

MEFF CCP – FAQs

INDEX OF CONTENTS

- 1. Ownership and Governance**
- 2. Legal Framework and Regulatory Oversight**
- 3. Compliance**
- 4. Access and Membership**
- 5. Segregation and portability**
- 6. Products: grouped in segments**
- 7. Risk Management**
 - a. Initial Margin Methodology**
 - b. Default Fund**
 - c. Individual Fund and Intraday risk control**
- 8. Collateral Management**
- 9. Default procedures**
- 10. Disaster recovery, business continuity and IT security**

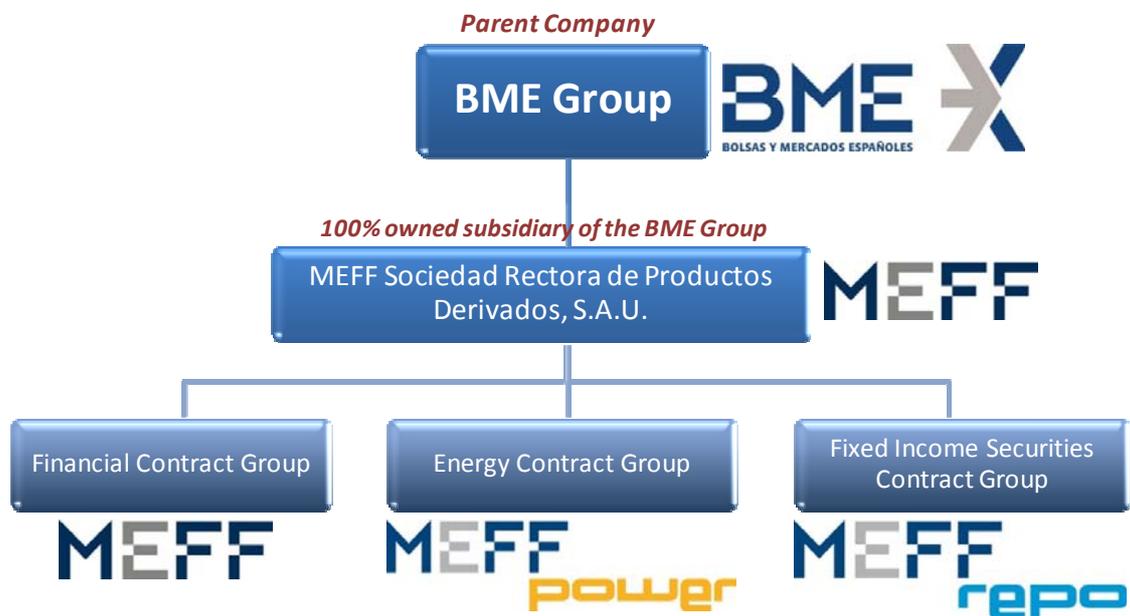
1. Ownership and Governance

What is MEFF?

MEFF Sociedad Rectora de Productos Derivados, S.A.U. (hereafter MEFF) is the official secondary Spanish derivatives Market which runs, under the Spanish Law, both the Exchange and the CCP activity. However, MEFF is in the process of separating the Exchange and the CCP in two different legal Entities. The CCP membership will not be affected as this will be done without changing the legal Entity of the CCP.

What are MEFF's ownership structure and corporate governance?

MEFF started its activity in November 1989 and became part of *Bolsas y Mercados Españoles* (BME), since this Group was created in 2002 (www.bolsasymercados.es).



MEFF is a 100% subsidiary of the BME Group, the parent company. The BME Group is a public company listed on the Spanish Stock Exchange.

Members of MEFF's Board are appointed by the sole shareholder, the BME Group. Members of the BME parent company Board are designated at the Annual Shareholder's General Meeting.

During 2013, the composition of the MEFF Board will be adapted to the requirements of EMIR.

The Group supports the highest standards in corporate governance. All the information regarding the corporate governance is held in the Corporate and Social Responsibility Report publicly available at the Shareholders and Investors corner of the website.

What is the financial standing of MEFF?

MEFF has an equity of €52.5MM. Bolsas y Mercados Españoles (BME Group), 100% owner of the MEFF Group, has an equity of €438.3MM.

How is MEFF CCP structured?

Several departments run MEFF CCP activities:

- **Clearing Department:** dedicated to clearing and risk operations, focusing on operational excellence and service towards MEFF customers. It manages the intra-day and end-of-day clearing processes. It operates MEFF's risk systems and monitors MEFF risks on a real time basis.
- **IT Helpdesk:** manages clearing databases and systems.
- **Sales Department:** monitors and translates customer requirements, and manages the enrollment of new customers.
- **Business Development Department:** in charge of the clearing strategy and project management.
- **Internal Risk Committee:** it focuses on the financial safeguards and protections of the CCP and the risk methodology.
- **Compliance Officer:** it focuses on any legal or tax issue that may affect the operating activity of the CCP. He is also responsible for dealing with both internal and external auditors.

2. Legal Framework and Regulatory Oversight

Who is MEFF's Supervisory body?

MEFF is an official exchange and CCP, authorized by the Ministry of Finance, as required by the Securities Market Act (Law 24/1988, of 28 July). The derivatives market activity is also regulated by the Royal Decree 1282/2010, of 15 October.

MEFF is supervised by the Spanish Regulatory Agency - *Comisión Nacional del Mercado de Valores* (hereafter CNMV), which is a government body set up under the Securities Market Act.

