

# MEFFServer User Guide



February 2020

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# 1. Introduction

MEFFServer is the core application of the utilities that obtains the market data, processing and storing the information received, making it available to client applications in distinct formats and media. It offers both real-time and historic information.

The Clearing data can be offered to other applications during the session through:

- DDE links (Dynamic Data Exchange)
- Real-time database tables.

Or for processing at the end of the session through:

- Transfer files.
- Historical database tables.

This manual describes how the application works and various options for its configuration and their implications.

## 1.1 Before starting

#### 1.1.1 What do you need to know

MEFFServer receives information from a Market session, processes it and makes it available in an open information system which client applications can access to provide users data from the session.

This application is exclusively a data server: it obtains Market data, processes them and stores this information in tables. It can also offer these data through DDE links. However, to use this information client applications are required which elaborate the information and make it available in other formats (lists, alarms, etc.).

Given that MEFFServer deals with Market information, it is essential that you understand how the Market works to make full use of the information provided, as well as the terms used related to trading, clearing and portfolio positions.

#### 1.1.2 What type of clients can use the information provided by MEFFServer

MEFFServer offers the following data formats:

- DDE links. MEFFServer offers information in real-time using DDE links (Dynamic Data Exchange) that can be used by any DDE client application.
- Real-time database tables.
- Transfer data in ASCII files.
- Historical database tables.

Given these data formats, the applications which use this information must behave in the same way as one of the following applications:

- Clients that inspect the databases.
- DDE clients.
- Applications that access the ASCII files.

## 1.1.3 What type of data MEFFServer offers

MEFFServer provides information on the session. This information can be offered in different formats (DDE links, Paradox tables and ASCII files) and at different times (real-time or historical).

It offers both master and audit trails. The difference between the master and audit trails data is that master data do not normally change on a daily basis as they are relate to the market in general, whereas the audit trails depend on the session and are different for each session.

The information that MEFFServer calculates and offers through DDE links can be organised in the following groups:

- Clearing. Data on Clearing, Risk, etc.
- Portfolios. Data on Open Positions.
- Registers. Data on Clearing, Risk, etc. registered
- Reports. Information in dynamic list format.
- Feed. Feed messages.
- General information. Session data (date, etc...)

The information that MEFFServer generates and offers via tables and files is structured as:

- Real-time. Generates the session information, for both masters and audit trails, updating it continuously through the session. This information is cleared at the start of each new session.
- Historical. Generates all the information (including treasury and clearing data), for both masters and audit trails, at the end of the session, adding information to that of previous sessions.

## **1.2** Physical environment

MEFFServer can receive market information via MEFFAccess or communication server of BMEClearing through TCP/IP network.

# 2. Starting and exiting

This chapter explains how to start and exit the application.

MEFFServer is an application that obtains Market data. Therefore the way it connects to obtain these data must be configured. It is assumed that the MEFFServer communications have been correctly configured. Should you require further information regarding this configuration, consult "Communications configuration" later in this manual.

## 2.1 Starting

### 2.1.1 Starting MEFFServer

Double click on the MEFFWIN.EXE program icon

A window will appear indicating that the program is being loaded:

| 1. 3                             | Meff - MeffWin                              |  |  |  |  |  |  |
|----------------------------------|---|--|--|--|--|--|--|
| [五]                              | MEFF SERVICES S.A.<br>Copyright 1995 - 2003 |  |  |  |  |  |  |
| Abriendo ficheros Clearing REGRD |   |  |  |  |  |  |  |

The main screen is immediately displayed:

| )최) Server         | -                  |                 |                |       |          |
|--------------------|--------------------|-----------------|----------------|-------|----------|
| <u>C</u> onnection | C <u>o</u> nfigure | <u>M</u> onitor | r <u>D</u> ata | ?     |          |
| Session:<br>Msg :  | 00/00/000          | )0              | 00:00          | :00   | 国        |
| Status:            | 00:00:00           |                 | Environ        | ments | A700 003 |
|                    |                    |                 |                |       |          |

At this point the MEFFServer application has been started but the reception and processing of HOST messages have not, so information from the current session is not available.

*Note* In this situation MEFFServer already offers DDE links, but the information provided is from the last session correctly received.

It is necessary to connect to the system to have access to the current session information in real-time.

This connection can be made through the communications controller (MEFFAccess).

## 2.1.2 Establishin a connection with the active session in MEFFServer

| 🛋 Server             | -                        |               |
|----------------------|--------------------------|---------------|
| Connection           | Configure Monitor Data ? |               |
| Connect<br>Disconnec | t 0/0000 00:00:00        | <u>الآل</u> ا |
| Pause<br>Resume      | :00:00 Environments      | A700 003      |
| Exit                 |                          |               |

Select the option "<u>C</u>onnect" in the "<u>C</u>onnection" menu.

The data on the main screen will be updated when the connection is made.

|  | Session date   | Session time: It<br>corresponds to the last<br>message received |
|--|--|---|
|  | )ﷺ) Server - MultiConn   |   |
|  | Connection Configure Monitor D   | ata ?   |
|  | Session:         07/04/2006         00           Msg :         27000 M3AL         00 | 0:00:00   |
|  | Status: 00:00:04   | A700 003  |
| Fields of status:<br>connection<br>time and market sta | tus  | Member and Trader code<br>connected to<br>MEFFServer            |

#### 2.1.3 Pausing and restarting MEFFServer

MEFFServer allows its activity to be paused, freezing the market situation at that moment. This facilitates the analysis of information in a static market situation.

The MEFFServer can also be paused to free up system resources. This may be appropriate when system resources are required for other processes.

#### 2.1.3.1 Pausing the activity of MEFFServer

Select the "Pause" on the "Connection" menu.

New data will not be processed, but the links remain active with the information held when the pause was activated.

You will observe that the main screen data are not updated.

*Note* MEFFServer can be paused at any moment without the loss of any messages. When MEFFServer restarts it will continue from the last message handled before the pause.

#### 2.1.3.2 Restarting the MEFFServer:

Select the option "Resume" in the "Connection" menu.

On restarting MEFFServer will continue receiving and handling data. It processes data at maximum speed until it clears the backlog and reaches its normal state (REAL TIME).

## 2.2 Existing

#### 2.2.1 Exiting completely from MEFServer

Select the "Exit" option in the "Connection" menu.

There may be times when it is preferable to disconnect from the current MEFFServer session without exiting the program. For example, changing the configuration.

#### 2.2.2 Exiting the session without exiting the aplication

Select the "Disconnect" option of the "Connection" menu.

*Note* When the MEFFServer session is disconnected, the DDE links can be consulted, providing data up to the time of disconnection.

# 3. Configuring data

## 3.1 Exporting data

MEFFServer enables data to be exported in ASCII format making it available to other applications.

