBERCLEAR, CBL and EUROCLEAR) have high solvency level, are highly supervised and regulated under the European legislation and have proven experience and solid renowned infrastructures.

**Key consideration 2: An FMI should have prompt access to its assets and the assets provided by participants, when required.**

**Q.16.2.1. How has the FMI established that it has a sound legal basis to support enforcement of its interest or ownership rights in assets held in custody?**

According to the legal opinions obtained by BME CLEARING, Luxembourgish law guarantees protection of the rights acquired by BME CLEARING over securities received through title of transfer instructions, or pledged in its favour in CBL in the event of a Member's insolvency. Same as for Belgian law about the securities posted in EUROCLEAR.

**Q.16.2.2. How does the FMI ensure that it has prompt access to its assets, including securities that are held with a custodian in another time zone or legal jurisdiction, in the event of participant default?**

Spanish, Luxembourgish and Belgian law guarantee that there are no impediments to enforcement of pledged securities.

Time zones do not pose any problem for BME CLEARING, as both countries where the operational management of the two ICSDs is located are in the same time zone as Spain. In addition, the two depositories have different settlement cycles during the day. This allows the enforcement of collateral to be carried out in a timely manner.

**Key consideration 3: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.**

**Q.16.3.1. How does the FMI evaluate and understand its exposures to its custodian banks?**

BME CLEARING doesn't have any exposures with custodian banks.

**In managing those exposures, how does it take into account the full scope of its relationship with each custodian bank? For instance, does the FMI use multiple custodians for the safekeeping of its assets to diversify exposure to any single custodian?**

See previous response.

**How does the FMI monitor concentration of risk exposures to its custodian banks?**

See previous response.

**Key consideration 4: An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.**

### Investment strategy

**Q.16.4.1. How does the FMI ensure that its investment strategy is consistent with its overall risk management strategy?**

The CCP follows a conservative investment strategy. Cash collateral provided by participants is invested in repos registered in BME CLEARING's securities account in IBERCLEAR. Clearing Members have discretion regarding investing or keeping the cash in the CCP's third-party account. BME CLEARING shall invest the Collateral posted 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.

In addition, BME CLEARING's Shareholders' Equity is also invested by using a conservative investment strategy.

**How and to whom does the FMI disclose its investment strategy?**

BME CLEARING discloses how it invests the cash collateral provided by Members as well as the maximum limit established for investment with each counterpart on its website and in the related "Posting of Margins" Circulars.

As it is established in that same Circular, when, in accordance with BME CLEARING's Regulations, the Member has not requested BME CLEARING to not invest the Cash Margins, BME CLEARING may invest cash margins by means of overnight re-purchase agreement transactions. If the Member requests BME CLEARING to not invest the cash margins posted, the cash is posted in BME CLEARING's margin account in the Eurosystem through TARGET2-Banco de España.

**Q.16.4.2. How does the FMI ensure on an ongoing basis that its investments are secured by, or are claims on, high-quality obligors?**

Investments in repos are made for one day and backed by highly liquid securities with low credit risk, in compliance with the requirements of article 47 of EMIR, after applying the corresponding haircuts to the investments collateral. The counterparties used are highly solvent, with a solvency level between S1 and S6, according to the Calculation of Shareholders' Equity and Solvency Circular. Depending on each firm's rating and Shareholders' Equity, the amount invested is limited.

## Risk characteristics of investments

### Q.16.4.3. How does the FMI consider its overall exposure to an obligor when choosing investments?

BME CLEARING uses several different counterparties to diversify its investments, thereby mitigating counterparty risk. In assessing its risk exposure and concentration, the CCP considers its exposure to a single Clearing Member, in a given residual maturity term of the same issuer, as the nominal volume of securities multiplied by the price, based on the sum of:

- The securities posted as collateral.
- The long net position in securities within the same residual maturity term, for those contracts belonging to the BME CLEARING's Fixed-income Securities segment.
- Securities posted in BME CLEARING's securities account with IBERCLEAR, received as a result of having invested part of the cash collateral provided in a sell/buy-back transaction with the Clearing Member.

### What investments are subject to limits to avoid concentration of credit risk exposures?

BME CLEARING establishes maximum limits on investment in repos with each counterparty based on the counterparty's creditworthiness and solvency.

The criteria limiting the investment with each counterparty are publicly disclosed by Circular:

- Minimum number of counterparties (at least four).
- Limit on percentage of the amount of invested collateral relative to the Shareholders' Equity of each counterparty to 10%.

These limits may be exceeded only with the express authorisation by the CCP or because the cash invested with the counterparty corresponds to its own cash collateral as a Clearing Member.

### Q.16.4.4. Does the FMI invest participant assets in the participants' own securities or those of its affiliates?

No. BME CLEARING invests in financial institutions and the assets are always Spanish debt securities (in the case of IBERCLEAR) and sovereign debt of other euro area countries (for both CBL and EUROCLEAR).

### Q.16.4.5. How does the FMI ensure that its investments allow for quick liquidation with little, if any, adverse price effect?

Firstly, BME CLEARING invests in overnight repos, which mitigates, almost completely, liquidity risk and market risk due to exposure to sharp, adverse movements in the value of the collateral exchanged in the investment. Moreover, the assets in which the repos are arranged are sovereign debt of the main euro area countries. Accordingly, issuer risk is also low.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING doesn't have any exposures with custodian banks. It only uses highly reliable securities depositories, which guarantee efficient management of the collateral provided by Members. BME CLEARING's investment policy for cash collateral is in line with prevailing regulations. In all cases, BME CLEARING can access the collateral posted promptly and efficiently, when required. Regarding cash collateral provided by Members, BME CLEARING's investment strategy is based on conservative criteria, pursuing high liquidity and low credit and counterparty risks.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 16 on Custody and Investment Risks without any type of limit or restriction.

## PRINCIPLE 17: OPERATIONAL RISK

***An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.***

### Summary narrative

BME CLEARING, authorized under EMIR as a CCP, has a sound and complete operational risk management system integrated in BME risk management system, and has clearly defined internal procedures to identify and manage its potential sources.

The main sources of operational risk at BME CLEARING come from errors in operational processes and system failures.

BME CLEARING reviews, audits and checks its systems, policies, procedures and controls through the Risk & Continuity Committee, with its participants through regular audits or due diligences; a test or simulation environment; by participating in an Incidents Committee with MEFF.

With basis on BME CLEARING's Business Continuity Policy, which is publicly available, the CCP has a Business Continuity Plan and a Disaster Recovery Plan aiming at protecting its employees, the funds of its members and the continuity of the business.

The Contingency Plan is reviewed at least annually.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.**

### **Identification of operational risk**

**Q.17.1.1. What are the FMI's policies and processes for identifying the plausible sources of operational risks? How do the FMI's processes identify plausible sources of operational risks, whether these risks arise from internal sources (for example, the arrangements of the system itself, including human resources), from the FMI's participants or from external sources?**

BME CLEARING policies and processes for identifying sources of operational risks have been approved by BME CLEARING Board, according to the framework established in BME Risk & Continuity Committee, which reports to and works with BME Management Committee in the application of the risk control and management policy.

Additionally, BME CLEARING Risk and Operations departments, its Executive Risk Committee and the Incidents Committee are responsible to identify and assess all possible sources of risks for the CCP and update the risk events inherent in operational processes.

Please, refer to Principles 2 and 3 for more in-depth information.



#### **Q.17.1.2. What sources of operational risks has the FMI identified?**

BME CLEARING has identified several sources of operational risk

- System failures
- Processes: execution and processing of operations (some processes cannot be fully automated)
- Internal fraud / External fraud
- Customers and third party suppliers
- Damage to tangible assets
- Security of the information. Cyber Risk.
- Legal risk

#### **What single points of failure in its operations has the FMI identified?**

The main factors that can cause operational failures in Clearing are: (1) Changes or updates to versions of BME CLEARING's clearing system; (2) Changes or updates to versions of the CCP's internal software (Margins, risk and settlement management systems); (3) Changes in risk parameters; (4) Management of Clearing operations (e.g. transfers of positions or transactions, corporate adjustments, etc.); (5) Failures in linked FMIs.

### **Management of operational risk**

#### **Q.17.1.3. How does the FMI monitor and manage the identified operational risks?**

BME CLEARING has a series of management controls:

- Corporate risk map that allows the identification and prioritization of risks
- Review in a regular basis of the risk analysis
- Regular monitoring of incidents recorded
- Internal audit supervises the efficacy of the risk control systems
- Information security framework, with clear policies, procedures and controls, and information security and cyber resilience training

There are also operational and oversight checklists, used daily to minimise operational errors. The CCP offers a simulation environment to Members so that they can test any significant changes in the system.

#### **Where are these systems, policies, procedures and controls documented?**

The CCP centralises a series of documents in a shared directory accessible to its entire staff. These documents consist of checklists of daily activities and the detail of all actions to be carried out by the CCP's personnel with respect to any of the department's risk or operational management processes.

Incidents record system allows to check the responsible to record each incident, the cause and impact of the incident, the areas or clients (internal or external) involved, and the state (completely solved or in progress).

## Policies, processes and controls

### **Q.17.1.4. What policies, processes and controls does the FMI employ that are designed to ensure that operational procedures are implemented appropriately?**

BME CLEARING reviews, audits and checks its systems, policies, procedures and controls with its participants as follows:

- Operational management and internal controls, as a simulation environment for internal staff and Members.
- BME CLEARING Incidents Committee, which assess any event that has occurred and outlines the steps to take to prevent or mitigate future incidents. Those incidents are reviewed in BME Risk & Continuity Committee. Representatives from each business area, and from the areas of Security, Compliance and Internal Audit participate in this Committee. Major incidents are also addressed by the Management Committee.
- Annual internal audits of operational risk.
- Annual external independent validation of its risk methodologies and models
- Due diligences with its Members, directly or through associations (AFME), and with regulatory bodies (Banco de España/ECB, CNMV/ESMA,...)