What is the basis of the MEFF General Regulations?

The 1991 version of the MEFF Rule Book was updated in only a few occasions, and had a substantial overhaul in 2010, which was, as legally required, approved by the Ministry of Finance and published on the Spanish Gazette on 5 January 2011. The Rule Book and complementary regulations became effective on January 24th, 2011 and they can be found on the MEFF website at the Rules & Regulations section.

The General Terms and Conditions of the Contracts are an integral part of the Rule Book and are approved by the CNMV. Circulars and Instructions, issued by MEFF using the remit of the Rule Book, complement the rules that govern trading, registration, clearing, settlement, central counterparty services and other relevant aspects of the services provided by MEFF.

What is the process for amending MEFF rules?

In order to amend either the Rule Book or the General Conditions the approval and the authorization from the Spanish Ministry of Finance and/or the CNMV is needed. However they are only updated when needed, which is not very often.

In the exercise of the duties corresponding to it in connection with the organization and management of both trading and CCP activities, MEFF may approve Circulars and Instructions, which shall be of mandatory compliance for Members, Clients, and generally end-users of the services provided thereby and which shall be subject to publication.

Circulars shall be approved by the MEFF's Board first and shall be published at least five business days before their effective date, except when for urgency reasons they must be effective in a shorter time after publication. The CNMV can stop any Circular from entering into force; Circulars related to posting of Margins require express approval of the CNMV.

Some Circulars are updated at least once a year whilst others can be updated on a monthly or a quarterly basis (i.e. Default Fund Circulars), and others are quite permanent through the years.

Instructions shall be approved by MEFF CEO.

In case of a CCP participant default, is there a high degree of assurance that actions taken under MEFF rules and procedures may not later be avoided or reversed?

There is a high degree of assurance that actions taken under MEFF rules and procedures may not later be avoided or reversed. The Securities Market Act establishes (in both arts. 44.ter.4 and 59.7) that the CCP Rule Book has the status of a Securities Market regulation, and therefore the Rule Book, the General Conditions of the Contracts, and the complementary rules issued by MEFF in accordance with the legal provisions, and approved by the CNMV as needed, are enforceable by law.

3. Compliance

Is MEFF exposed to external audits?

Yes. Meff has its mandatory annual audit. The latest external auditing firm has been Deloitte.

The Annual Accounts and Management Report are available in the CNMV (the Supervisory Body) web page. The latest can be found at the following link:

<http://www.cnmv.es/portal/consultas/Rectoras/ListadoAuditoriasCuentasAnuales.aspx>

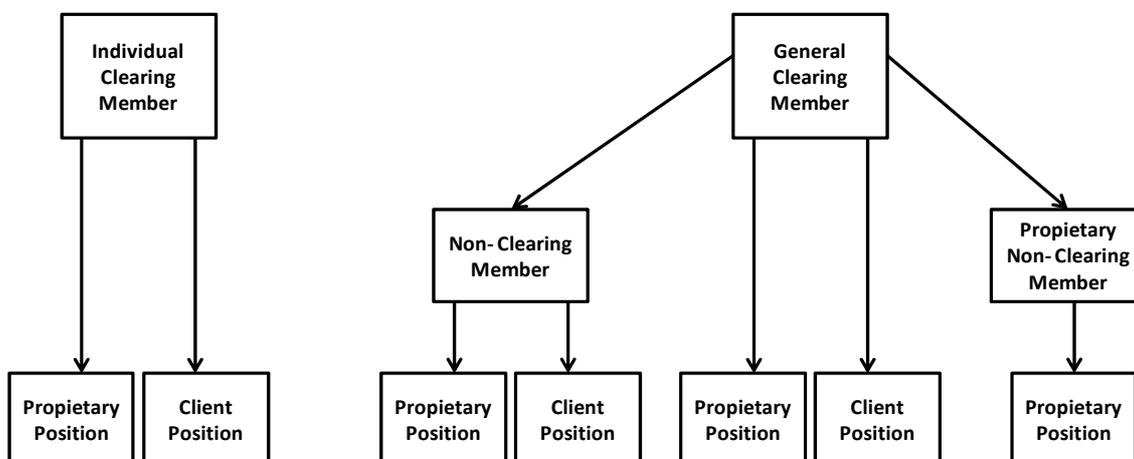
4. Access and Membership

What are the different types of MEFF membership?

Clearing Membership comes in two categories, Individual Clearing Member and General Clearing Member:

- Individual Clearing Members. This category enables the Member to trade or request Registration of Contracts for its proprietary account or on behalf of its clients. An Individual Clearing Member shall be liable to MEFF for compliance with all obligations to the contracts and trades registered in its accounts.

- General Clearing Members. As well as the duties inherent to Individual Clearing Members, a General Clearing Member shall be liable to MEFF for full compliance with all obligations inherent to the Contracts registered in the accounts of its Non-Clearing Members and registered in the accounts of its Proprietary Non-Clearing Members.



What is required to gain access to MEFF?