These files can be obtained during the session or at the end of the session.

See 'MEFFStation - RDF Clearing' documents to obtain a detailed description of the files.

## 3.1.1 Separators of fields and records

All the fields are separated by the semi-colon character (";").

All the records of each of the files are separated by the characters CR, LF.

### 3.1.2 Syntax in the files. Data types

These types of data correspond with ASCII values and all are of variable length. These are:

- int: Sequence of digits without separators for thousands or decimals and optionally with sign (ASCII characters "-" and "0" "9"). The sign character uses one byte (that is, int is " 99999" whereas negative int is "-99999"). Note that int values can represent figures that begin with zeros (that is "00023" = "23").
- float: Sequence of digits, optionally with decimal comma and sign (ASCII characters "-", "0" –
   "9 and ","); the absence of the decimal comma in the value of the field should be interpreted as
   the "float" representation of a whole value. All the float fields will have a maximum of fifteen
   significant digits (the sign and the decimal comma are not counted). The number of
   decimals used will be a factor of the requirements of the trade. Note that the float values can
   represent figures that begin with zeros (that is "00023" = "23") and can contain or omit zeros at
   the end after the decimal comma (that is "23,0" = "23,0000" = "23").
  - o **Qty:** Float field able to store a complete number (without decimals) of "contracts".
  - **Price:** Float field that represents a price. Note that the number of decimals may vary.
  - **Amt:** Float field that represents an amount. Note that the number of decimals may vary.
- **char:** field of a single character. It can contain any alphanumeric character or punctuation character except the delimiter. All the char fields are case sensitive (that is,  $m \neq M$ ) and are delimited by punctuation marks (").
- String: Chain of alphanumeric characters. Can include any alphanumeric character or punctuation character except the delimiter. All the String fields are case sensitive (that is, ref ≠ Ref) and are delimited by punctuation marks ("). The annotation "String(n)" is used to indicate the maximum number of characters in the String field. In some cases, "n" implies the exact number of characters and, in this case it will be specified clearly under the column "Valid values".
  - **Currency:** String field that represents a currency using the values defined in the standard ISO 4217 Currency code (3 characters).
  - **LocalDate:** Local date in YYYYMMDD format.

Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31.

• LocalTime: Local time of file generation in HH:MM:SS format

Valid values: HH = 00-23, MM = 00-59, SS = 00-59

### 3.1.3 Generating Raw Data Files

MEFFServer allows data from the active session to be saved in ASCII format. If configured, these files are updated automatically at the of the session.

#### 3.1.3.1 Raw data files at the end of the session

Configuring the generation of the raw data files clic on the 'Transfer Data ....' option in the 'Configure' menú.

The following configuration window will be displayed:

| 🛱 Transfer Data Clearing                                      |  |        |
|---|--|--------|
| Acceptance filter of Give-In Clearing Member (CGIVEINFILTCLM) | ✓ Inter-group off-sets (CINTERSPR)                         |        |
| Acceptance filter of Give-In Member (CGIVEINFILT)             | Intra-group off-sets (CINTRASPR)                           |        |
| Accounts (CACCOUNTS)  | Invoicing (CINVOICES)                                      |        |
| Allocations & Registered Transfered (CTRANSFTRADES)           | ✓ Live trades (CHISTTRADES)                                |        |
| Bank Holidays (CHOLIDAYS)                                     | Margin array parameters (CVALARRAYS)                       |        |
| Cash movement for the Clearing Member (CCASHMOVCLM)           | Margins required (CMARGINSCLM)                             | All    |
| Cash movement for the Treasury Entity (CCASHMOVTREAS)         | Margins to be deposited by Custodian Member (CMARGINSCUST) | \$     |
| Clearing Houses (CCLEARINGHOUSE)                              | Open Positions balance (COPENPOSITION)                     |        |
| Contract groups (CCONTRGRP)                                   | Option premiums (CPREMIUMS)                                | None   |
| Contract types (CCONTRTYP)                                    | Participating Entities (CENTITIES)                         |        |
| Contracts (CCONTRACTS)  | Position adjustment (CPOSADJUST)                           |        |
| Contracts daily information (CCONTRSTAT)                      | Settlement and margins by holder (CACCOUNTSETTL)           |        |
| Deltas (CDELTAS)  | Settlement on expiration (CEXPIRESETTL)                    |        |
| Detail of margin calculation (CINIMARGINCALC)                 | Spot trades broken-down by holder (CSPOTTRADESBRKD)        | Cancel |
| Detailed Margins (CPLEDGES)                                   | Spot trades of Member (CSPOTTRADES)                        |        |
| Exercise requests (CEXERCISERQT)                              | ✓ Status (CSTATUS)   |        |
| Give-In References (CGIVEINREF)                               | Theoretical prices (CTHEORPRICES)                          | Ok     |
| Give-Ins for Clearing Member of Give-In Member (CGIVEINCLM)   | Trade types (CTRADETYP)                                    |        |
| Give-Ins for Give-In Member (CGIVEIN)                         | ✓ Trades (CTRADES)   |        |
| Give-Out References (CGIVEOUTREF)                             | Variation Margin (CVARMARGIN)                              |        |
| Give-Outs (CGIVEOUT)  |  |        |
| Directory   |  | ·      |
|   |  |        |
| Transfer: \smart\server\TRASPASO\                             |  | Browse |
|   |  |        |
|   |  |        |

In this window you can configure the raw data files to be generated automatically at the end of the each session received.

The folder where the files have to be generated can be configured.

#### 3.1.3.2 Raw data files during the session

The files can be generated at any moment during the session. Select 'Generation transfer data ...' option in 'Data' menú.

In this case MEFFServer shows a warning box indicating that communications will be paused during the generation of the files.



If generation is confirmed, MEFFServer shows the following window:

By default, it will be showed the files configured last time.



#### 3.1.3.3 Clearing. Raw data files

All the files have as extension the code of their corresponding clearing house (generically, "ch").

The structure of the files is the same for any MEFF/BME CLEARING workstation you have (MEFFTop, MEFFServer,...). The description of these files can be consulted in 'MEFFStation - RDF Clearing' document.

## 3.2 Generating Tables

MEFFServer allows the Session information to be generated in Paradox tables.

These tables are stored in the directories specified in the configuration window and can be consulted from any application.

In the appendix "Tables" there is a detailed description of each table.

#### 3.2.1 Historical data

In the Historical data configuration window you can define the tables that are to be updated at the end of each Session to maintain the Historical data tables in Paradox format.