### **To what extent do the FMI's systems, policies, processes and controls take into consideration relevant international, national and industry-level operational risk management standards?**

BME CLEARING adopts a comprehensive risk management framework that encapsulates major regulatory directives and best practices like EMIR, CSDR, MiFID II, IOSCO, ISO – ASIS, CNPIC, NIS, etc., and with some of its Members takes part in the annual Disaster Recovery Test conducted by BME

### **Q.17.1.5. What are the FMI's human resources policies to hire, train and retain qualified personnel, and how do such policies mitigate the effects of high rates of personnel turnover or key-person risk?**

Hiring of employees entails personal interviews within BME CLEARING, psycho-technical tests and personal interviews conducted by specialists from BME human resources department and by the person in charge for the area involved. There are certain minimum knowledge and experience requirements. New hires in the CCP undergo training in their first months. An incentive-based scheme is also in place, which takes into consideration training hours undertaken and annual appraisals and exchange of views with the direct responsible.

### **How do the FMI's human resources and risk management policies address fraud prevention?**

BME CLEARING has physical and information security policies that address potential vulnerabilities and threats. Moreover, all BME CLEARING employees are subject to BME Group anti-fraud internal policies included in the Internal Regulations of Conduct.

### **Q.17.1.6. How do the FMI's change management and project management policies and processes mitigate the risks that changes and major projects inadvertently affect the smooth functioning of the system?**

To prevent any risk from a major change in the system, an Action Plan is carried out sufficiently in advance. Before it is put into practice, the Action Plan is tested internally in a testing environment that replicates the data and configuration of the production environment.

Once the Action Plan is implemented, Technology and Operations departments assign back-up personnel for the more conflicting times to resolve any unexpected incidents.

**Key consideration 2: An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.**

**Q.17.2.1. How has the board of directors defined the key roles and responsibilities for operational risk management?**

BME risk management governance ensures common focus applied across all BME companies. Accordingly, BME CLEARING Board of Directors has approved the operational risk framework aligned with BME, and both Chief Risk Officer and BME CLEARING Operations manager are members of BME CLEARING Executive Risk Committee and BME Risk & Continuity Committee.

Please refer to Principle 2 for more in-depth information.

**Q.17.2.2. Does the FMI's board explicitly review and endorse the FMI's operational risk management framework?**

The Board of Directors, through the EMIR Risk Committee and through the participation of the Chief Risk Officer and the Operations manager in the Risk & Continuity Committee, reviews and endorses the risk management framework.

**How frequently does the board review and endorse the FMI's operational risk management framework?**

It is permanently informed on any relevant issue and is responsible for making significant decisions concerning risk management. At least on an annual basis, through the Internal Audit department, both the controls in place and any residual operational risk are assessed by reviewing the activities included in the processes and preparing flowcharts, as well as risk and control matrices.

**Review, audit and testing**

**Q.17.2.3. How does the FMI review, audit and test its systems, policies, procedures and controls, including its operational risk management arrangements with participants? How frequently does the FMI conduct these reviews, audits and tests with participants?**

Please, see answer to Q.17.1.4.

**Q.17.2.4. To what extent, where relevant, is the FMI's operational risk management framework subject to external audit?**

An external independent validation is annually conducted for the risk methodologies and models, as a part of the annual review required by EMIR regulation.

The Risk & Continuity Committee works with an external auditor in order to assess and update the corporate risk map, one of the main tools of the operational risk management framework, in addition to BME annual audit conducted by an external auditor.

**Key consideration 3: An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.**

**Q.17.3.1. What are the FMI's operational reliability objectives, both qualitative and quantitative?**

BME CLEARING's main operational reliability target consist in offering Members a clearing service that is available at all times during trading and settlement hours, respectively, without delays or failures in the system that could cause information to be sent late or incorrectly.

The following risk management objectives have been established to achieve that goal, in accordance with the policies discussed in the Risk & Continuity Committee.

- A risk structure with a clear definition of decision makers, responsibilities, communication and escalation flows
- Methodology with clear and detailed criteria for risk assessment
- Availability of risk tools such (i) an incidents record system, with a clear relation between threat / risk and incidence, and (ii) a corporate risk map
- Business Continuity Plan and procedures, with updated BIAs and continuity scenarios, and regular execution of continuity tests
- Continuous monitoring of incidents and evaluation of risks through the Risk & Continuity Committee

**Where and how are they documented?**

All BME CLEARING's departments have written procedures not only for the critical services included in the BIA (Business Impact Analysis), but also for each process considered and performed, and timeframes during which they should be executed.

BME CLEARING's Business Continuity Policy is published on the CCP website.

**Q.17.3.2. How do these objectives ensure a high degree of operational reliability?**

On a daily basis, at the close of each business day, BME CLEARING's Operations department checks the accuracy of all data generated and sent to Members. On average, there are very few incidents, signalling sufficient operational reliability in the CCP's processes.

The evaluation of the different risk situations are carried out on a regular basis. Each risk is evaluated on its inherent basis and after application of measures and controls (residual)

At least once a year, the operational and technical BIAs are reviewed and updated,

Through the regular meetings of the Risk & Continuity Committee during the year, the incidents recorded, the evaluation of risks included in the risk map, and the updated BIAs are reviewed.

**Q.17.3.3. What are the policies in place that are designed to achieve the FMI's operational reliability objectives to ensure that the FMI takes appropriate action as needed?**

The Incidents Committee and the Risk & Continuity Committee are the Control Bodies for any potential incidents in BME CLEARING. They analyse and assess all incidents to prevent them from occurring again and to maximise operational reliability.

**Key consideration 4: An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.**

**Q.17.4.1. How does the FMI review, audit and test the scalability and adequacy of its capacity to handle, at a minimum, projected stress volumes? How frequently does the FMI conduct these reviews, audits and tests?**

Capacity tests are carried out whenever there are any changes in software/hardware. The system is subjected to regular stress volume tests.

**Q.17.4.2. How are situations where operational capacity is neared or exceeded addressed?**

BME CLEARING makes appropriate plans to adapt to any changes in the volume of business or technical requirements.

**Key consideration 5: An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.**

**Physical security**

**Q.17.5.1. What are the FMI's policies and processes, including change management and project management policies and processes, for addressing the plausible sources of physical vulnerabilities and threats on an ongoing basis?**

BME CLEARING, through the BME Security group, continuously address plausible sources of physical vulnerabilities and threats

Security group maintains the Emergency and Evacuation Plan and manages the technical resources required to detect disaster situations caused, deliberately or accidentally, by environmental or social phenomena.

An evacuation drill is carried out annually at each office.

**Q.17.5.2. Do the FMI's policies, processes, controls and testing appropriately take into consideration relevant international, national and industry-level standards for physical security?**

Yes, BME CLEARING complies with standards and is audited regularly in this respect.

## Information security

### **Q.17.5.3. What are the FMI's policies and processes, including change management and project management policies and processes, for addressing the plausible sources of information security vulnerabilities and threats on an ongoing basis?**

BME CLEARING, through the BME Security group,

- has an information security framework
- continuously address plausible sources of information security vulnerabilities and other kind of threats as cyber risk

The Information security framework includes policies about security, information security, access control and passwords, and it also includes procedures about vulnerability management, incident management, data center security, logical access media management and backup.

On cyber risk, Security group

- has identified a list of risks and has implemented controls related to external attacks, internal misuse and abuse, and theft,
- has promoted a cyber resilience strategy based on:
  - Information security quarterly reporting to the Board
  - Mandatory training and awareness for all the staff
  - Information Security Services Improvement: measures against ransomware and advanced persistent threats, Cyber Intelligence collect and sharing systems and specialized Training for SOC officers
  - Recovery: Software and data integrity checking procedures

### **Q.17.5.4. Do the FMI's policies, processes, controls and testing appropriately take into consideration relevant international, national and industry-level standards for information security?**

The ISO/IEC/IEEE 12207 standard, SWEBOK 2004 (Software Engineering Body of Knowledge of the IEEE) and new trends in agile development methodologies have been considered when designing the methodology covering software life cycles. Other more specific IEEE standards have been used when designing the testing and software verification processes.

Additionally, BME CLEARING information security framework complies with the requirements of the Directive on security of network and Information System (NIS), the Critical Infrastructures Protection Law, and the General Data Protection Regulation (GDPR)

Key consideration 6: An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.

### Objectives of business continuity plan

**Q.17.6.1. How and to what extent does the FMI's business continuity plan reflect objectives, policies and procedures that allow for the rapid recovery and timely resumption of critical operations following a wide-scale or major disruption?**

BME CLEARING's main commitment in a disaster situation is to protect its employees, the funds of its members, and the continuity of the business.

According to this and based on its Business Continuity Policy, BME CLEARING has drawn up a Business Continuity Plan and a Disaster Recovery Plan, and updates BIA at least once a year.

The Business Continuity Plan is periodically audited to verify its validity and compliance with current regulations in this area.

Audits are carried out by BME's Internal Audit department, counting when necessary with the collaboration of the corresponding technical team.

BME CLEARING continuity management system is included in the continuity structure BME, and takes into account the best practices for Continuity management systems implementation and continuous improvement, like ISO/IEC 22301 and ISO/IEC 22313.

The recovery point objective (RPO) in all scenarios coincides with the point at which the disruption occurs. The Recovery Time Objective (RTO) in most scenarios is 0 since network, system, connection, etc. redundancies are sufficient to achieve this. In certain instances, the RTO may depend on making certain decisions and manual action, but disruptions will never exceed two hours for critical CCP systems and services, in line with EMIR.

### Design of business continuity plan

**Q.17.6.2. How and to what extent is the FMI's business continuity plan designed to enable critical IT systems to resume operations within two hours following disruptive events, and to enable the FMI to facilitate or complete settlement by the end of the day even in extreme circumstances?**

Please see response to Q.17.6.1. Members must have at least two connection points. Members need at least two lines and the hardware provided by BME CLEARING is duplicated to prevent single disruption points.

**Q.17.6.3. How is the contingency plan designed to ensure that the status of all transactions can be identified in a timely manner, at the time of the disruption; and if there is a possibility of data loss, what are the procedures to deal with such loss (for example, reconciliation with participants or third parties)?**

Please see response to Q.17.6.1.