Applicants must be authorized by the MEFF’s Board, show evidence of a certain minimum level of liable Capital and pay a contribution to MEFF’s Clearing Fund for each segment they want to be active in. The minimum requirements, based on the different types of Membership are shown in the following table (figures in million Euros):

Type of Member	Financial Group Requirements	Energy Group Requirements	Repo Group Requirements
ICM	Equity: 75	Equity: 75	Equity: 100
	Individual Fund: 2% Initial Margin with a cap 1.5 and a floor 0.5	Individual Fund: 2% Initial Margin with a cap 0.3 and a floor 0.1	Individual Fund: 2
	Minimum Default Fund contribution: 1 - 2	Minimum Default Fund contribution: 0.5 - 1	Minimum Default Fund contribution: 1
GCM	Equity: 100 - 125	Equity: 100 - 125	Equity: 125
	Individual Fund: 2% Initial Margin with a cap 3 and a floor 1	Individual Fund: 2% Initial Margin with a cap 0.6 and a floor 0.2	Individual Fund: from 5 to 11, based on the NCMs and Clients it clears
	Minimum Default Fund contribution: 1 - 2	Minimum Default Fund contribution: 0.5 - 1	Minimum Default Fund contribution: 2

Any company requesting to become a member must meet all the legal requirements and have the appropriate human and technical resources as well as the means that enables it to undertake its business as a member.

In order to obtain the category of member carrying a second-tier register, and to maintain a second-tier register, a description of how its back office system enables to maintain the second-tier register system and how it calculates individual risks must be provided. Also, a description of the procedures and methods for posting and investing the margins provided by its clients is required.

A Clearing Member must hold a cash account in the TARGET2 system or designate a Payment Agent with an account on the TARGET2 system.

Is there any Clearing Membership fee?

Yes, there is a one-off Clearing Membership fee of € 30,000. This fee and any maintenance fee can be found in the *General Fees Circular* (see link below):

<http://www.meff.com/docs/ing/normativa/circulares/2012/C-GEN-2012%2003%20%20General%20Fees.pdf>

Which firms are admitted as clearing Members at MEFF?

All of the following Entities may be admitted as a Clearing Member at MEFF:

- The investment services companies which are authorized to execute client orders or to trade for their own account.
- Spanish credit entities.
- The investment services firms and credit institutions authorized in other Member States of the European Union who are authorized to execute client orders or to trade for their own account.
- The investment services firms and credit institutions authorized in a State which is not a member of the European Union, provided that, on the authorization given by authorities in their home country are empowered to execute client orders or to trade for their own account.
- The Spanish Central Government, acting through the Department of Treasury and Finance, the General Social Security Treasury and the Bank of Spain.
- Those others who, under MEFF's judgement, comply with some specific criteria.

The list of members is public and can be found on the following link, which shows the list of the different MEFF Members divided by category type and Group of Contracts to which they belong:

<http://www.meff.com/asp/Normativa/Miembros.aspx?id=ing>

5. Segregation and portability

What kind of account structure does MEFF have in place?

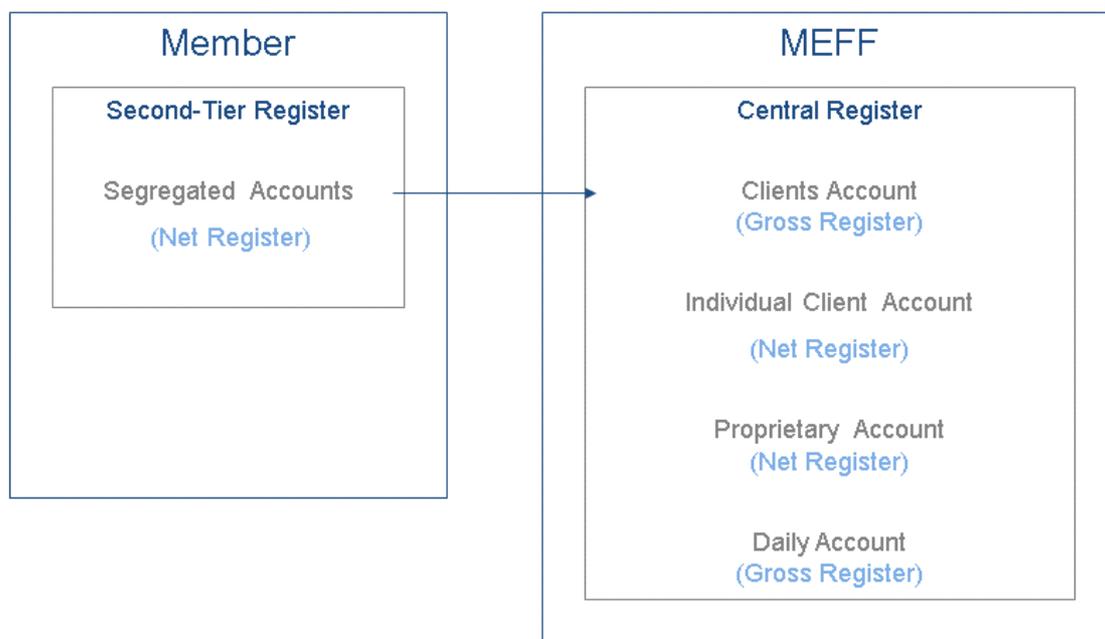
MEFF currently holds around 4,000 accounts with an open position, and has been monitoring and calculating their risk on a real time basis for the last 20 years.

The following account types are opened in MEFF:

- Daily account: the holder is a member. Trades are recorded before being allocated to another type of account. This account cannot have a position at the end of a session. Every daily account has an associated default account where trades not assigned at the end of the session are automatically allocated.
- Proprietary account: the holder is a member. The member's own trades are registered and reflect the member's position at any given moment.
- Individual client account: the holder can be any natural or legal person. It will reflect the position of the client at any given moment.