Configuring the historical data tables: Select the option "Historical Data..." in the "Configure" menu. The configuration window will be displayed:

| 🛋 Historia    | cal Data Clearing                                     |  |        |
|---------------|---|--|--------|
| 🗹 Acceptan    | ce filter of Give-In Clearing Member (CGIVEINFILTCLM) | ✓ Give-In References (CGIVEINREF)                                  |        |
| 🗹 Acceptan    | ce filter of Give-In Member (CGIVEINFILT)             | Give-Ins for Clearing Member of Give-In Member (CGIVEINCLM)        |        |
| Accounts      | (CACCOUNTS)   | Give-Ins for Give-In Member (CGIVEIN)                              |        |
| Allocation    | s & Registered Transfered (CTRANSFTRADES)             | Give-Ins Log for Clearing member of Give-In Member (CLOGGIVEINCLM) |        |
| Allocation    | s, Transfers and Give-Outs Log (CLOGALLOC)            | Give-Ins Log for Give-In Member (CLOGGIVEIN)                       |        |
| 🗹 Bank Holi   | days (CHOLIDAYS)                                      | Give-Out Filters (CGIVEOUTFILT)                                    | All    |
| 🗹 Cash mov    | ement for the Clearing Member (CCASHMOVCLM)           | Give-Out References (CGIVEOUTREF)                                  |        |
| 🗹 Cash mov    | ement for the Treasury Entity (CCASHMOVTREAS)         | Give-Outs (CGIVEOUT)   |        |
| 🗹 Clearing H  | louses (CCLEARINGHOUSE)                               | Historic Control (CTRLHST)   | None   |
| 🗹 Contract g  | proups (CCONTRGRP)                                    | Holders (CHOLDERS)   |        |
| 🗹 Contract t  | ypes (CCONTRTYP)                                      | Inter-group off-sets (CINTERSPR)                                   |        |
| Contracts     | (CCONTRACTS)  | Intra-group off-sets (CINTRASPR)                                   |        |
| Contracts     | daily information (CCONTRSTAT)                        | Invoicing (CINVOICES)  |        |
| Currency (    | (CDIVISAS)  | Margin array parameters (CVALARRAYS)                               | Cancel |
| 🗹 Delta Trac  | des (COPEDELTA)                                       | Margins required (CMARGINSCLM)                                     |        |
| 🗹 Deltas (CD  | DELTAS)   | Margins to be deposited by Custodian Member (CMARGINSCUST)         |        |
| 🗹 Detail of n | nargin calculation (CINIMARGINCALC)                   | Open Positions balance (COPENPOSITION)                             | Ok     |
| 🗹 Detailed N  | fargins (CPLEDGES)                                    | Option premiums (CPREMIUMS)  |        |
| 🗹 Dividends   | (CDIVIDENDS)  | Participating Entities (CENTITIES)                                 |        |
| 🗹 Exercise r  | equests (CEXERCISERQT)                                | Permissions (CPERMISOS)  |        |
| <             |   | >  |        |
| Directories:  |   |  |        |
| Master:       | \smart\server\meffhist\Maestros\                      |  | Browse |
| Daily:        | \smart\server\meffhist\                               |  | Browse |
|               | ,   |  |        |

It enables the configuration of the information for master data and audit trails, and the configuration of the directories where they are to be stored.

#### 3.2.2 Realtime

It is possible to generate tables with information from the active session. You can access these tables as they are generated. They are known as "Real-Time Tables" and are available so that users can consult them during the trading period.

The tables are generated in Paradox format. They are created every time MEFFServer is initiated and increase in size through the course of the session, ensuring that they can be consulted and lists taken in real-time using external tools.

Configuring tables in real time: Select "Session tables..." in the "Confifure" menu.

The following configuration window will appear:

| 🕺 Session Tables Trading                 |        |
|--|--------|
| Accounts (TACCOUNTS)                     |        |
| Bank Holidays (THOLIDAYS)                |        |
| Contract groups (TCONTRGRP)              |        |
| Contract types (TCONTRTYP)               |        |
| Contracts (TCONTRACTS)                   |        |
| Contracts daily information (TCONTRSTAT) | All    |
| Cross Trades (TCROSSTRADES)              |        |
| Cross trades Log (TLOGCROSSTRADES)       |        |
| Currency (TDIVISAS)                      | None   |
| General trades (TGENTRADES)              |        |
| Holders (THOLDERS)                       |        |
| Market maker control (TLIQUIDEZ)         |        |
| Markets (TMARKET)                        |        |
| 🗌 Order Log (TLOGORDERS)                 | Cancel |
| Orders (TORDERS)                         |        |
| Participating Entities (TENTITIES)       |        |
| Pending Orders (TORDPEND)                | Ok     |
| Permissions (TPERMISOS)                  |        |
| Request for Quote (TPINTERES)            |        |
| Supervisor Messages (TMSGADMIN)          |        |
| Trade types (TTRADETYP)                  |        |
| Directories:                             |        |
|  |        |
| Realtime: \smart\server\REALTIME\        | Browse |
|  |        |
|  |        |

The tables to be generated during the Session are specified in the Configuration window. Both master data and audit trails can be generated in real-time.

The place where these tables will be created is indicated in "Directories".

## 3.2.3 List of the tables

The description of each Paradox table is detailed in the Appendix.

Following a list of available tables is included indicating if they are RealTime (RT), Masters (M) or Historical data (H)

| Tables              | RT           | Μ            | н            | Description  |
|---------------------|--------------|--------------|--------------|--|
| CACCOUNTS.DB        | $\checkmark$ |              |              | Information on the available accounts  |
| CACCOUNTSETTL.DB    |              |              | $\checkmark$ | Amounts by holder of settlements and inicial margins   |
| CACCOUNTSETTLDET.DB |              |              | $\checkmark$ | Second-tier register. Amounts by account of settlements and inicial margins  |
| CBACKTESTING.DB     |              |              | $\checkmark$ | Back Testing Disclosure Data   |
| CCLEARINGHOUSE.DB   | $\checkmark$ | $\checkmark$ |              | Generic information about the Clearing House   |
| CCOLLATERALACCOUNTS | $\checkmark$ | $\checkmark$ |              | Information on the available collateral accounts   |
| CCONTRACTS.DB       | $\checkmark$ |              |              | General information on the contracts available in the session  |
| CCONTRGRP.DB        | $\checkmark$ |              |              | Contract groups  |
| CCONTRREL.DB        | $\checkmark$ |              | $\checkmark$ | Resulting codes for the theoretical cascade  |
| CCONTRRELDET        |              |              | $\checkmark$ | Relationship between the original contract and its resulting<br>contracts, in the case where in the group of contracts there<br>are contracts whose position should be broken down into<br>others of a lower nominal amount.<br>For Energy this informs about the position which results from<br>applying the theoretical cascade. |
| CCONTRSTAT.DB       | $\checkmark$ |              | $\checkmark$ | Contract daily data  |
| CCONTRTYP.DB        |              |              |              | Contract types   |
| CCPACCOUNTSETTL.DB  | $\checkmark$ |              | $\checkmark$ | Settlements and margins per holder at CCP level  |