**Q.17.6.4. How do the FMI's crisis management procedures address the need for effective communications internally and with key external stakeholders and authorities?**

BME CLEARING has a Communications Management Plan to address such issues.

### Secondary site

**Q.17.6.5. How does the FMI's business continuity plan incorporate the use of a secondary site (including ensuring that the secondary site has sufficient resources, capabilities, functionalities and appropriate staffing arrangements)?**

There is a secondary site with the necessary capacity and resources to undertake all relevant functions of in the event of a disaster situation. Primary and secondary sites are double connected through different telecommunication providers.

**To what extent is the secondary site located a sufficient geographic distance from the primary site such that it has a distinct risk profile?**

The primary and secondary Data Processing Centres are located in different cities with different risk profile. There is a high-capacity and high-availability multi-fiber interconnection between them, allowing the Synchronous data replication of the systems.

**Q.17.6.6. Has the FMI considered alternative arrangements (such as manual, paper-based procedures or other alternatives) to allow the processing of time-critical transactions in extreme circumstances?**

The procedures in BME CLEARING's Contingency Plan consider alternative arrangements, i.e. manual entries, for processing transactions in extreme circumstances.

### Review and testing

**Q.17.6.7. How are the FMI's business continuity and contingency arrangements reviewed and tested, including with respect to scenarios related to wide-scale and major disruptions? How frequently are these arrangements reviewed and tested?**

New developments/changes in the system are incorporated in the related Contingency Plan for testing in the subsequent simulation, always assuming a wide-scale disruption.

The Contingency Plan is reviewed at least annually or earlier in the event of a change in operations or systems. It includes a detailed inventory of the technical resources (machines, applications and data) involved in the contingency, which are tested every one or two months.

Since 2018, BME CLEARING participates in BME Business Continuity annual test.

It is a plan test for all BME infrastructures and their respective members, for the next three years exercises.

The proposed exercises test the different continuity scenarios (such as main CPD loss, pandemic simulation and cyber-attack simulation) thus reviewing the suitability of the different parts and procedures of the BCP

The loss of the main CPD was simulated, having to recover the systems in the contingency center involving the members / clients of the services involved



The tests for 2018 & 2019 were successful and all the systems were recovered within the times established for each one of them

**Q.17.6.8. How does the review and testing of the FMI's business continuity and contingency arrangements involve the FMI's participants, critical service providers and linked FMIs as relevant? How frequently are the FMI's participants, critical service providers and linked FMIs involved in the review and testing?**

Please see response to Q.17.6.7

Additionally, BME CLEARING performs quarterly tests with Banco de España given the importance of its link for the settlement of credits/debits to Members.

**Key consideration 7: An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.**

#### **Risks to the FMI's own operations**

**Q.17.7.1. What risks has the FMI identified to its operations arising from its key participants, other FMIs, and service and utility providers? How and to what extent does the FMI monitor and manage these risks?**

BME CLEARING has a back-up system for each connection, based on the different risks identified for each FMI. Please refer to Principle 20 for further information.

**Q.17.7.2. If the FMI has outsourced services critical to its operations, how and to what extent does the FMI ensure that the operations of a critical service provider meet the same reliability and contingency requirements they would need to meet if they were provided internally?**

Use of internal testing environments has been crucial for verifying that all changes applied by any external provider work correctly within the CCP's technical and operational structure. At all times, thorough tests have been conducted to verify that implementation of the service does not prevent BME CLEARING's operations from performing normally whatsoever.

#### **Risks posed to other FMIs**

**Q.17.7.3. How and to what extent does the FMI identify, monitor and mitigate the risks it may pose to another FMI?**

BME CLEARING has mitigated its operational risks largely. Anyhow, BME CLEARING could pose an operational risk to Banco de España if daily multilateral settlement with BME CLEARING were not executed within the normal settlement period due to operational disruptions. In order to solve that situation BME CLEARING has contingency procedures.

**Q.17.7.4. To what extent does the FMI coordinate its business continuity arrangements with those of other interdependent FMIs?**

New developments or changes in the system that imply a service with another FMI are always incorporated into the corresponding BME CLEARING Business Continuity Plan and based on the level of criticality for BME CLEARING to operate as normal.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING has appropriate operational processes and controls to restore and provide continuity to its business and services, even in the event of any disaster that exposes its technical and/or human resources to risk. These policies are sufficiently documented and annually reviewed internally and validated by both internal and external auditors.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 17 on Operational Risk without any type of limit or restriction.

## PRINCIPLE 18 ACCESS AND PARTICIPATION REQUIREMENTS

***An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.***

### Summary narrative

BME CLEARING access requirements are transparent, non-discriminatory and based on objective criteria in order to guarantee open and equal access, as required by the Spanish Securities Market Act and EMIR (Article 37 Regulation (EU) 648/2012 - Participation Requirements).

The institutions that can become members of the CCP are heavily regulated and supervised by bodies that are the competent authorities of the firm's country of origin.

The participation criteria are established in the regulations published on BME CLEARING website. Pursuant to article 109 of the Securities Market Act, membership of a CCP is limited to certain kind of entities. According to article 3.1 of BME CLEARING's Rule Book, said entities that comply with the requirements set down in this Rule Book and corresponding Circulars are eligible to become Members of BME CLEARING. Membership applications shall be approved by the CCP Board of Directors.

Since there are different types of members, the criteria established for each one may be different in some cases, depending on the member's activity, but they are the same for every member category, and any firm that meets the explained requirements can become a member.

The General Conditions of each Segment may set forth specific terms in relation with Members' activities, depending on the Contract to which they refer. BME CLEARING may set forth pursuant to a Circular, other alternative margins and requirements instead of such minimum equity, which must provide an equivalent level of solvency, availability and financial security, keeping, in any case, a minimum equity requirement.

Article 3.4 of BME CLEARING's Rule Book establishes that Members must have and maintain the necessary technical and human resources required to operate in BME CLEARING. The CCP shall review Members' compliance with these requirements. .

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.**

### **Participation criteria and requirements**

**Q.18.1.1. What are the FMI's criteria and requirements for participation (such as operational, financial and legal requirements)?**

Pursuant to Article 109.1 of the SMA, membership of a CCP shall be limited to the entities referred to in paragraphs a) to d) and f) of Article 69.2 of the SMA, the Banco de España and other entities, whether resident or non-resident, that perform analogous activities in the terms and with the limitations set out in enhancing legislation and in the entity's own internal regulation.

Chapter 2 of BME CLEARING's Rule Book, under the title "Members", regulates comprehensively the different classes of Members admitted in the CCP.

Article 3.1 of BME CLEARING's Rule Book, prescribes that the entities referred to in paragraphs a) to d) and f) of Article 69.2 of the Securities Market Act are eligible to become Members of BME CLEARING, as long as they comply with the requirements set down in the Rule Book, the General Conditions of each Segment and the corresponding Circulars, which shall not be discriminatory, and shall be transparent and objective in order to guarantee open and equal access to BME CLEARING. Members may act in the CCP with the scope corresponding to each category and under the terms established in the Rule Book and its enabling provisions.

Banco de España and other resident or non-resident "entities" which carry out analogous activities may also become Members, under the terms and conditions stipulated in the Securities Market Act, its enabling provisions and in this Rule Book. The latter may become Members of BME CLEARING following approval by the CNMV (Article 109.1 of the Securities Market Act and Article 3.2 of BME CLEARING's Rule Book).

The entities referred to in paragraphs a) to d) and f) of Article 69.2 of the Securities Market Act which may become Members of the CCP, according to Article 3.1 of the Rule Book which reproduces the content of the legal provision, are as follows:

- Investment service companies that are authorised to execute client orders or trade for their own account;
- Spanish credit institutions;
- Investment service companies and credit institutions authorised in other Member States of the European Union that are authorised to execute client orders or trade for their own account;
- Investment service companies and credit institutions authorised in a country that is not a Member State of the European Union, provided that they comply with certain requirements; and
- Those firms that, in BME CLEARING's opinion, having regard to the special functions that as could be performed by them as participants in BME CLEARING:
  1. are appropriate;
  2. have a sufficient level of aptitude and competence in clearing and settlement;
  3. have established, where applicable, adequate organizational measures, and
  4. 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 the CCP and to ensure the correct Position Settlement.

According to the Rule Book (Article 3.4), the General Conditions may set forth specific terms in relation with Members' activities, depending on the Segment to which they refer.

Membership applications shall be approved by the Board of Directors of BME CLEARING (Article 3.3 of the Rule Book).

Article 3.5 of BME CLEARING's Rule Book establishes that Members must have and maintain the necessary technical and human resources required to operate in BME CLEARING, which will be determined and revised for each class of Member by BME CLEARING through the corresponding Circulars. These obligations aim to ensure that Members' resources and operational capacity are sufficient to perform the obligations deriving from BME CLEARING membership. On an annual basis, BME CLEARING shall review Members' compliance with the requirements that must be fulfilled and resources needed to operate in BME CLEARING.

BME CLEARING's EMIR Risk Committee shall advise the Board of Directors when establishing the criteria for accepting CCP Clearing Members, as set forth in the EMIR Risk Committee Regulations defined in BME CLEARING's Board of Directors Regulations.

## CLEARING MEMBERS

According to Article 3.4 and 4 of the Rule Book, in BME CLEARING there are two classes of Clearing Members, as defined in article 2.14 of EMIR:

- General Clearing Members
- Individual Clearing Members

BME CLEARING's Rule Book devotes Article 4 to define the main features of the activities to be performed by Clearing Members, prescribe their liability to BME CLEARING as their Central Counterparty, and the principal requirements applicable to them, while Article 5 contains a comprehensive enunciation of rights and obligations of Clearing Members and of the content of the agreement to be signed with BME CLEARING.

To become Clearing Member, both Individual and General Clearing Member, entities must meet the minimum level of equity established by BME CLEARING for each Segment in compliance with the corresponding General Conditions. BME CLEARING may establish by Circular other alternative guarantees and requirements instead of this minimum equity, which must provide an equivalent level of solvency, availability and financial security.