- Clients account: the member has a clients account opened in which the net positions of each client account of the second-tier register are recorded without being netted. This form of record is called "gross record".

The correspondence between Member Second-Tier Register and MEFF Central Register can be seen in the following chart:



Does MEFF have in place rules and procedures that enable segregation and portability of positions?

Yes. Complying with the 2012 CPSS-IOSCO Requirements,

- MEFF CCP has Segregated Positions protected from a Clearing Member's Default or a Non-Clearing Member's Default.
- The majority of accounts opened in MEFF are individual client accounts.
- Initial Margins have been calculated at an individual account level in MEFF for more than 20 years.
- The collateral posted for an individual account is legally segregated from that of the Clearing Member.
- Full identification of individual accounts, which means that both collateral and positions can be transferred to one or more participants in a Default situation, thus facilitating the CCP's ability to carry out its default management procedures in an orderly manner.

All of the above is fully supported by Article 59 (and equivalent Art. 44.ter) of the Spanish Securities Market Act:

- Margins posted shall only be applied to cover obligations arising from contracts registered in MEFF (article 59.8).
- "Absolute right of separation" for MEFF and Members in case of bankruptcy proceedings (article 59.9).

6. Products: grouped in segments

What asset classes does MEFF clear and what markets does it operate?

Products are grouped in three different segments: Financials (including equity and fixed income derivatives), Repo (*MEFFRepo*) and Energy (*MEFFPower*). The criteria to assign a product into a specific segment are (i) risk profile; and (ii) type of underlying.

Both Equity and Fixed Income Derivatives trading is undertaken via the MEFF Exchange, cleared by MEFF as CCP, and settled either by cash or by delivery.

Repo trading on Spanish Government Bonds is undertaken via bilateral trading systems, voice brokers, etc. or via Multilateral Trading Facilities, cleared by MEFF as CCP and settled at IBERCLEAR as a securities settlement system (SSS).

Energy derivatives are bilaterally traded within the OTC markets, with clearing taking place at MEFF as CCP. All instruments are cash-settled.

Is a margin offset between products in different segments admitted?

No, because they have a different risk profile, so they are uncorrelated.

There's a principle of no contamination between segments: margins and default funds are called independently by segment, and losses in a segment can't be covered by default funds of other segments.

7. Risk Management

a. Initial Margin Methodology

What is the assumed holding period applied to MEFF Initial Margin parameters and what confidence level is MEFF trying to achieve?

The confidence level to achieve in terms of covering the tail losses is 99.9% and the holding or close-out period is a minimum of 2 days. It can be more days for large positions or for less liquid products (for example, 3 days for the energy segment products).

How long is the look-back period considered for the Initial Margin parameters?

MEFF uses a look-back period to calculate the Initial Margin parameters that takes into account the last 63 business days and follows conservative criteria: only if a specific underlying Initial Margin interval has been liable to be decreased during two consecutive reviews, MEFF will proceed to do so.

Are MEFF initial margin parameters criteria compliant with EMIR?

MEFF initial margin parameter for each product is equal or exceeds the minimum initial margin parameter calculated according to Article 41 of Regulation (EU) No 648/2012: minimum look-back period of 1 year with a 99% confidence interval and a margin buffer of 25% to avoid procyclicality.

What model is used to calculate Initial Margin?

MEFF uses its own proprietary margin model, MEFFCOM2. The model is similar to the “SPAN” model developed by the Chicago Mercantile Exchange. It is a portfolio margining method based on a scenario matrix simulation.

The model finds the worst case scenario for the portfolio looking at diverse scenarios of variations in the risk factors: price and volatility. The initial margin required by the CCP will correspond to the monetary value of the worst case scenario, which is equivalent to the maximum loss.

This model is used for calculating end-of-day initial margins and intra-day initial margins, using real time positions and risk factors.

How many simulated scenarios are considered by MEFF risk margining model?

22 scenarios are considered for each underlying. They will come from:

11 price scenarios:

- Settlement price of the contract plus 2 extreme prices:
 - Settlement price – initial margin fluctuation
 - Settlement price
 - Settlement price + initial margin fluctuation
- Plus 4 downside prices and 4 upside prices in between of the 2 extreme prices.

Additionally, the above 11 price scenarios are combined with 2 volatilities (volatility at close increased and decreased by a minimum parameter of 10% for each contract), which gives a total of 22 scenarios.

Are concentration and liquidity risks considered in initial margin calculations?

Yes, and it results in an additional margin for large positions. In the case of an Account and a certain underlying where the Net Position is greater than a threshold function of the Average Daily Trading Volume (ADV), the Initial Margin interval for that underlying will be increased, based on some extra price scenarios.

The base Initial Margin interval uses 2 days as a holding period for both the Financial Derivatives and the Fixed Income Securities segments, whilst 3 days are considered for the Energy segment.