| Tables               | RT           | М            | Н            | Description   |
|----------------------|--------------|--------------|--------------|---|
| CCPCASHMOVCLM.DB     | $\checkmark$ |              |              | Clearing member cash movements at CCP level   |
| CCPCASHMOVTREAS.DB   | $\checkmark$ |              | $\checkmark$ | Treasury entity cash movements at CCP level   |
| CCPPLEDGES.DB        | $\checkmark$ |              | $\checkmark$ | Detail of margins pledged at CCP level  |
| CDELIVERABLES        | $\checkmark$ |              | $\checkmark$ | List of available deliverable contracts associated to a derivative contract   |
| CDELIVSETTL          | $\checkmark$ |              | $\checkmark$ | Settlements due to gas delivery at Margin Account level   |
| CDELTAS.DB           | $\checkmark$ |              | $\checkmark$ | Deltas of the contracts   |
| CDIVIDENDS.DB        | $\checkmark$ |              | $\checkmark$ | Information on teh dividends used for theoretical price calculations for each underlying  |
| CCCURRENCY.DB        | $\checkmark$ |              | $\checkmark$ | Currencies available in the system  |
| CENTITIES.DB         | $\checkmark$ | $\checkmark$ |              | Public information on the entibies that participate in the<br>Clearing House  |
| CEXERCISERQT.DB      | $\checkmark$ |              | $\checkmark$ | Information on live exercise requests   |
| CFEES.DB             |              |              | $\checkmark$ | Fees  |
| CFEESBRKD.DB         |              |              | $\checkmark$ | Detail of fees  |
| CGIVEIN.DB           | $\checkmark$ |              | $\checkmark$ | Status of Give-ins where participating as Clearing Broker   |
| CGIVEINCLM.DB        | $\checkmark$ |              | $\checkmark$ | Status of the Give-Ins where actino as Clearing Member  |
| CGIVEINFILT.DB       | $\checkmark$ |              |              | Give-in acceptance filters established by the Clearing broker   |
| CGIVEINFILTCLM.DB    | $\checkmark$ | $\checkmark$ |              | Give-in acceptance filters established by the Clearing<br>Member  |
| CGIVEINREF.DB        | $\checkmark$ | $\checkmark$ |              | Give-in referentes defined in the system by the Clearing Broker   |
| CGIVEOUT.DB          | $\checkmark$ |              | $\checkmark$ | Status of give-outs in which source member participates   |
| CGIVEOUTFILT.DB      | $\checkmark$ | $\checkmark$ |              | Give-out filters established by the Executing broker  |
| CGIVEOUTREF.DB       | $\checkmark$ | $\checkmark$ |              | Give-out referentes defined in the system by the Executing Broker   |
| CHOLIDAYS.DB         | $\checkmark$ |              |              | Calendar of holidays when the clearing platform is closed   |
| CINIMARGINCALC.DB    |              |              | $\checkmark$ | Detailed information of the calculation of the initial margin for each holder   |
| CINIMARGINCALCDET.DB |              |              | $\checkmark$ | Second-tier register. Detailed information of the calculation of the initial margin for each account                                |
| CINTERSPR.DB         |              |              | $\checkmark$ | Table of offsets to apply in the calculation of margins for<br>positions of opposite sign on contracts with different array<br>code |
| CINTRASPR.DB         |              |              | $\checkmark$ | Table of offsets to aplly in the calculation of margins for positions of opposite sign on contracts with the same array code        |
| CMARGINACCOUNTS      |              | $\checkmark$ |              | Information on the available margin accounts  |
| CMARGINOPENPOSITION  | $\checkmark$ |              | $\checkmark$ | nformation on open position by margin account and contract (only for those that have position)                                      |
| COPENPOSITION.DB     | $\checkmark$ |              | $\checkmark$ | Information on open position by account and contract (only for those that have position)  |
| COPENPOSITIONCLM.DB  |              |              | $\checkmark$ | Information on open position by clearing member and contract (only for those that have position)                                    |
| CPHYSDEL             |              |              |              | Nominations for gas physical delivery at EIC level  |
| CPHYSDELDET          |              |              | $\checkmark$ | Details about physical delivery   |
| CPOSADJUST.DB        |              |              | $\checkmark$ | Position adjustments made during the session  |

| Tables                | RT           | М            | н            | Description   |
|-----------------------|--------------|--------------|--------------|---|
| CPREMIUMS.DB          | $\checkmark$ |              |              | Premium associated with an option trade   |
| CSPOTTRADES.DB        | $\checkmark$ |              | $\checkmark$ | Information about the trades on stocks to be made outside of MEFF, due to the exercising of options done in the session.  |
| CSPOTTRADESBRKD.DB    | $\checkmark$ |              | $\checkmark$ | Detail at holder level of the stock trades to be made outside MEFF, due to the exercise of options in the session   |
| CSPOTTRADESBRKDDET.DB | $\checkmark$ |              | $\checkmark$ | Detail at account level of the stock trades to be made outside MEFF, due to the exercise of options in the session  |
| CSTRESSTESTING.DB     |              |              | $\checkmark$ | Stress Testing Disclosure Data  |
| CTHEORPRICES.DB       | $\checkmark$ |              | $\checkmark$ | Theoretical prices of contracts   |
| CTRADES.DB            | $\checkmark$ |              | $\checkmark$ | Information on all the trades registered  |
| CTRADETYP.DB          | $\checkmark$ | $\checkmark$ |              | Information on trade types handled in the Clearing House  |
| CTRANSFTRADES.DB      | $\checkmark$ |              | $\checkmark$ | Assignments and tranfers registered   |
| CUNDERLYINGS.DB       | $\checkmark$ | $\checkmark$ |              | Information on underlyings  |
| CVALARRAYS.DB         | $\checkmark$ |              | $\checkmark$ | Parameters for each of the margin valuation arrays  |
| CVALUATIONOTH.DB      | $\checkmark$ |              | $\checkmark$ | Valuation detail at trade or position level for products without daily settlement of profits and losses   |
| CVARMARGIN.DB         | $\checkmark$ |              | $\checkmark$ | Detail of daily settlement of P&L, calculated by the valuation<br>of positions at the start of the day and the trades during the<br>day at the settlement price |
| CVARMARGINPEND.DB     | $\checkmark$ |              | $\checkmark$ | Variation Margin pending (to be added to required margins)  |
| CVOLATILITYSKEW.DB    | $\checkmark$ |              |              | Volatility curve used for theoretical price calculation   |
| CYIELDCURVE.DB        | $\checkmark$ |              |              | Information of interest rates used for theoretical price calculation, by ranges   |

MEFFServer acts as a DDE server, offering information on the active session through DDE links. A link is the connection that exists between the data server and other applications, such as spreadsheets and other programs that can act as DDE clients.