Circular on "Admission of Clearing Members in BME CLEARING", implements Article 3 of BME CLEARING's Rule Book, establishing the guidelines to be followed and the requirements for an entity to become a Clearing Member. Additionally, Article 25 of BME CLEARING's Rule Book, included in Chapter 6 related to "Registration" also lays down the requirements to be met by Clearing Members who provide services to clients who have opted for an omnibus segregated account, in order to manage a Second-Tier Register.

## NON-CLEARING MEMBERS AND ORDINARY NON-CLEARING MEMBERS

Although they are not clearing members, as defined in EMIR, according to Article 3.4 and to Article 6 of the Rule Book, Non-Clearing Members and Ordinary Non-Clearing Members are also admitted in BME CLEARING, with the category of Members. Their rights and obligations and the terms of the agreement to be signed with BME CLEARING are set out in Article 7 for Non-Clearing Members and in Article 8 for Ordinary Non-Clearing Members.

When Non-Clearing Members or Ordinary Non-Clearing Members have the power to trade exclusively on their own account or on behalf of entities in their group, mention of this must be made in their identification, so that they are identified as Proprietary Non-Clearing Members or Proprietary Ordinary Non-Clearing Members.

In order to act in BME CLEARING, Non-Clearing Members must enter into an agreement with one or, as a maximum, two General Clearing Members, being the Non-Clearing Member and the General Clearing Member jointly and severally liable to BME CLEARING, as the Central Counterparty, for compliance of the obligations of the former.

Ordinary Non- Clearing Members must also execute an agreement with a General Clearing Member, who will be their Counterparty, and will be liable to such General Clearing Member for fulfilment of their obligations. The minimum content of the agreements between General Clearing Members and Non- Clearing Members or Ordinary Non-Clearing Members established in Article 9 of BME CLEARING's Rule Book.

**Q.18.1.2. How do these criteria and requirements allow for fair and open access to the FMI's services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements?**

The criteria and requirements stated in the answer to question Q.18.1.1 enable the members to have an equitable and open access to the CCP; since there are different types of members, the criteria established for each one may be different in some cases, depending on the member's activity, but they are the same for every member category, and any entity that meets the aforementioned requirements can become a member.

Information and requirements regarding indirect participants are described in the response to principle 19.

BME CLEARING does not have any agreements with any other CCP at present.

Based on objective and non-discriminatory criteria and based on a comprehensive risk analysis, BME CLEARING may limit the volume of Trades and Positions corresponding to Accounts for which the Clearing Members are liable vis-à-vis BME CLEARING.

If the Clearing Members should exceed the applicable limits, BME CLEARING shall require them to post additional margins. An explanation of these limits is provided in Principle 6 on margins. These limits are non-discriminatory since they are established with common criteria (equity and solvency) for all the clearing members.

#### Access to trade repositories

**Q.18.1.3. For a TR, how do the terms of access for use of its services help ensure that competition and innovation in post-trade processing are not impaired? How are these terms designed to support interconnectivity with other FMIs and service providers, where requested?**

Article 2.3 g) of the Rule Book states that one of BME CLEARING's functions in relation to the organisation and management of its services is to report to a trade repository or the European Securities and Markets Authority, as appropriate, on its own behalf or through delegation of the corresponding counterparties, in compliance with the terms and conditions stipulated by EMIR and its implementing regulations, the Trades on derivative financial instruments for which it acts as Central Counterparty, in accordance with the relevant Circulars and Instructions.

In accordance with the guidelines established by the European Securities and Markets Authority, BME CLEARING may issue Circulars to determine the reporting criteria and formats governing notifications submitted by Members or Clients to a trade repository or the European Securities and Markets Authority, as appropriate, in relation to the details of the Trades in which BME CLEARING acts as CCP.

**Key consideration 2: An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.**

#### Justification and rationale of participation criteria

**Q.18.2.1. How are the participation requirements for the FMI justified in terms of the safety and efficiency of the FMI and its role in the markets it serves, and tailored to and commensurate with the FMI's specific risks?**

See the answers to the two preceding questions. Basically, BME CLEARING allows certain types of entities to become members (mainly investment firms and credit institutions). These types of institutions are heavily regulated and supervised by bodies that are the competent authorities of the entity's country of origin. Additionally, these entities participate in trading and/or clearing, either for their own account or that of their clients, in the markets in which BME CLEARING provides its services.

In relation to BME CLEARING's specific risks, the type of entity that can become a member provides some certainty (because of its regulations and supervision). With respect to BME CLEARING's adaptation to the specific risks, they are managed mainly through BME CLEARING's risk management system.

**Q.18.2.2. Are there participation requirements that are not risk-based but required by law or regulation? If so, what are these requirements?**

As can be seen in the answer to question Q.18.1.1, the Spanish Securities Market Act requires that the CCP members be a certain type of entity.

**Q.18.2.3. Are all classes of participants subject to the same access criteria?**

As can be seen in the answer to question Q.18.1.1, the various types of participants can have different requirements.

**If not, what is the rationale for the different criteria (for example, size or type of activity, additional requirements for participants that act on behalf of third parties, and additional requirements for participants that are non-regulated entities)?**

The difference in the requirements for the participants is justified as follows:

- BME CLEARING has a risk relationship with the clearing members.
- The clearing members are liable for the proprietary or client account. The general clearing members are liable for their proprietary and client account, as well as the proprietary and client account of the non-clearing members that they clear. In this sense, the general clearing members have greater responsibility than the clearing members, which is why their requirements are stricter.
- As already explained, additional requirements are requested from members that manage segregated accounts.

For the IRS segment, the obligation to participate in the auction simulations and the eventual obligation to participate in the Default Management Group are additional obligations, set for this particular segment, but such additional obligations are proportional to the risk brought by the clearing member and do not restrict participation to certain categories of clearing members  
Least restrictive access.

**Q.18.2.4. How are the access restrictions and requirements reviewed to ensure that they have the least restrictive access that circumstances permit, consistent with maintaining acceptable risk controls? How frequently is this review conducted?**

As stated in the previous answers, BME CLEARING considers that its access requirements are transparent, non-discriminatory and based on objective criteria. These access requirements meet Spanish and European Law.

A possible review would be needed if a certain type of entity that does not meet the requirements wishes to become a member. In this case, the situation would be analysed and, if considered appropriate, the necessary steps would be taken to change the established access conditions.

Disclosure of criteria.

**Q.18.2.5. How are participation criteria, including restrictions in participation, publicly disclosed?**

As stated in the answer to question 18.1.1, the participation criteria are established in the regulations published on the website. BME CLEARING website includes a section called "How to become a member" With all the information needed and a contact form.

**Key consideration 3: An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.**

**Monitoring compliance.**

**Q.18.3.1. How does the FMI monitor its participants' ongoing compliance with the access criteria? How are the FMI's policies designed to ensure that the information it uses to monitor compliance with participation criteria is timely and accurate?**

Article 3.5 of BME CLEARING's Rule Book establishes that Members must have and maintain permanently the necessary technical and human resources.

The obligations of Clearing Members laid down in the Rule Book include the obligation defined in Article 5.3.I) to communicate to BME CLEARING the required information concerning themselves or their Clients, to enable BME CLEARING to evaluate compliance with the Rule Book, its enacting regulations and other applicable regulations. This same obligation correspond to Non-Clearing Members (Article 7.3.K) and to Ordinary Non-Clearing Members (Article 8.3). For Clearing Members carrying a Second-Tier Register, Article 25.3 of BME CLEARING's Rule Book also establishes that they are obliged to provide the Competent Authorities and BME CLEARING with all detailed information requested in respect of each Client's Trades registered in the Second-Tier Register Accounts.

Moreover, in the cases and in the manner set forth by BME CLEARING pursuant to a Circular, the Members must inform BME CLEARING, without the need for prior request thereof, of the Clients' Trades registered in the Second-Tier Register Accounts.

Pursuant to Article 3.5 of BME CLEARING's Rule Book, on an annual basis, BME CLEARING shall review Members' compliance with the requirements that must be fulfilled and resources needed to operate in BME CLEARING.

At least once a year, BME CLEARING shall request from each Member, evidence that they hold the human and technical resources required to operate in BME CLEARING, and any other information that BME CLEARING deems to be relevant in this regard.

The format of information to be submitted to BME CLEARING is defined in an Instruction.

**Q.18.3.2. What are the FMI's policies for conducting enhanced surveillance of, or imposing additional controls on, a participant whose risk profile deteriorates?**

A member's risk profile deterioration is detected as a result of a press article, a solvency deterioration or lower equity.



The revision to the solvency of a firm is made immediately once BME CLEARING is aware of any significant improvement or worsening of any solvency indicator: firm's probability of default, the evolution of its financial statements, its risk management and operational capability, as well as the possibility for the firm to get any backup (for instance from the parent company, government,...).

If a Member is aware of any deterioration of its solvency, the Member is obliged to notify this to BME CLEARING immediately. If a clearing member's solvency or equity decreases, the limits applied to it (see the answer to question Q.18.1.2) will also be reduced. This reduction will either decrease the clearing member's activity and, therefore, its risk, or the clearing member will be forced to create additional margins so that BME CLEARING can have greater coverage. Additionally, BME CLEARING has the power to request extraordinary margins in any exceptional situation as a result of specific circumstances at a member that entails, in BME CLEARING's opinion, a high risk that is not sufficiently covered by the individual fund and initial margin. BME CLEARING will specifically require that the extraordinary margins reasonably hedge this risk. BME CLEARING will inform the CNMV and the Banco de España of this requirement on the same day that it is made.

### Suspension and orderly exit

#### **Q.18.3.3. What are the FMI's procedures for managing the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements?**

With respect to the procedures for the suspension and orderly exit of Clearing Members that fail to meet the requirements for membership to the CCP, please refer to section 48.1 on procedures in the event of default of the EMIR dossier.

#### Temporary Suspension of a Member or Client

According to article 40 of BME CLEARING's Rule Book, a Member or Client may be subject to temporary suspension, from the moment when there are signs that the Member or Client incurs in any cause of Default.

The resolution to temporarily suspend Clearing Members corresponds to BME CLEARING. General Clearing Members may agree to temporarily suspend their Non-Clearing Members, notifying BME CLEARING of such decision.