A large position takes a longer holding period to unwind. For futures and options:

- Between 0%-100% of the ADV, 2 days holding period is considered => there's no margin increase.
- Between 100%-150% of the ADV, 3 days holding period is considered => there's a margin increase of $\sqrt{3}/\sqrt{2} - 1 = 22\%$
- Between 150%-200% of the ADV, 4 days holding period is considered => there's a margin increase of $\sqrt{4}/\sqrt{2} - 1 = 41\%$
- If the ADV exceeds 200%, 5 days holding period is considered => there's a margin increase of $\sqrt{5}/\sqrt{2} - 1 = 58\%$

Furthermore, the MEFFREPO base margin interval may be additionally increased for long positions in securities whenever the yield for Spanish Sovereign Debt in the secondary market is higher than the yield for the Reference Basket over two consecutive days, as a way to reflect the potential decrease in liquidity, which is also factored thru the increase in the assumption of the number of days needed to liquidate the position, as follows:

- If the differential is greater than 400 points, the valuation interval will increase by 41% (4 days instead of 2).
- If the differential is greater than 450 points, the valuation interval will increase by 73% (6 days).
- If the differential is greater than 500 points, the valuation interval will increase by 100% (8 days).
- If the differential is greater than 550 points, the valuation interval will increase by 124% (10 days).

Is there any cross-margining considered?

Yes, there is a margin offset for correlated positions.

In order to determine the Inter-Commodity Spread Credit (ICS) to be applied to two different Margin Classes, a minimum average correlation equal or higher than 70% is required between the underlying assets from each Margin Class.

A list of the current ICS Credits can be found in the *Margin Calculation Parameters* Circular.

Does MEFF perform a frequent review and validation of the methodology?

Yes. MEFF performs reviews on both Initial Margin parameters (variation in price, volatility and correlation) on a real time basis and at the end of the day. If at any time during a business day there is a lack of correlation between a pair of underlyings liable to be offset, MEFF would no longer apply any ICS Credit between such underlyings.

Additionally, on a monthly basis, MEFF's Internal Risk Committee reviews all Initial Margin parameters

Furthermore, MEFF backtests Initial Margin daily, in order to monitor the adequacy of the margin parameters and margin model in relation with the intended coverage. At the close of each session the Initial Margin required to each Account Holder is compared to the worst loss incurred by such account within the following 1 or 2 business days, according to the holding period of 2 days.

As a result, given the different % of the Initial Margin used to cover the maximum loss per account during the present year 2012, the Initial Margin amount has successfully covered the maximum loss for each account with a confidence level of 99.9%.

Do MEFF Members participate in Risk Management?

MEFF receives advice from the Advisory Working Group, composed of the main clearing members. This Group will be transformed, with necessary changes, into the EMIR-mandated Risk Committee.

b. Default Fund

Which methodology does MEFF use to calculate the default fund?

MEFF's uses the same holding period as for the Initial Margin (2 days), which must cover the maximum historical upward and downward price fluctuations (from 1 to 2 days) recorded for a period of 10 years. This historical period could be outstretched up to 15 years whenever there are important Stress periods in between.

These fluctuations are applied to the open positions recorded at the close of each session, and 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. MEFF Members may request MEFF stress test methodology document.

At a final stage, the amount of the Default Fund must cover the Risk, under Stress Test conditions, of the Clearing Member with the highest risk plus an additional 10%, thus being compliant with 2004 CPSS-IOSCO Recommendations. This amount will be calculated separately for each different Group of Contracts.

Moreover, following the current Regulation for CCP's, MEFF's Default Fund amount, calculated under extreme but plausible market conditions, also complies with:

CPSS-IOSCO 2012 Principles for Financial Market Infrastructures: where the additional financial resources should be sufficient to cover the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the CCP.

EMIR 2012 Regulation: where the amount of the Default Fund should enable the CCP to withstand the default of the Clearing Member to which it has the largest exposure or of the second and the third largest Clearing Members, if the sum of their exposures is larger.

How frequently is the default fund updated?

It is updated on a quarterly basis for both the Financial Derivatives and MEFFRepo Groups of Contracts and on a monthly basis for the Energy Group of Contracts.

However, a daily stress test is calculated for each Clearing Member at the end of each session. Margins deposited by each Clearing Member will be taken into account for calculating the non covered risk. If this non covered risk exceeds the contribution amount to the Default Fund of all the remaining Members, an additional non-mutualized amount of collateral ("Individual Fund") must be posted for the difference.

How is the default fund calculated for each Clearing Member?

There is a Minimum amount based on the Member's type for each Group of Contracts, plus an additional variable contribution resulting from a % of the average Clearing Member's Initial Margin registered in the last quarter in the same group of contracts.

Is default fund contribution limited or unlimited? Is there a rolling capped liability period?

MEFF is in the process of establishing a rolling capped liability period that will set an absolute limit to unfunded default fund contributions during a rolling period of three months.

However, MEFF current system limits liability in a different way:

In the event that the Default Fund is used once in more than 50% of its full amount, or more than once within three consecutive months, in addition to its replenishment by Clearing Members, and during a minimum period of three months,

- MEFF's "skin-in-the-game" will double
- Initial Margins will be calculated using stress test parameters

These measures greatly reduce the probability of repeated usage of the Default Fund and will be maintained.

When is the default fund contribution refunded?

MEFF will refund a Clearing Member its Default Fund contribution as soon as the Member resigns and has closed out all its open positions at MEFF.

Does MEFF have enough capital ("skin-in-the-game") to enable Members to use Method 1 to calculate their own capital requirements, in respect of the default fund contributions, in BCBS 227?

Yes. MEFF skin-in-the-game exceeds its hypothetical capital (Kccp) for all segments. Then Method 1, equation 3 (the better outcome) applies. MEFF Kccp and C-factor used to calculate each Clearing Member capital requirement in each segment are available to MEFF Clearing Members by request.

c. Individual Fund and Intraday risk control

Are there any other margin types?