MEFFServer makes sure that all data sent to other applications reach their destination. It does this by requiring confirmation of each data element from the application with which it maintains the active link.

Normally, confirmation of data sent to another application is received immediately, but this depends on the process that the receptor application (or client) employs.

## 4.1 Information on active links

### 4.1.1 Information window

MEFFServer has an information window on the state of links in the system. This information can be useful to control the system.

Viewing the information window: Select the option "Monitor..." in the "Data" menu.

The following information window will be displayed:

| Monitor DDE   | ×       |
|---------------|---------|
| Service       | MEFFWIN |
| Calc          | 0       |
| Command       | 0       |
| Error         | 0       |
| Links         | 0       |
| Pokes         | 0       |
| Requests      | 0       |
| Sent          | 0       |
| Var. Changing | 0       |
| Variables     | 0       |

This window displays internal information on the linked data and global variables in the <u>MEFFServer</u>. Each of the items is described in the following table:

| Ítem         | Description  |
|--------------|--|
| Calc         | Total number of calculations made for data requested |
| Command      | Number of commands executed                          |
| Error        | Number of errors registered                          |
| Links        | Total number of correct and active links             |
| Pokes        | Number of commands received                          |
| Requests     | Number of requests handled (linked or not)           |
| Sent         | Number of messages sent                              |
| Var Changing | Number of changes in the values of the variables     |

| Ítem      | Description                            |
|-----------|--|
| Variables | Number of correct and active variables |

## 4.2 Data offered by MEFFServer

#### 4.2.1 Variables

MEFFServer allows you to define variables to make it easier to obtain data links for which the parameters are provided from the client application in a variable form

Each of the variables is referenced using a name choosen by the user. Subsequently, it is possible to inclued these variables in the links between MEFFServer and other applications, such that when the value of a variable is changed, the data links that depend on it are updated.

Creating a variable from Excel:

- 1. Put MeffDDE.dll and MeffDDE.xla in the working directory
- 2. Open an Excel file. Under "Tools" menu, "Complements" option, click the "Examine" button and select MeffDDE.xla from the directory where is installed.
- 3. In a cell select the function MEFF\_DDECreaVariable("MEFFWIN", Variable, Value) from the list of available functions in Excel.

The arguments are explained below:

- "MEFFWIN": It is the name of the application that provides the DDE links. It depends on the name of Meffserver exe (it use to be MEFFWIN)
- Variable: It refers to the name you want to assign to the variable
- Value: It refers to the value you want to assign to the variable

All these arguments can make reference to cell addresses where the required data are.

Example:

In cell B1 we write:

#### =MEFF\_DDECreaVariable(A1,B2,B3)

where the cell A1 contains the text MEFFWIN, cell B2 contains the text Contr and cell B3 contains the text IX10000D. That is, we have created a variable called Contr with the current value of IX10000D. As we change cell B3 the variable will change the value.

**Note** When opening an Excel spreadsheet that contains variables it is necessary to create them in the system. A way of doing this is to place the MEFFWIN text in a separate cell and all the CALL functions make reference to this cell. This way the variables can be created editing (manually or with a macro) the cell where the MEFFWIN text is located.

Once these steps have been taken the list of variables will be accessible in the "Variables DDE" option of the "Monitor" menu.

#### 4.2.2 Data selection

MEFFServer allows viewing of all the topics offered as links. It also enables you to specify the parameters for each topic and displays its current value.

Displaying the Data selection window: Select the option "MultiConn Data Selection" in the "Data" menu.

The following window will appear:

| 💐 Server - Mu   | tiConn Data Selection |            |  |  |
|-----------------|-----------------------|------------|--|--|
| Class           | Trading               | •          |  |  |
| ltem            | Ask 1 Volume          |            |  |  |
| Market          | M3 MEFF RV            | <b>_</b>   |  |  |
| Group           | Futuros IBE×MINI      | •          |  |  |
| Contract        | MNJ06                 | 1 <u>4</u> |  |  |
|                 |                       | ✓ Value    |  |  |
| ASKVOL1,M3MNJ06 |                       | 2          |  |  |

The fields needed to make the calculation must be completed for each topic. If the user clicks in "Value", the result of the calculation is displayed below.

A specific value must be selected from the MEFFServer list for each of the parameters. On occassions this value can be a wildcard.

When data is viewed using this window, it will be deposited in the Windows Clipboard so that it is available for other applications.

Once the required data is viewed on screen, you can "Paste" the value directly in any Windows application that allows this (a spreadsheet with DDE links, for example).

Additionally, in some applications the "Link" can be made by using the option "Paste Link".

If the later method is used, the two programs are related so that changes in real-time are sent to the application where the data "link" was made.

To enter a variable within a link it is necessary to change the corresponding part of the link with the variable created, using the symbol "#" before and after.

#### Concepts

The data are organised in categories. Within each category there is a list if types of data, called topics.

In the appendiox "Predefined codes" there is a detailed list of topics used by MEFFServer, grouped by category.

# 5. Other configurations

## 5.1 Communications

#### Menu option: <u>Configure – Connection</u>

Function: Define the system connection parameters.

The configuration data are provided by MEFF.



- Connection configuration windows -

## 5.1.1 Managing connection errors

When MEFFTop detects an error in some of its connections, it will notify the user, who can opt to retry or accept the disconnection. If the disconnection is accepted he will have to decide if he wants to discard the connection, such that the terminal does not require this connection to end correctly, or not discard it, whereby the terminal considers it necessary to end the sessions associated with the connection.



- Actions in the case of disconnection -

## 5.2 Messages from the Supervisor

In the system there is a message mechanism that allows messages to reach the trader from Market Surveillance, the Clearing House and the trader's own system. MEFFServer receives these messages and displays them to the user.

The messages appear in a window like the following:



When a message window appears, MEFFServer pauses its activity until the user clicks on the "OK" button. This ensures that the user does not miss any messages.

The message display time can be configured.

Configuring the display time of the message window: Select the option "Clearing House messages..." in the "<u>C</u>onfigure" menu.

A window will appear like the following:

| Server - MultiConn 🛛 🔀             |  |  |
|------------------------------------|--|--|
| Screen Messages Timeout (millisec) |  |  |
| 20000                              |  |  |
| OK Cancel                          |  |  |

The display time is configured in milliseconds. If you enter the value zero (0), the messages will not appear.