The agreement to temporarily suspend Clients corresponds to the Member through which such Client has opened Accounts.

Prior to resolving on such suspension, if the cause of Default should allow it, in BME CLEARING's opinion in the event of suspension of Clearing Members, or in the relevant Member's opinion in the event of suspension of Non-Clearing Members, giving BME CLEARING prior notice thereof, or in the case of Clients, and provided that there is no risk to BME CLEARING or to its participants, the Member or Client may be granted twenty four (24) hours to remedy such Default. If such Default is not remedied within such period, the Member or Client may be temporarily suspended.

Suspension of the Member or Client shall involve BME CLEARING or the Member, as applicable, establishing the relevant limitations to its actions in the CCP, in relation to those CCP Segments where Default has occurred or where such Default is relevant. The Member or Client obligations to post Margins, or to make payments corresponding to any applicable settlements will persist.

The Member must immediately give notice to BME CLEARING of the temporary suspension of Non-Clearing Members and of Clients.

BME CLEARING, shall notify the CNMV and the corresponding Competent Authorities, in addition to the markets and trading systems and clearing and settlements systems with which BME CLEARING holds agreements. If the Non-Clearing Member had several General Clearing Members or if the Client had Individual Segregated Accounts (Agency Model) opened with other Members, BME CLEARING will give notice of the temporary suspension of the Non-Clearing Member or of the Client to the other Members.

#### Orderly exit of a Member or Client.

Pursuant to article 46 to the Rule Book, upon declaration of Default of a Client or Member, BME CLEARING may terminate their agreement with the Defaulting Client or Member, which shall determine the loss of the condition of Client or Member, without prejudice to its obligation to comply with all the financial obligations with BME CLEARING, even after it loses its membership.

Furthermore, BME CLEARING has a specific procedure for managing the orderly exit of a member from BME CLEARING in the event of a Member waiving its right to Membership due to BME CLEARING amending the regime applicable to the Member or due to cancellation of agreement.

#### **Q.18.3.4. How are the FMI's procedures for managing the suspension and orderly exit of a participant disclosed to the public?**

As stated in the answer to question Q.18.3.3, the procedures for managing the suspension or orderly exit of a participant contained in BME CLEARING's Rule Book are public.

### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING has objective participation criteria based primarily on the type of entity that can become a member and secondarily on their risks, providing fair and open access. The participation criteria are public. Considering the rules laid down in the Rule Book and the rules on membership and Member classes ensure fair and open access to the CCP, as required in the SMA and EMIR.

### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 18 on Access and participation requirements without any type of limits or restriction.

## PRINCIPLE 19: TIERED PARTICIPATION ARRANGEMENTS

***An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.***

### Summary narrative

When responding to this principle, Clients have been deemed to be indirect participants whereas Members have been deemed to be direct participants. The latter are fully described in Principle 18.

The structure of BME CLEARING's records and accounts, as regulated in article 21 of its Rule Book, enables Members and Clients to hold different types of accounts in both the Central Register managed by BME CLEARING and, as applicable, in the Second-Tier Register managed by Members with the capacity to run a Second-Tier Register in the cases where the General Conditions for each CCP Segment require these accounts in relation with Omnibus Second-Tier Register Accounts.

A Client is an Individual, legal person, entity or institution that acts on one or more Segments, through a Clearing Member or a Non-Clearing Member and subject to the requirements prescribed in the Rule Book and the corresponding General Conditions and supplementing regulations, whose Trades, the Positions resulting from these Trades, Margins and Collateral are registered in an Individual Segregated Account (ISA Agency or ISA PtoP) or an Omnibus Segregated Account (OSA), as specified.

The Client must always have a Member which bears responsibility for it and their contractual relationship is subject to specific requirements: it should mention the rights and obligations of the Client, the type of Account, and the acceptance of the regulation of the CCP and the Client's submission in relation to its activity in the CCP to the applicable Spanish legislation.

Members who hold a second-tier register are subject to specific information requirement so as to allow BME CLEARING to monitor and manage the risk of indirect participants. As a result, maintaining separate accounts is a normal activity for BME CLEARING and the monitoring, management and risk control of such accounts are integrated in the regular monitoring and control of all accounts.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.**

### **Tiered participation arrangements**

#### **Q.19.1.1. Does the FMI have any tiered participation arrangements? If so, describe these arrangements.**

There are two types of participants according to BME CLEARING regulations:

- (1) Members, which may be Non-Clearing Members (NCM), Ordinary Non-Clearing Members (ONCM), Individual Clearing Members and General Clearing Members. For Non-Clearing members, BME CLEARING acts as its Counterparty. For Ordinary Non-Clearing Members its General Clearing Member acts as its Counterparty.
- (2) Clients. Clients may choose in relation to the type of Client account where its Trades and Positions are registered with different Account holder and Counterparty relationship:

- Individual segregated account- Agency (ISA Agency Model): its holder is the Client, whose identity must be known to BMEC, opened through a NCM or a CM. BME shall be the central counterparty of the Client holder of the account with respect to the trades registered and collateral posted.
- Individual segregated account- Principal to Principal (ISA PtoP Model): its holder is the Clearing Member, trades are made in the name of the Member and on behalf of a Client. BME shall be the central counterparty of the Clearing member holder of the account with respect to the trades registered. The Client on behalf of which the Trades are held in such account shall have the Clearing member as counterparty, subject to the terms agreed by the two parties.
- Omnibus Segregated Client Accounts (OSA): Clearing members may be holders of the OSA accounts, where Trades are made in the name of the Clearing member and on behalf of multiple Clients. BMEC shall be the counterparty of the Clearing member. The multiple Clients on behalf of which the Trades are held in such Account shall have the Clearing member as counterparty, subject to the terms agreed by the two parties.

Where the Clearing member is the holder of ISA PtoP or OSA accounts, including the accounts it opens at the request of its ONCM, the Clearing member shall be solely and directly responsible before BMEC.

When the GCM acts in BMEC in the name and on behalf of its NCM, the GCM shall be jointly and severally liable before BMEC, with its NCM, irrespective of whether its NCM have complied with such obligations vis-à-vis the general clearing member in the event of their default.

When the GCM acts in BMEC in the name and on behalf of the Clients holding an ISA Agency accounts, is jointly and severally liable before BMEC for compliance with the obligations deriving from these accounts with the Client, irrespective of whether the Client has complied with such obligations vis-à-vis the general clearing member in the event of their default.

The contractual relationship between a Member and a Client shall follow the terms agreed upon by the parties, and shall be subject to the specific requirements, where appropriate, that are established in the corresponding General Conditions. The terms should mention the rights and obligations of the Client, the type of Account, and the acceptance of the regulation of BME CLEARING and the Client's submission in relation to its activity in BME CLEARING, solely to these regulations and to legislation applicable in Spain, both Spanish and EU.

#### **Q.19.1.2. How does the FMI gather basic information about indirect participation? Which information is collected and how frequently is it updated?**

For clients who have an Individual Segregated Account (ISA-Agency model) in the CCP, BME CLEARING requests the client's name and fiscal identification data.

For clients who have an Individual Segregated Account (ISA-Principal-to-Principal) in the CCP, the owner (holder) is the Member.

For Clients who have opted for an Omnibus Segregated Account (OSA), article 21.4 of BME CLEARING's Rule Book lays down the requirements to be met by Members who provide services to clients who have opted for an OSA.

For Financial Derivatives, IRS, and Power Segments, Rule Book requirements to be met by Members in order to manage a Second-Tier Register are: (1) send BME CLEARING an Explanatory Report on the management system used for correct administration of the second-tier register; (2) send BME CLEARING a file containing the internal procedures that the Entity has established to manage clients Risk; (3) investment policy for client funds.

Clients must communicate to their Member the required information which will include, in any case, the Client's name, address and tax identification number, the legal entities' identification code, and, if applicable, the identity of the legal representative and justification of such representation. Members, subsequently, must communicate to BME CLEARING the required information concerning themselves or their Clients, to enable BME CLEARING to evaluate compliance with the Rule Book, its enacting regulations and other applicable regulations and to determine, control and manage significant risk concentrations related with their activities as Members and with the provision of services to Clients.

Members carrying a Second-Tier Register are obliged to provide the Competent Authorities and BME CLEARING with all detailed information requested in respect of each Client's Position registered in the Second-Tier Register Accounts.

At least once a year, BME CLEARING shall request from each Member, evidence that they hold the human and technical resources required to operate in BME CLEARING and any other information that BME CLEARING deems to be relevant in this regard.

Members must have an updated database, with complete contact details of its clients at BME CLEARING disposal whenever deemed necessary and in the event of a Default of the Clearing Member, so as to transfer the account. BME CLEARING periodically checks the existence and immediate availability of such data base.

## Risks to the FMI

### Q.19.1.3. How does the FMI evaluate its risks arising from these arrangements?

Risks arising from tiered participants have been monitored and managed by BME CLEARING since inception. Risk is measured on a real-time basis, at account level.

### Q.19.1.4. What material risks to the FMI arising from tiered participation arrangements has the FMI identified? How has it mitigated these risks?

BME CLEARING identifies the following material risks: (1) concentration risk related to the Daily Trading Volume, the Client Member position, the CCP overall position, and such position is measured in terms of margins or stress test risk, (2) a sharply increase of position at individual client.

These risks are mitigated: (1) with additional position margins for large positions plus client concentration limits, (2) measuring stress test risks at segregated client level, (3) identifying a sharply increase of position at individual client level segregated account on a daily basis.

Members who provide services to clients who have opted for an OSA, in order to mitigate these risks, must meet several requirements in order to manage a Second-Tier Register. They must:

- Meet the minimum level of equity established by BME CLEARING for each CCP Segment.
- Have the necessary material, technical, human and procedural resources to manage (1) a registration system, (2) the Margins corresponding to those Positions, (3) Settlements corresponding to such Trades, (4) the Position Settlement in the corresponding settlement systems, (5) the allocation of partial exercises of Options or deliveries with multiple deliverables permitted.
- Post an Individual Fund.