There is an additional margin to the initial margin that is called Individual Fund, only requested to Clearing Members:

- To meet the minimum equity requirements to be admitted as a Clearing Member.
- To get and maintain the category of member carrying a second-tier register.
- As a minimum requirement to register in one segment (Repo segment).
- To cover any risk limits excess.

Advantages of the Individual Fund:

- It allows a higher level of participation: Members with less Equity can also be accepted by MEFF as Clearing Members without increasing mutualized risk.
- The Default Fund will not be exposed to a high risk of concentration from any Clearing Member: At the end of each trading session, a Default Fund Stress Test is carried out for each Clearing Member and an additional Individual Fund is required if necessary.
- Both MEFF and its Clearing Members are of the opinion to give more strength to the Individual Fund rather than to the Default Fund contribution.
- MEFF's Risk Policy based on the requirement of the Individual Fund goes in parallel with the new Capital Requirement Regulations:
 - ❑ Basel III gives a higher risk weight to mutualized Funds.
 - ❑ EMIR tends to increase Initial Margin levels through Stress Test scenarios.

What will be the expected frequency of intra-day margin calls?

MEFF will perform intra-day margins calls in case of exceptional market circumstances or whenever a Clearing Member exceeds its Intra-day Risk Limit. General calls due to exceptional market circumstances are infrequent. Particular calls for Individual funds are frequent.

The intra-day risk is calculated real time for all the accounts with open position that have traded during the session. Its objective is to control the intra-day risk due to open position increments and due to movements of prices since the last settlement was done. MEFF has the ability to ask for an Individual Fund if the threshold is exceeded.

$$\text{Real time Initial Margin} - \text{Margin posted} + \text{Real time Variation Margin}$$

This risk is compared against an Intra-day Risk Limit, which is the sum of Individual Funds and Extraordinary Funds posted by Clearing Members plus a Solvency Limit (5%-10% of the Net Worth of the Clearing Member minus bank guarantees issued to other members). The Solvency Limit has a maximum or cap depending on the rating of the Clearing Member (from 10 to 300 million euro, for example, a Member with BBB- rating and no Individual Fund posted may not have overnight risk larger than 15 million euro).

Are there any other Risk Limits established by MEFF CCP?

At the end of the day, there is a stress test of the intra-day risk limit, which is known as the Margin Call Limit. It is calculated using two scenarios (a bearish and bullish scenario). Its purpose is to test that, in case MEFF asks for an Extraordinary Margin Call during the following business day, the amount of additional funds that would be required by MEFF does not exceed 10%-20% of the Clearing Member's Net Worth.

The Stress Test of the Intra-day Risk Limit at the end of each session is calculated with the following formula:

$$\text{Simulated Margins} - \text{Margin Posted in D+1} + \text{Simulated Variation Margin}$$

And the Clearing Member's Solvency Limit for the Margin Call Limit (MCL) is calculated using double the percentages of Shareholders' Equity utilized in the Intra-day Risk Limit (IRL), with

some maximum amounts established in the corresponding Circular (the same caps as for the Solvency Limit in the previous paragraph).

If the calculated Risk Amount exceeds the sum of the Clearing Member's Solvency Limit for the MCL plus the Margins considered for the purpose of establishing the IRL, the Member will be required to post an Individual Fund for the difference.

Finally, as mentioned before, a daily stress test is calculated for each Clearing Member at the end of each session. If this non covered risk exceeds the contribution amount to the Default Fund of all the remaining Members, an Individual Fund must be posted for the difference.

How does MEFF account for Liquidity Risk in a Stress event?

Around 80% of margins are posted in cash, thus MEFF does not face a significant liquidity risk, and by Circular that percentage can't be less than 30%. Additionally, MEFF keeps enough own resources in cash to cover MEFF's overnight financing needs.

8. Collateral Management

What types of margin collateral does MEFF accept?

Margins can be posted in the form of:

- Cash in Euro.
- Simple transfer of securities of Spanish Sovereign Debt to MEFF's account in the Spanish Central Depository (IBERCLEAR), and Sovereign Debt of Germany, France, United Kingdom, The Netherlands, Belgium and Austria to MEFF's account in Clearstream Banking, Société Anonyme (hereafter CBL).
- Pledge of securities included in the IBEX 35 Index¹, pledge of Spanish Sovereign Debt in MEFF's account in IBERCLEAR, and from 2013 onwards pledge of Sovereign Debt of Germany, France, United Kingdom, The Netherlands, Belgium, Austria and USA in CBL and EUROCLEAR, through their respective collateral management services.
- Bank Guarantees on first demand, exclusively under some conditions established in the corresponding Circular.

It is expected to also accept cash in US Dollars in 2013.

How is the collateral valued?

Securities posted as collateral are valued on a daily basis and at the end of the business day, and can be valued intraday if necessary, in an extreme volatility session.

A haircut is also applied for valuation purposes, being a different percentage for each type of security posted as collateral. For instance, higher haircuts will be applied to less liquid securities. The *Valuation of Securities posted as Margins* General Circular establishes the different criteria followed by MEFF to value the collateral.

¹ Except BME shares

Can MEFF CCP re-use the collateral received?

No.

How does MEFF hold the margin collected? Is it held in a bankruptcy-remote account? What is the investment policy for cash margins?

Securities are kept in direct accounts at (I)CSD's, as mentioned above.