#### 5.3 MEFFServer state

MEFFServer can display two different small scale windows by double clicking on the Environments or Connection Time state fields respectively. The windows will always be visible and can be moved anywhere on the screen. The position of the windows is saved for subsequent executions of MEFFServer. It is displayed below:

#### **Environment Monitor**

| Monitor Environments |            |          |        |         |        |            |
|----------------------|------------|----------|--------|---------|--------|------------|
| Environment          | Date       | Time     | Number | Message | Status | Connection |
| C2 - CAMARA MEFF RV  | 07/04/2006 | 17:21:39 | 596300 | OP      | Active | Paused     |
| M3 - MEFF RV         | 07/04/2006 | 17:53:33 | 68500  | BF      | Active | Paused     |

### **Connections Monitor**

| Connection Monitor |         |          |            |          |         |         |         |
|--------------------|---------|----------|------------|----------|---------|---------|---------|
| Connection         | User    | 00:04:22 | Date       | Msg-Sent | Msg-Rec | Message | Status  |
| VARI_CL            | A700003 | 00:04:22 | 07/04/2006 | 1        | 596300  | C2OP    | On Line |
| VARI_TRAD          | A700003 | 00:04:22 | 07/04/2006 | 1        | 68500   | M3BF    | On Line |

# Appendix A Structure of tables

This appendix describes the structure of each table generated by MEFFServer. It is also indicated in which database is generated: *REALTIME*, *MEFFHIST* and *MAESTROS*.

- **REALTIME** has tables which are maintaned during the session. They are created when the MEFFServer connection is made and remain until the next connection, when they are created again.
- **MEFFHIST** contains the historical tables. At the end of each session new records are added to these tables.
- **MAESTROS** contains the general tables. They are updated at the end of each session, modifying the existing contents and adding new records.

## A.1 Special value NULL

When a field with type String has no value, this field will be filled with '-' value.

# A.2 Clearing data

## A.2.1 General Data

## **Clearing house**

|                 | CCLEARINGHOUSE.DB                            |
|-----------------|--|
| Group           | General Data                                 |
| Description     | Generic information about the Clearing House |
| Group of tables | RealTime - Maestro                           |

| # | * | Field                 | Туре       | Description                            |
|---|---|-----------------------|------------|--|
| 1 | 8 | Camara                | String(2)  | Clearing house code                    |
| 2 |   | Descripcion           | String(75) | Description                            |
| 3 |   | FechaAct              | Date       | Last updated                           |
| 4 |   | ReglaCompensacion     | Char       | Offset rule                            |
| 5 |   | ReglaDepositos        | Char       | Margin calculation rule                |
| 6 |   | ReglaPresentDepositos | Char       | Rule for presentation of cash deposits |
| 7 |   | TipoInteres           | Float      | Interest rate by default               |
| 8 |   | CodigoBCE             | String(6)  | Clearing house code in CEB             |

#### Currencies

|                 | CCCURRENCY.DB                               |
|-----------------|---|
| Group           | General Data                                |
| Description     | Currencies avalilable in the Clearing House |
| Group of tables | RealTime – Historical data                  |

| # | *            | Field          | Туре      | Description  |
|---|--------------|----------------|-----------|--|
| 1 | <del>ا</del> | Fecha          | Date      | Session date   |
| 2 | <b>8</b> –1  | Camara         | String(2) | Contract Group code  |
| 3 | 8            | Currency       | String(3) | Currency.<br>For the FX Contracts, the quote currency or the second of the pair. |
| 4 |              | SettlCurrency  | String(3) | Currency in which cash amounts are settled                                       |
| 5 |              | ConversionRate | Float     | Conversion rate to the settlement currency                                       |

## Holidays

|                 | CHOLIDAYS.DB  |
|-----------------|---|
| Group           | General Data  |
| Description     | Calendar of holidays when the clearing platform is closed |
| Group of tables | RealTime - Maestro  |

| # | *              | Field            | Туре      | Description                 |
|---|----------------|------------------|-----------|-----------------------------|
| 1 | 8 <b>-</b> 1   | Camara           | String(2) | Clearing house code         |
| 2 | <del>9 -</del> | Fecha            | Date      | Holiday date                |
| 3 |                | FechaAct         | Date      | Last updated                |
| 4 |                | RegistrationOpen | String(1) | Open for registration (S/N) |

## **Participating entities**

|                 | CENTITIES.DB  |
|-----------------|---|
| Group           | General Data  |
| Description     | Public information on the entibies that participate in the clearing house |
| Group of tables | RealTime - Maestro  |

| #  | * | Field       | Туре       | Description  |
|----|---|-------------|------------|--|
| 1  | 8 | Camara      | String(2)  | Clearing house code  |
| 2  | 8 | Codigo      | String(4)  | Code of the Entity in the clearingh house  |
| 3  |   | CodigoBCE   | String(6)  | Code of the Entity in the European Central Bank  |
| 4  |   | Descripcion | String(75) | Name of the Entity   |
| 5  |   | NombreCorto | String(20) | Short name of the Entuty   |
| 6  |   | CodSIBE     | String(4)  | Entity code in SIBE  |
| 7  |   | Clase       | Char       | Type of Entity<br>See Table 8 in document "Codification Tables"                              |
| 8  |   | FechaAlta   | Date       | Date when Entity was added   |
| 9  |   | FechaAct    | Date       | Last updated   |
| 10 |   | CodigoExt   | String(5)  | Entity code in the origin clearing house   |
| 11 |   | NumIdentif  | String(18) | Identification number. Only informed for ADM   |
| 12 |   | FechaBaja   | Date       | Date when Entity has been removed  |
| 13 |   | Pais        | String(2)  | Country<br>Codification ISO 3166:1993  |
| 14 |   | Estado      | Char       | Status<br>"S"=Temporary removed<br>"T"=New but not operative<br>"A"=Operative<br>"B"=Removed |
| 15 |   | CodIdioma   | String(2)  | Idiom<br>Codification ISO 639-2  |
| 16 |   | CodBAFIN    | String(8)  | BAFIN code for Eurex clearing house  |
| 17 |   | LEI         | String(20) | LEI of the Entity  |

## **Contract groups**

|                 | CCONTRGRP.DB       |
|-----------------|--------------------|
| Group           | General Data       |
| Description     | Contract groups    |
| Group of tables | RealTime - Maestro |

| # | *              | Field       | Туре       | Description                                |
|---|----------------|-------------|------------|--|
| 1 | 8              | Camara      | String(2)  | Clearing house code                        |
| 2 | <del>8</del> – | Grupo       | String(2)  | Group of contract                          |
| 3 |                | Descripcion | String(20) | Description                                |
| 4 |                | FechaAct    | Date       | Last updated                               |
| 5 |                | CodPais     | String(2)  | Country<br>Codification ISO 3166:1993      |
| 6 |                | CodSector   | String(3)  | Sector code<br>""=No procede (f.e. Bonds)  |
| 7 |                | Subyacente  | String(22) | Code of spot contract for group            |
| 8 |                | Activo      | String (8) | Underlying code that identifies this group |