According to article 25 of the Rule Book: Members with the capacity to run a Second-Tier Register are obliged to provide the Competent Authorities and BME CLEARING with all detailed information requested in respect of the Trades of all Clients registered in Second-Tier Register Accounts.

In the cases and in the manner established by BME CLEARING pursuant to a Circular, Members must inform BME CLEARING, without the need for prior request thereof, of the Clients' Trades registered in Second-Tier Register Accounts.

Members with the capacity to run a Second-Tier Register must communicate, with respect to the Trades registered in Second-Tier Register Accounts, which Trades are closing trades and the resulting Position adjustment that BME CLEARING must perform in the OSA in the Central Register.

Members with the capacity to run a Second-Tier Register may transfer Trades between Second-Tier Register Client Accounts, as long as the purpose is to correct errors in the assignment of Trades.

If the Member with the Capacity to run a Second-Tier Register fails to comply with any of the conditions and obligations established in this Rule Book and its supplementing regulations with respect to the management of Second-Tier Register Accounts, BME CLEARING may implement the regime established for Defaults in the chapter 9 of the Rule Book.

### Key consideration 2: An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.

#### **Q.19.2.1. How does the FMI identify material dependencies between direct and indirect participants that might affect the FMI?**

BME CLEARING controls on a daily basis the proportion of activity and risk of indirect participants on their Member (direct participant), through the LIMITES risk tool gathers information on indirect participation regularly.

Additionally, Members having either a Clients' Segregated Account which registers a Large Position, has to inform BME CLEARING about this fact.

BME CLEARING will check the gross position in real time for each Client's Segregated Account. If - based on the gross position - there is detected the possibility of a large position, the Member will be informed by BME CLEARING about it in order for the former to verify before 9:00 a.m. of the next trading session if there is a Large Position.

### Key consideration 3: An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.

#### **Q.19.3.1. Has the FMI identified (a) the proportion of activity that each direct participant conducts on behalf of indirect participants in relation to the direct participants' capacity, (b) direct participants that act on behalf of a material number of indirect participants, (c) indirect participants responsible for a significant proportion of turnover in the system, and (d) indirect participants whose transaction volumes or values are large relative to the capacity of the direct participant through which they access the FMI to manage risks arising from these transactions?**

As previously mentioned, BME CLEARING monitors Members activity at account level. Those Members that are deemed to contribute more risk are monitored more closely by BME CLEARING, which also analyses the activity of the different accounts that make up the total risk of the Clearing Member.

**Q.19.3.2. What risks to the FMI arise, and how does the FMI manage these risks arising from key indirect participants?**

This has already been described in the responses to the questions above.

**Key consideration 4: An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.**

**Q.19.4.1. What are the FMI's policies for reviewing its rules and procedures in order to mitigate risks to the FMI arising from tiered participation? How frequently is this review conducted?**

BME CLEARING undertakes a total review of its risk management model at least annually. This risk management assessment includes the risks entailed in tiered participation arrangements.

**Q.19.4.2. What criteria does the FMI use to determine when mitigating actions are required? How does the FMI monitor and mitigate its risks?**

Please, see Q.19.1.3.

In addition, the Executive Risk Committee receives a weekly report on large positions and unusual movements in clients' accounts and if it so decides, it can request individual collateral to cover possible risks.

#### KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING monitors and manages the material risks that it faces regarding its tiered participation arrangements. It gathers all the necessary information, which enables the monitoring, management and risk control of tiered participation arrangements. This is integrated in the regular monitoring and control of all accounts so indirect clearing arrangements would be identified in the account structure and would not affect the resilience of the CCP.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 19 on Tiered participation arrangements without any type of limit or restriction.

## PRINCIPLE 20: FMI LINKS

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

### Summary narrative

BME CLEARING controls the risks it bears from and poses to other interdependent FMIs: IBERCLEAR, CLEARSTREAM and EUROCLEAR as Central Depositories; TARGET2-Banco de España as payment system, and IBERCLEAR as a settlement system through the TARGET-2 Securities platform; Regis -TR as Trade Repository.

BME CLEARING accomplishes a total review of its risk management model at least annually.

When a link is established with a foreign FMI a legal opinion is requested from a law firm from the country of the applicable legislation to check that there is sufficient protection in the relevant jurisdictions.

Linked FMIs work together to resolve incidents and continuity mechanisms are set forth in the aforementioned agreements which are triggered if communication links are severed. The CCP's Technology Department has systems in place to flag any operational incidents.

The effectiveness of these controls is verified annually through an internal audit and by external auditors.

Regarding links with CSDs and the custody of the securities provided as collateral in BME CLEARING's account in the depository, given that the transfers place BME CLEARING as the owner of the securities and therefore the recipient of the income from these, the BME CLEARING operations department carries out monitoring (in addition to the control that in itself can be carried out by the depository itself) to exchange the securities before maturity or the coupon payment and thus avoid the corresponding tax treatment.

In addition, the contracts/agreements entered into between BME CLEARING and the different CSDs stipulate the applicable rules in the event of the insolvency of any of the entities signing the agreement.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor, and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.**

**Q.20.1.1. What process is used to identify potential sources of risk (such as, legal, credit, liquidity, custody and operational risks) arising from prospective links? How does this affect the FMI's decision whether to establish the link?**

Establishing a link with an FMI entails reaching an agreement and the signature of a contract. The potential sources of risk and the rights and obligations of each party are analysed and reflected therein.

**Q.20.1.2. What links have been established with other FMIs?**

BME CLEARING controls the risks it bears from and poses to other interdependent FMIs: IBERCLEAR, CLEARSTREAM and EUROCLEAR as Central Depositories; TARGET2-Banco de España as payment system, and IBERCLEAR as a settlement system through the TARGET-2 Securities platform; Regis -TR as Trade Repository.



Links with Central Securities Depositories and SSS:

- IBERCLEAR, the Spanish Central Securities Depository.
  - BME CLEARING holds a securities account for accepting collateral, through the transfer of ownership of the securities.
  - Connecting to register transactions where BME CLEARING acts as the central counterparty.
  - Securities Settlement System (SSS) for BME CLEARING Equities segment transactions, and Repo transactions (through the TARGET-2 Securities platform).
- •CLEARSTREAM and EUROCLEAR. BME CLEARING holds one cash account and one securities account. BME CLEARING receives collateral through transfer of ownership and accepts collateral through the pledging of securities and likewise uses the Tri-party service to make cash investments.

Links with Payment Systems:

For its daily settlements, BME CLEARING sends to TARGET 2-Banco de España through IBERCLEAR's MUL application (which connects to the Banco de TARGET2 ICM platform) a file with all the transfers to be made to the relevant Payment Agent in the daily multilateral settlement. The interface is also used to receive cash collateral during the session.

Links with Trade Repositories:

BME CLEARING reports to REGIS-TR all derivative trades where the CCP is a counterparty.

**How does the FMI identify, monitor and manage the risks arising from an established link on an ongoing basis?**

BME CLEARING undertakes a total review of its risk management model at least annually. This annual risk management review includes a review of links with FMIs.

The potential sources of risk arising from a link between BME CLEARING and another FMI are analysed at the moment the decision is taken to establish the link and enter into the agreement.

When the annual analysis of its global risk system is conducted, the possible sources of risk of the established link arrangements are reviewed in an ongoing manner.

**Q.20.1.3. How does the FMI ensure that link arrangements are designed so that it is able to remain observant of the other principles?**

At the time that the link is established, a comprehensive analysis is conducted of the consequences of the link, the possible risks and the rights and obligations associated with the new link.

**How frequently is this analysis conducted?**

BME CLEARING undertakes at least an annual analysis of its global risk system. See Q.20.1.2.

**Key consideration 2:** A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.

**Q.20.2.1. In which jurisdictions has the FMI established links? What are the relevant legal frameworks supporting the established links**

The agreements with IBERCLEAR and Banco de España are governed by Spanish legislation. The agreement with CLEARSTREAM is governed by Luxembourg legislation. The agreement with EUROCLEAR BANK is governed by Belgian legislation.

**Q.20.2.2. How does the FMI ensure that its links have a well founded legal basis that support its design and provide it with adequate protection in all relevant jurisdictions? How does the FMI ensure that such protections are maintained over time?**

Please see Q.20.1.1. Additionally, when a link is established with a foreign FMI, a legal opinion is obtained from a law firm from the country of the applicable legislation to identify possible conflicts between legislations. Please refer to Principle 1 for further information.

**Key consideration 7:** Before entering into a link with another CCP, a CCP should identify and manage the potential spill-over effects from the default of the linked CCP. If a link has three or more CCPs, each CCP should identify, assess, and manage the risks of the collective link arrangement.

The questions do not apply to BME CLEARING, as it currently has no links with another CCP (please see Q.20.1.2).

**Key consideration 8:** Each CCP in a CCP link arrangement should be able to cover, at least on a daily basis, its current and potential future exposures to the linked CCP and its participants, if any, fully with a high degree of confidence without reducing the CCP's ability to fulfil its obligations to its own participants at any time.

The questions do not apply to BME CLEARING, as it currently has no links with another CCP (please see Q.20.1.2).

## KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING controls the risks it bears from and poses to other interdependent FMIs. BME CLEARING always signs an agreement or contract with each FMI. When the agreement is being developed, all the risks established with the link are identified. The risks related to the links are analysed in the global review of the risk management system.

## ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 20 on FMI links without any type of limit or restriction.

## PRINCIPLE 21: EFFICIENCY AND EFFECTIVENESS

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

### Summary narrative

BME CLEARING, following EMIR requirements, has clearly defined CCP corporate and management arrangements, technological resources and procedures, risk management tools and mechanisms which allow for a smooth communication with Members, Clients and Stakeholders in general. These enables BME CLEARING to achieve high levels of effectiveness and efficiency.

The evaluation and review of BME CLEARING efficiency and effectiveness is included in its internal control, compliance and audit systems and in the external audits as well.