For cash margins, participants may decide whether cash should be invested or kept in a MEFF account in the Eurosystem of the European Central Banks.

MEFF invests the cash margins by means of overnight re-purchase agreement transactions (hereafter sell-buyback transactions) on Spanish Public Debt securities settled at IBERCLEAR. The counterparties chosen by MEFF must have a minimum rating of BBB and the corresponding haircuts (MEFFRepo initial margins) are applied. Interests earned are passed in full to the Members.

Also, it is expected by the second quarter of 2013 to carry out cash margins investments by means of overnight re-purchase agreement transactions through CLEARSTREAM and EUROCLEAR, acting in both cases as a Collateral Taker within its Tri-party Collateral Management Service.

For cash posted by an individual Client who holds an Individual Account with MEFF, or by a Member, in both cases having a margin requirement of 10 million euro or higher, there is the possibility to request that the cash posted as collateral be deposited in MEFF's account with the Eurosystem. This account is separated from MEFF's operating account, and it is a non-interest-bearing account.

The Spanish law establishes that all margins transferred to MEFF can only be used to cover the default of the member or client, or must be returned to the member or client, being therefore protected from the hypothetical bankruptcy of MEFF.

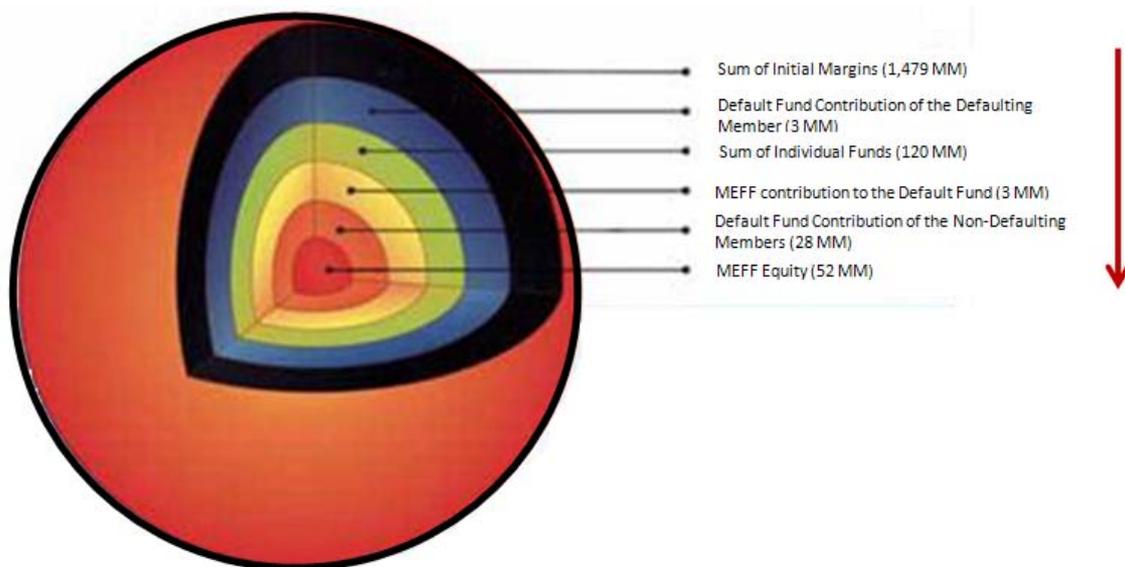
9. Default procedures

What will happen if a Member does not fulfill any Margin requirement?

As per the MEFF rules and regulations, not fulfilling any margin requirement constitutes grounds for declaring the Member in default and therefore applying the actions and procedures established in the Rule Book.

What is the default waterfall in the event of a Clearing Member's default?

MEFF refers to the risk waterfall as its "lines of defense." In the event of a default, the full amount of each "line of defense" is shown in the following picture (figures as of 28th September 2012 for the Financial Derivatives group of contracts):



As it is shown in the picture above, the resources available (in the same strict order) for MEFF CCP in case of a default, are:

- Defaulter's Initial Margins for each Group of Contracts: This is the main layer of protection against a default of any participant. As of 28th September 2012, the sum of all Initial Margins posted by Clearing Members in the Financial Derivatives Group reached €1,479MM.
- Defaulter's own Default Fund contribution for each Group of Contracts: as of 28th September 2012, the largest individual contribution to the Default Fund for the Financial Derivatives Group was €3MM.
- Defaulter's offsetting balances for each Group of Contracts and execution of Extraordinary and Individual Funds: once MEFF handles a default, if the sum of the Initial Margin and the Default Fund contribution of the defaulting Member is not enough to cover the losses coming from the default, MEFF will offset balances for each Group of Contracts where the defaulter Member is active in and afterwards will use all Extraordinary and Individual Funds posted by the defaulter.
- Fund provided by MEFF for each Group with losses. For the Financial Derivatives Group of Contracts, MEFF contributes with €3MM in case the three previous layers of protection were not sufficient to cover the default situation.
- Remainder of the Default Fund in the Groups with losses: this amount, equal to €28MM, corresponds to the Default Fund for the Financial Derivatives Group of Contracts (€31MM), once the corresponding Defaulter's Default Fund contribution (€3MM) has already been deducted.
- MEFF's own capital: as stated in page 2 of this document, as of 31 December 2011, MEFF Group had a combined equity of €52MM, which would serve as a final layer to cover the default situation.