## **Contract types**

|                 | CCONTRTYP.DB       |
|-----------------|--------------------|
| Group           | General Data       |
| Description     | Contract types     |
| Group of tables | RealTime - Maestro |

| #  | *   | Field             | Туре       | Description  |
|----|-----|-------------------|------------|--|
| 1  | 8-1 | Camara            | String(2)  | Clearing house code  |
| 2  | 8   | Grupo             | String(2)  | Contract group   |
| 3  | 8   | Тіро              | String(4)  | Contract type  |
| 4  |     | Descripcion       | String(20) | Description  |
| 5  |     | Multiplicador     | Float      | Multiplier that has to be apllied to the contract price  |
| 6  |     | Nominal           | Float      | Nominal value  |
| 7  |     | Divisa            | String(3)  | Currency code  |
| 8  |     | MetodoCalculo     | Char       | Method for calculating prices and volatility for this<br>type of contract<br>"1"=Black-76<br>"2"=Binomial<br>"3"=Black Scholes   |
| 10 |     | FechaAct          | Date       | Last updated   |
| 11 |     | NumeroDecimales   | SmallIn    | Number of decimals   |
| 12 |     | TipoOpcion        | Char       | Option type<br>"A"=American<br>"E"=European<br>"V"=Automatic European  |
| 13 |     | SubTipo           | String(2)  | SubType<br>"C"=Spot<br>"I"=Índices<br>"R"=Rollover<br>"X"=External<br>"FA"=Stock Futures<br>"FF"=Fix Income Futuros<br>"FI"=Index Futures<br>"FS"=Sectorial index futtures<br>"OA"=Stock options<br>"OI"=Index options<br>"OS"=Sectorial index options<br>"OF"=Fix income options  |
| 14 |     | EntornoAnotacion  | String(1)  | "P" = S/MART<br>"S" = SIBE (external platform)   |
| 15 |     | TipoLiquidacion   | String(1)  | <ul> <li>"N" – These contracts are not settled</li> <li>"D" – These contracts are settled with daily variation margin</li> <li>"V" – These contracts are settled with variation margin at expiration date. Variation margin not settled is added to margins</li> <li>"P" - These contracts are settled using premiums</li> </ul> |
| 16 |     | FamiliaProducto   | String(5)  | see Table 20 in document "Codification Tables"   |
| 17 |     | IdentificacionAll | String(12) | All Identifier   |
| 18 |     | TipoCotizacion    | SmallIn    | 1=Price<br>2=Yield   |

| #  | * | Field          | Туре      | Description  |
|----|---|----------------|-----------|--|
| 19 |   | TipoProducto   | String(1) | "E"= Strategy<br>"F"=Future<br>"M"=Forward<br>"O"=Option<br>"R"=Roll-over<br>"W"=Swap<br>"S"=Spot<br>"X"=Other   |
| 20 |   | IndFlexible    | String(1) | "Y" – No standard<br>"N" - Standard  |
| 21 |   | MetodoLiq      | String(1) | "P" – physical<br>"C" - cash   |
| 22 |   | PutCall        | String(1) | "P" – Put<br>"C" - Call  |
| 23 |   | Periodicidad   | Strin(1)  | "Y" – Anual<br>"S"- Season<br>"Q" – Quaterly<br>"M" – Monthly<br>"m" – Balance of the month<br>"K" – Weekly (L-D)<br>"k" – Balance of the week<br>"B" – Weeklyl (L-V)<br>"E" – Weekly (S-D)<br>"D" – Daily |
| 24 |   | TipoAjuste     | String(1) | "E" – extraordinary<br>"T" – All   |
| 25 |   | CFICodeOficial | String(6) | CFICode official EMIR Reporting<br>Ver Tabla 16 en documento "Tablas de Codificación"  |
| 26 |   | UnitOfMeasure  | Char(20)  | Unit of measure of the multiplier  |
| 27 |   | BaseCurrency   | Char(3)   | Currency of the nominal of contracts of this type  |
| 28 |   | SettlCurrency  | Char(3)   | Currency into which settlements of these contracts are converted   |

### Contracts

|                 | CCONTRACTS.DB   |
|-----------------|---|
| Group           | General Data  |
| Description     | General information on the contracts available in the session |
| Group of tables | RealTime - Maestro  |

| #  | *             | Field               | Туре       | Description  |
|----|---------------|---------------------|------------|--|
| 1  | 8 <del></del> | Camara              | String(2)  | Clearing house code  |
| 2  | 8             | Contrato            | String(22) | Contract code  |
| 3  | <b>8</b> –1   | Grupo               | String(2)  | Contract group   |
| 4  | ₽             | Тіро                | String(4)  | Contract type  |
| 5  | <b>8</b> –1   | Strike              | Float      | Strike price   |
| 6  | 8             | FechaVencimiento    | Date       | Maturity date  |
| 7  |               | FechaFinNeg         | Date       | Last trading date  |
| 8  |               | Subyacente          | String(22) | Underlying contract code applied to exercise   |
| 9  |               | SubyacenteCalculos  | String(22) | Underlying contract code applied to margin calculation   |
| 10 |               | CodigoComp          | String(3)  | Array code   |
| 11 |               | StdLargo            | Char       | Type de expiration<br>Codes: AZ y 09   |
| 12 |               | IdVencimiento       | String(8)  | Identifier of maturity<br>Formats:<br>YYYYMM<br>YYYYMMDD<br>YYYYMMWW<br>(YYYY=year,<br>MM=month,<br>DD=day,<br>w="w",<br>W=week) |
| 13 |               | ISIN                | String(12) | ISIN contract code for information purposes. Need not be provided  |
| 14 |               | FechaAct            | Date       | Last updated   |
| 15 |               | FechaAlta           | Date       | Date when contract was added   |
| 16 |               | VersionNumber       | Char       | Version number (0 if no adjustments have taken place)  |
| 17 |               | ForwardMaturityDate | Date       | For contracts with deferral feature, it is the theoretical maturity date of the forward. In general, D+3.                        |
| 18 |               | SpotMaturityDate    | Date       | For contracts with deferral feature, it is the theoretical maturity date of the spot. In general, D+2.                           |