**Key consideration 1: An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.**

**Q.21.1.1. How does the FMI determine whether its design (including its clearing and settlement arrangement, its operating structure, its delivery systems and technologies, and its individual services and products) is taking into account the needs of its participants and the markets it serves?**

BME CLEARING's General Management has clearly defined targets to ensure the CCP's continuity and efficiency: maintaining secure and reliable clearing and settlement mechanisms, controlling registered volumes, adding new and retaining existing clients, broadening the scope of products cleared and enhancing the service provided to direct and indirect participants, and to end users with new technological developments. Organisationally, BME CLEARING has clearly defined CCP decision, management and consulting bodies.

In addition, the CCP has the EMIR Risk Committee, an advisory body composed of the main Clearing Members and Clients of BME CLEARING which is set up to detect new needs or pinpoint problems in risk management or any other key business area. Moreover, BME CLEARING checks the actions taken by other European CCPs as part of its ongoing efforts to improve its services.

**Q.21.1.2. How does the FMI determine whether it is meeting the requirements and needs of its participants and other users and continues to meet those requirements as they change (for example, through the use of feedback mechanisms)?**

BME CLEARING assesses the needs of any Member or Client detected through either the Incidents Committee –when the issue arises as a result of an incident that has occurred– or the Management Committee –when the Member or Client has notified a department or specific person at BME CLEARING of a particular need–. BME CLEARING has a close relationship with its Members. This enables it to know their level of satisfaction with its mechanisms and any needs they may have. It does not, however, conduct participant satisfaction surveys.

BME CLEARING strives to improve its infrastructures and adapt them as quickly as possible to changes that may occur, for regulatory issues and market situations. BME CLEARING has Clearing tools for risk management, guarantees and settlements designed to offer the best possible service to Clearing Members and enable it to become more efficient and effective.

**Key consideration 2: An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.**

**Q.21.2.1. What are the FMI's goals and objectives as far as the effectiveness of its operations is concerned?**

BME CLEARING's overriding aim in terms of effectiveness is to carry out its responsibilities so as to achieve its goals and objectives regarding risk management, operations, company revenue and the development and launch of new products and projects. The effectiveness targets can be summarised as follows (1) Risk management: adoption of models and parameters that enable it to control the risk incurred by Clearing Members; (2) Company revenue: definition of reasonable targets based on driving trading volumes in certain products or adding new products quickly; (3) Services: continuous improvement, Member and Client orientation; (4) Technology, permanent infrastructures improvement, strong resilience to changes that take place due to regulatory developments and market situations.

**Q.21.2.2. How does the FMI ensure that it has clearly defined goals and objectives that are measurable and achievable?**

BME CLEARING's Management Committee meets regularly to assess the goals and objectives set at the beginning of the year and their degree of fulfilment. New objectives are proposed based on economic trends, market performance and developments and changes that have taken place within BME CLEARING. These goals and objectives are always measurable and reasonably achievable.

**Q.21.2.3. To what extent have the goals and objectives been achieved? What mechanisms does the FMI have to measure and assess this?**

BME CLEARING mainly achieves its goals. It monitors its progress against its goals continuously. BME CLEARING's Management Committee reviews the progress made regularly and adopts any measures necessary to redirect, where needed, efforts to maximise its effectiveness in meeting its defined goals.

**Key consideration 3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.**

**Q.21.3.1. What processes and metrics does the FMI use to evaluate its efficiency and effectiveness?**

With respect to risk management, BME CLEARING strives to optimise the level of financial resources and guarantees Members and Clients should hold in the CCP. To achieve this, BME CLEARING has Clearing tools (risk management, as well as margins and settlements) to control Clearing Members' exposures and enable it to manage the guarantees required and deposited more efficiently and effectively.

On a daily basis, at the end of the session, Back Testing and Stress Testing are carried out to control the adequacy of both the parameters and the margin model compared to the expected coverage. Tests are daily performed for each account with open position in BME CLEARING and for each Segment.

Operationally, the CCP is efficient and effective when Clients and Market Members receive all the information on settlements, guarantees, fees, etc. as clearly as possible and in a timely manner. The information is available and accessible quickly to any Member or Client of BME CLEARING.

In general, in accordance with BME CLEARING Rule Book, there is a Supervision system in order to oversee BME CLEARING's proper functioning. Moreover, there is a Claims Commission that is aware of claims filed by Members and complaints or claims filed by Clients. Internal and external audits, Compliance controls, also take into consideration effectiveness and efficiency of the CCP.

**Q.21.3.2. How frequently does the FMI evaluate its efficiency and effectiveness?**

BME CLEARING's Management Committee holds weekly follow-up meetings to monitor key developments in accordance with its defined goals and objectives. In addition, operationally the CCP minimises the time required to calculate daily settlements in its pursuit of quicker management of the daily processes of both the CCP and the Members. It monitors these times each day with a view to improving this service.

Any incidents uncovered in CCP's operations that could undermine its efficiency or effectiveness are addressed by the Incidents Committee at its weekly meetings.

#### KEY CONCLUSIONS FOR PRINCIPLE

In terms of efficiency and effectiveness, BME CLEARING's General Management has clearly defined objectives designed to meet the needs of participants, end users and the market in general regarding its settlement processes, management of operations and risk models. To achieve these goals as efficiently as possible, BME CLEARING has certain corporate governance arrangements and technological resources in place that it updates and improves continuously.

#### ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 21 on Efficiency and Effectiveness without any type of limit or restriction.

## PRINCIPLE 22: COMMUNICATION PROCEDURES AND STANDARDS

***An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement and recording.***

### Summary narrative

The CCP uses internationally accepted communication procedures and standards. In bilateral communications, generally the CCP adapts to the format selected by the other party.

For cross-border operations, the FIX messaging services used by BME CLEARING facilitates the interoperability of the different systems, removing barriers to entry and eliminating the need for participants to make manual interventions.

### **QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS**

**Key consideration 1: An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.**

### **Communication procedures**

#### **Q.22.1.1. Does the FMI use an internationally accepted communications procedure and, if so, which one(s)?**

The most common communication procedures between the CCP and its participants are FIX and FIXML Protocols, while the transmission mechanisms used are TCP/IP and MQSeries.

BME CLEARING furnishes its participants with CSV and XML files through a Secure File Transfer Protocol (SFTP) file server. It also uses websites to provide its participants with information.

BME CLEARING uses ISO 15022 message format to communicate repo transactions. These messages reach the CCP from SENAF and Brokertec or from the CSD through MQ queues. The CCP's personnel use the application MUL to issue payments instructions that generates ISO 15022 messages sent through SWIFT.

BME CLEARING uses FpML protocol for Markitwire transactions in the Interest Rate Derivatives Segment.

In bilateral communications, the CCP generally adapts to the format selected by the other party.

#### **If not, how does the FMI accommodate internationally accepted communication procedures?**

Not applicable to BME CLEARING.

#### **Q.22.1.2. If the FMI engages in cross-border operations, how do the FMI's operational procedures, processes and systems use or otherwise accommodate internationally accepted communication procedures for cross-border operations?**

The CCP uses the other party's communication procedures in bilateral communications with ICSDs. This is performed through the websites of CBL (Creation Online) and Euroclear (Euclid and Triweb).

## Communication standards

### **Q.22.1.3. Does the FMI use an internationally accepted communications standard and, if so, which one(s)?**

BME CLEARING identifies financial instruments with a CFICODE in accordance with ISO 10962.

Once ISIN codes have been assigned by the Spanish National Securities Coding Agency (under the auspices of the CNMV), these codes are communicated through the FIX messaging service and in data files.

The CCP uses participants' BIC/SWIFT codes to identify the payment recipient.

If not, how does the FMI accommodate internationally accepted communication standards?  
Not applicable to BME CLEARING.

### **Q.22.1.4. If the FMI engages in cross-border operations, how do the FMI's operational procedures, processes and systems use or otherwise accommodate internationally accepted communication standards for cross-border operations?**

The communication standards with ICSDs are the same used for non-cross-border operations: BIC/SWIFT codes and ISIN codes.

### **Q.22.1.5. If no international standard is used, how does the FMI accommodate systems that translate or convert message format and data from international standards into the domestic equivalent and vice versa?**

Not applicable to BME CLEARING.

## KEY CONCLUSIONS FOR PRINCIPLE

BME CLEARING uses internationally accepted communication procedures and rules.

## ASSESSMENT OF PRINCIPLE

BME CLEARING is FULLY COMPLIANT with Principle 22 on Communication procedures and standards without any type of limit or restriction.

## PRINCIPLE 23: DISCLOSURE OF RULES, KEY PROCEDURES AND MARKET DATA

*An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.*

### Summary narrative

BME CLEARING has clear and comprehensive rules and procedures and provides sufficient information to enable participants to have an accurate understanding, to the extent possible, of the CCP's operations, risks, fees and other material costs that may be incurred by taking part in the CCP's operations. All relevant rules and main procedures are publicly disclosed.

BME CLEARING website is a public website ([www.bmeclearing.es](http://www.bmeclearing.es)). It makes available the CCP rules and procedures to participants and to the general public. The information is clear, accurate and accessible. Participants may evaluate the risks they would incur by taking part in CCP operations.

BME CLEARING and CNMV websites include information on: fees and other material costs for participants; CCP's risk management systems, techniques and performance; information on financial resources; information on investment policy; information on price data sources; information on BME CLEARING's Continuity Policy; Corporate Governance Arrangements (Organisational Structure, Remuneration Policy, Financial Information and Board of Directors Regulations); the self-assessment on compliance with 2012 CPSS-IOSCO Principles for FMIs; Daily CCP's open interest and statistics in line with February 2015 CPSS-IOSCO Public Quantitative Disclosure standards for Central Counterparties.

### QUESTIONS BY KEY CONSIDERATION FOR THE PRINCIPLES FOR FMIS

**Key consideration 1: An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.**

### Rules and procedures

#### **Q.23.1.1. What documents comprise the FMI's rules and procedures?**

The FMI's rules and procedures are included in BME CLEARING Rule Book, General Conditions, Circulars and Instructions. Please, refer to Principle 1 for more in-depth information.