As an example of how the MEFF waterfall of resources is used, some different cases are shown here below:

	Group 1	Group 2
Member A Initial Margin	100,0	40,0
Member A Default Fund Contribution	5,0	2,0
Individual Default Fund of Member A	8,0	
Skin in the Game	5,0	2,0
Total Default Fund (all Members)	60,0	25,0

CASE 1			
Winding Down Cost	-90,0	-60,0	
Member A Initial Margin	100,0	40,0	
Member A Default Fund Contribution	5,0	2,0	Total
BALANCE (Cross Default)	15,0	-18,0	-3,0
Individual Default Fund of Member A	8,0		8,0
TOTAL LOSS			0

CASE 2			
Winding Down Cost	-100,0	-60,0	
Member A Initial Margin	100,0	40,0	
Member A Default Fund Contribution	5,0	2,0	
BALANCE (Cross Default)	5,0	-18,0	-13,0
Individual Default Fund of Member A	8,0		8,0
TOTAL LOSS			-5,0
LOSS SHARING (1)	0,0	-5,0	
Skin in the Game		2,0	
LOSS AGAINST DEFAULT FUND		-3,0	

(1) Balance of Group 1 is positive. Contributions to DF of non-defaulting members is not affected.

CASE 3			
Winding Down Cost	-110,0	-60,0	
Member A Initial Margin	100,0	40,0	
Member A Default Fund Contribution	5,0	2,0	
BALANCE (Cross Default)	-5,0	-18,0	-23,0
Individual Default Fund of Member A	8,0		8,0
TOTAL LOSS			-15,0
LOSS SHARING (2)	-3,3	-11,7	
Skin in the Game	5,0	2,0	
LOSS AGAINST DEFAULT FUND	0,0	-9,7	

(2) Group 1 part of the Total Loss is the proportion of Group 1 Balance over Total Balance.

CASE 4			
Winding Down Cost	-115,0	-60,0	
Member A Initial Margin	100,0	40,0	
Member A Default Fund Contribution	5,0	2,0	
BALANCE (Cross Default)	-10,0	-18,0	-28,0
Individual Default Fund of Member A	8,0		8,0
TOTAL LOSS			-20,0
LOSS SHARING (2)	-7,1	-12,9	
Skin in the Game	5,0	2,0	
LOSS AGAINST DEFAULT FUND	-2,1	-10,9	

(2) Group 1 part of the Total Loss is the proportion of Group 1 Balance over Total Balance.

Is the default fund split out and ring fenced for different product types or is there just one default fund pool?

As mentioned above, there is a Default Fund for each different Group of Contracts (Financial Derivatives, Energy, and MEFFRepo), therefore, losses in a Group cannot affect the Default Fund of other Groups.

Would there be sufficient funds to cover two defaults or more occurring at the same time?

As stated in the first question from point 7.b. above, MEFF's Default Fund methodology would comply with the new EMIR Regulation, which means having enough Default Fund to cover the default of the Clearing Member to which MEFF has the largest exposure or of the second and the third largest Clearing Members, if the sum of their exposures is larger. Also, based on the new CPSS-IOSCO 2012 Principles for Financial market infrastructures, MEFF's additional financial resources would be sufficient to cover the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure.

Currently MEFF would even cover with Individual Funds the default of its five largest Members.

In case of a MEFF default, will Members recover their margins posted?

According to Articles 59.8 and 59.9 of the Spanish Securities Market Law (and its equivalent Art. 44.ter.6), collateral posted by members is only liable for the obligations that the member has with the CCP and cannot be used for another purpose. In other words, margins are segregated and they can only be used to cover the default of the member or to be returned to the member.

Therefore, if the CCP gets on a winding-up procedure or reorganization measure, the margins posted are not assets of the CCP and cannot be used to meet any other obligations that the CCP may have. Consequently in an insolvency procedure of MEFF, the margins posted would be segregated and excluded from the insolvency procedure.

10. Disaster recovery, business continuity and IT security

Does the CCP have a business continuity plan that addresses events posing a significant risk of disrupting operations?

All MEFF key departments have appropriate Business Continuity Plans that address a long list of events posing a significant risk of disrupting operations. Three main departments; Technology, Market Services and Supervision, and Clearing do have a Business Continuity Plan to ensure that critical information and systems can be recovered within a very short time.

The plan is tested at least 7 times per year to ensure the business is not interrupted in terms of the systems and the service. Appropriate adjustments have been made as a result of the tests.

Does MEFF have a disaster recovery back up site? If yes, does this site have fully functional operations to support MEFF's business and how long does it take for this site to be fully operational?

MEFF does have two data centers with full capacities, the main one in Madrid and the alternative one in Barcelona; they are double connected using different telecommunications providers. Madrid and Barcelona are 600 Km apart.

There are several points of presence for members to connect to the Exchange: Madrid, Barcelona, Valencia, Bilbao and London.

Members must be able to connect to at least two different MEFF points of presence. A member must have at least two different lines and all the MEFF provided hardware installed in the member premises is duplicated to avoid single points of failure.

MEFF's Recovery Time Objective (RTO) for the whole system has been evaluated in 30 minutes regarding Technical Issues (Host and communications). Analysis and fixing actions, if needed in case of software problems or unexpected issues, are not included.

Furthermore, MEFF and MEFF Members participate in a yearly Disaster Recovery Test organized by the Technology Division of the FIA (Futures Industry Association).