#### **How are these documents disclosed to participants?**

BME CLEARING website makes available all these documents for participants and for the general public. The information is constantly updated. In addition, BME CLEARING participants receive information via e-mail concerning changes to BME CLEARING regulations and other relevant information. Furthermore, the following information is available to BME CLEARING's Members: (1) a monthly report on how the CCP invests the cash collateral posted with it; (2) a monthly report providing a breakdown of the collateral posted; (3) a quarterly report outlining back test results; and (4) a quarterly report outlining stress test results.



**Q.23.1.2. How does the FMI determine that its rules and procedures are clear and comprehensive?**

The rules and procedures are developed with great care by the departments involved. Any regulatory change is subject to an exhaustive internal review by Legal and Compliance departments and by the Senior Management and the Board of Directors. BME CLEARING Rule Book, General conditions and Circular are subject to CNMV approval.

**Disclosure****Q.23.1.3. What information do the FMI's rules and procedures contain on the procedures it will follow in non-routine, though foreseeable, events?**

The measures to be adopted in the event of a participant's default are outlined in the Rule Book. In addition, there is an action protocol in the event of a default which is reviewed at least annually by the Senior Management and the Executive Risk Committee. This document is for internal use and it's shared with the relevant authorities. See Principle 13 for more information.

BME CLEARING has a Continuity Policy and a Business Continuity Plan fully coordinated with BME Group. For more details, see Principle 17.

Information on BME CLEARING Continuity Policy is publicly available: ON BME CLEARING website. As the Plan contains sensitive information on business continuity it is not disclosed to the general public. However, it is reported to the relevant authorities. There is a short version of the Plan available for BME CLEARING's members

**Q.23.1.4. How and to whom does the FMI disclose the processes it follows for changing its rules and procedures?**

Changes to the Rule Book and General Conditions must be approved by BME CLEARING's Board of Directors and authorized by the CNMV.

Circulars shall be approved by the Board of Directors of BME CLEARING, and shall be published at least five Business Days before their effective date, except when, for reason of urgency, they must be effective in a shorter time after publication. Circulars must be communicated to the CNMV and to the Banco de España within 24 hours of their adoption. The CNMV may oppose, and suspend or render the Circulars ineffective when it considers that they may infringe applicable legislation, or harm the prudent and safe functioning of the CCP and of the markets to which it provides a service or investor protection.

**Q.23.1.5. How does the FMI disclose relevant rules and key procedures to the public?**

The BME CLEARING website has a section containing the Rule Book, General Conditions, Circulars and Instructions and specific documents on certain relevant topics under EMIR obligations. The information is constantly updated.

**Key consideration 2: An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.**

**Q.23.2.1. What documents comprise information about the system's design and operations?**

BME CLEARING provides transfer files for participants with information concerning transactions, settlements and margins. A publicly disclosed document contains the format and details of those files.

How and to whom does the FMI disclose the system's design and operations?

BME CLEARING has a Technology section on its website which publishes information for the general public, participants and developers.

**Q.23.2.2. How and to whom does the FMI disclose the degree of discretion it can exercise over key decisions that directly affect the operation of the system?**

According to BME CLEARING's Rule Book, in all CCP sessions there will be, at least, one Supervisor, who shall watch over the orderly and suitable development of Clearing, Settlement, Registration and Central Counterparty processes, who may decide the momentary suspension of one or more routes of access to the Register, in cases where such decisions should be necessary to guarantee the orderly development of the CCP processes.

BME CLEARING will inform the CNMV of all the significant or material circumstances that may affect the compliance with CCP rules.

**Q.23.2.3. What information does the FMI provide to its participants about their rights, obligations and risks incurred through participation in the FMI?**

Information related to Members and Clients rights and obligations is outlined BME CLEARING's Rule Book. The measures to be adopted in the event of a participant's default are also included in the Rule Book. BME CLEARING's website has information on types of members, requirements, rights and obligations, the list of participants and indications on how to become a Member. Please see response to Q.23.1.1.

**Key consideration 3: An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.**

**Q.23.3.1. How does the FMI facilitate its participants' understanding of the FMI's rules, procedures and the risks associated with participating?**

It is a mandatory requirement that all Clearing personnel of each BME CLEARING participant, must have a BME CLEARING Operator's License. INSTITUTO BME, BME Group training center, provides this specialized training.

**Q.23.3.2. Is there evidence that the means described above enable participants' understanding of the FMI's rules, procedures and the risks they face from participating in the FMI?**

In addition to providing sound explanatory documentation enabling users to understand and correctly interpret the data and offering specialized training, BME CLEARING has a dedicated team available to clarify any questions related to the rules and procedures followed by the CCP.

**Q.23.3.3. In the event that the FMI identifies a participant whose behaviour demonstrates a lack of understanding of the FMI's rules, procedures and the risks of participation, what remedial actions are taken by the FMI?**

Any irregular behaviour from participants due to failure to comprehend or comply with rules and procedures is reported to CCP management, which may adopt measures such as temporary suspension or reporting to the CNMV, as set out in the Rule Book.

**Key consideration 4: An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.**

**Q.23.4.1. Does the FMI publicly disclose its fees at the level of its individual services and policies on any available discounts?**

Yes, BME CLEARING publishes prices for the services it offers as well as any applicable discounts.  
How is this information disclosed?

All information related to fees is published in Circulars on the BME CLEARING website.

**Q.23.4.2. How does the FMI notify participants and the public, on a timely basis, of changes to services and fees?**

BME CLEARING sends notification via e-mail concerning changes to BME CLEARING rules and regulations. The notification includes any changes to the above-mentioned Circulars on fees, or any replacement Circulars.

**Q.23.4.3. Does the FMI provide a description of its priced services? Do these descriptions allow for comparison across similar FMIs?**

BME CLEARING provides full details of services included in the price so that participants are able to evaluate the cost of taking part in CCP operations. The information on BME CLEARING fees is transparent and comparable with the prices charged by other CCPs.

**Q.23.4.4. Does the FMI disclose information on its technology and communication procedures, or any other factors that affect the costs of operating the FMI?**

Please see Q.23.2.1.

**Key consideration 5: An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values**

**Q.23.5.1. When did the FMI last complete the CPSS-IOSCO Disclosure framework for financial market infrastructures?**

BME CLEARING accomplished the self-assessment on compliance with 2012 CPSS-IOSCO Principles for financial market infrastructures in July 2015.

**How frequently is it updated?**

It shall be updated every two years.

**Is it updated following material changes to the FMI and its environment and, at a minimum, every two years?**

In the event of any significant change to the FMI and/or its environment, the document will be updated.

**Q.23.5.2. What quantitative information does the FMI disclose to the public?**

BME CLEARING, in cooperation with EACH, has prepared quantitative information in line with February 2015 CPSS-IOSCO Public Quantitative Disclosure standards for Central Counterparties.

CCP's open interest and statistics are displayed on BME CLEARING website and in press releases.

**How often is this information updated?**

Open interests and statistics are updated daily. The quantitative information is updated following the requirements of February 2015 CPSS-IOSCO Public Quantitative Disclosure standards for Central Counterparties.

**Q.23.5.3. What other information does the FMI disclose to the public?**

BME CLEARING's certified Annual Accounts, and Audit Report can be found on BME CLEARING's website and on CNMV website. Financial information of BME Group is also published.

The products and services offered by the CCP are public and can be viewed on the website as well as Risk Management material, and information on participants (Types of members, Requirements, Rights and obligations, List of participants, Indications on how to become a Member).

Pursuant to article 39 of EMIR, BME CLEARING's website makes the Disclosure Document on Segregation and Portability: costs and levels of protection associated with each level of segregation available.

**Q.23.5.4. How does the FMI disclose this information to the public? In which language(s) are the disclosures provided?**

Using accessible means: BME CLEARING website and through terminals or via e-mail in the case of information to participants. Disclosures are provided in English and Spanish.

**KEY CONCLUSIONS FOR PRINCIPLE**

BME CLEARING has comprehensive and clearly defined rules and procedures, which are fully disclosed to participants. It provides all appropriate documentation and training to facilitate its and to enable participants to evaluate the risks they would face by taking part in BME CLEARING operations.

**ASSESSMENT OF PRINCIPLE**

BME CLEARING is FULLY COMPLIANT with Principle 23 on Disclosure of rules, procedures, principles and market data, without any type of limit or restrictions.

## KEY ABBREVIATIONS AND TERMS

ABBREVIATIONS	FULL NAMES
Act 41/1999	Act 41/1999, of 12 November, on Payment and Securities Settlement Systems of 12 November, on the securities payment and settlement systems, which transposes into national Law the provisions of Directive 98/26/EC, of 19 May 1998 on settlement finality in payment and securities settlement systems
BME	Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros, S.A.
CBL	Clearstream Banking Luxembourg, Société Anonyme
CMS	Collateral Management System
CNMV	Spanish National Securities Market Commission
CSD	Central Securities Depository
Directive 98/26/EC	Directive 98/26/EC, of the European Parliament and of the Council, of 19 May, on settlement finality in payment and securities settlement systems
DvP	Delivery versus payment
EACH	European Association of CCP Clearing Houses
EMIR	Regulation (EU) no. 648/2012 of the European Parliament and of the Council, of 4 July 2012 on OTC derivatives, central counterparties and trade repositories
ESMA	European Securities and Markets Authority
EUROCLEAR	Euroclear Bank SA/NV
FIA	Futures Industry Association
IBERCLEAR	Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores
IM	Initial Margin
IRL	Intraday Risk Limit

ABBREVIATIONS	FULL NAMES
ISA	Individual Segregated Account
OSA	Omnibus Segregated Account
Royal Decree Law 5/2005	Royal Decree Law 5/2005, of 11 March, on Urgent Reforms to Foster Productivity and Improve Public Procurement (which transposes into national Law the Directive 2002/47/EC of 6 June 2002, on financial collateral arrangements)
Royal Decree 827/2017	Royal Decree 827/2017, of September 1st, which modifies Royal Decree 878/2015, of October 2nd, on Clearing, Settlement and Registry of book entry securities, about the Central Securities Depositories and Central Counterparties legal framework and the transparency requirements for issuers of securities admitted to trading in the official secondary
RPO	Recovery Point Objective
SMA	Spanish Securities Market Act, Consolidated text approved by Royal Legislative Decree 4/2015, 23 October



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