## Trade types

|                 | CTRADETYP.DB   |
|-----------------|--|
| Group           | General Data   |
| Description     | Information on trade types handled in the clearing house |
| Group of tables | RealTime - Maestro                                       |

| #  | *           | Field                  | Туре       | Description  |
|----|-------------|------------------------|------------|--|
| 1  | 8           | Camara                 | String(2)  | Clearing house code  |
| 2  | 8 <b></b> 1 | TipoOperacion          | Char       | Trade type<br>See Table 12 in document "Codification tables"   |
| 3  |             | Descripcion            | String(20) | Description  |
| 4  |             | FechaAct               | Date       | Last updated   |
| 5  |             | ActPrecioVolumenUltima | Char       | Indicates if price, last volume, high, low and tendency<br>has to be updated<br>"S"=Yes<br>"N"=No<br>"T"=it depends on the contract type   |
| 6  |             | ProvieneNegociación    | Char       | Indicates if trade comes from trading<br>"S"=Yes<br>"N"=No   |
| 7  |             | ActVolContrato         | Char       | Indicates if total volume has to be updated<br>"S"=Increased<br>"N"=No<br>"R"=Decreased  |
| 8  |             | SeEnviaDistribuidores  | Char       | Sent to distributors<br>"S"=Yes<br>"N"=No  |
| 9  |             | VisualizaTickerOper    | Char       | View in trader ticker<br>"M"=Market (Order type is shown)<br>"O"="Tr" + Trade type<br>"A"="Ap" + Trade type<br>"N"=It is not shown (except ADM)  |
| 10 |             | Intermediada           | Char       | Brokered trade<br>"S"=Yes<br>"N"=No  |
| 11 |             | AcumulaVolGeneral      | Char       | Update general volumen<br>"S"=Increased<br>"N"=No<br>"R"=Decreased   |
| 12 |             | ClaseOperacion         | Char       | Trade class<br>"N"=Electronic trading<br>"A"=Telephone trade outside of Market session<br>"H"=Telephone trade during Market session<br>"J"=Trades with large volume<br>"L"=Delta trades<br>"V"=Expiry<br>"E"=Exercise<br>"T"=Transfers<br>"G"=Give-up<br>"D"=Assignment from daily account<br>"P"=Adjustment of position |

## Underlyings

|                 | CUNDERLYINGS.DB            |
|-----------------|----------------------------|
| Group           | General Data               |
| Description     | Information on underlyings |
| Group of tables | RealTime - Maestro         |

| #  | *          | Field              | Туре       | Description   |
|----|------------|--------------------|------------|---|
| 1  | 9 <b>-</b> | Camara             | String(2)  | Contract Group code   |
| 2  | 8          | Contrato           | String(22) | Contract code   |
| 3  |            | ISIN               | String(12) | ISIN underlying code  |
| 4  |            | Descripcion        | String(20) | Description of the underlying   |
| 5  |            | EntornoActivoSuby  | String(2)  | Contract Group code in which the asset is listed  |
| 6  |            | CFICode            | String(6)  | Codification of financial instruments in accordance with ISO standard 10962.  |
| 7  |            | TipoActivo         | String(3)  | Asset class   |
| 8  |            | Divisa             | String(3)  | Asset currency code   |
| 9  |            | FechaVencimiento   | Date       | Expiry date for asset   |
| 10 |            | FechaUltimaSubasta | Date       | Last auction date for the asset   |
| 11 |            | FechalncioCupon    | Date       | Date on which the asset starts to accrue coupon. Only for bonds   |
| 12 |            | NumeroCupones      | Integer    | Number of annual coupons. Only for bonds  |
| 13 |            | Cupon              | Float      | Coupon as percentage of nominal. Only for bonds   |
| 14 |            | MetCalCuponCorrido | String(1)  | Accrued interest calculation method, depending on<br>the way of estimating the number of days between the<br>coupon dates. Only for bonds<br>Real base: Considers the actual number of days<br>between the coupon dates |
| 15 |            | FechaAct           | Date       | Last updated  |

## Resulting codes for the theoretical cascade

|                 | CCONTRREL.DB  |
|-----------------|---|
| Group           | General Data  |
| Description     | Relationship between the original contract and its resulting contracts, in the case where<br>in the group of contracts there are contracts whose position should be broken down into<br>others of a lower nominal amount.<br>For Energy this informs about the position which results from applying the theoretical<br>cascade. |
| Group of tables | RealTime - Maestro  |

| # | *           | Campo             | Тіро       | Descripción   |
|---|-------------|-------------------|------------|---|
| 1 | <b>8</b> –1 | Fecha             | Date       | Session date  |
| 2 | <b>8</b> –1 | Camara            | String(2)  | Clearing house code   |
| 3 | 8           | Contrato          | String(22) | Contract code   |
| 4 |             | NoContratos       | Integer    | Number of related contracts that are defined as follows. Maximum 31.  |
| 5 |             | ContratoFinal_1   | String(22) | Code of resulting contract  |
| 6 |             | FechalniPeriodo_1 | Date       | Date of initial contract<br>In Energy it is the initial date of the delivery period of<br>the resulting contract. |
| 7 |             | FechaFinPeriodo_1 | Date       | Final date of contract.<br>In Energy, it is the final date of the delivery period of<br>the resulting contract.   |
|   |             | ContratoFinal_n   | String(22) | ContratoFinal_n, FechalniPeriodo_n y<br>FechaFinPeriodo_n fields are repeated for n=2 31                          |
|   |             | FechalniPeriodo_n | Date       | ContratoFinal_n, FechalniPeriodo_n y<br>FechaFinPeriodo_n fields are repeated for n=2<br>31                       |
|   |             | FechaFinPeriodo_n | Date       | ContratoFinal_n, FechaIniPeriodo_n y<br>FechaFinPeriodo_n fields are repeated for n=2<br>31                       |

## Detail of resulting codes for the cascade

|                 | CCONTRRELDET.DB   |
|-----------------|---|
| Group           | General Data  |
| Description     | Relationship between the original contract and its resulting contracts, in the case where<br>in the group of contracts there are contracts whose position should be broken down into<br>others of a lower nominal amount.<br>For Energy this informs about the position which results from applying the theoretical<br>cascade. |
| Group of tables | RealTime -Histórico   |

| #  | *           | Campo              | Тіро       | Descripción   |
|----|-------------|--------------------|------------|---|
| 1  | 8 <b></b> 1 | Fecha              | Date       | Session date  |
| 2  | 8-          | Camara             | String(2)  | Contract Group code   |
| 3  | 8           | Contrato           | String(22) | Contract code   |
| 4  |             | FechaVencimiento   | Date       | Expiry date   |
| 5  |             | FechaCascada       | Date       | Cascade date  |
| 6  |             | Multiplicador      | Amt        | Nominal of the contract   |
| 7  |             | UnidadMedidaMul    | Char(20)   | Unit of measure of the multiplier   |
| 8  |             | FechalniPeriodo    | Date       | Date of initial contract<br>In Energy it is the initial date of the delivery period of<br>the initial contract.   |
| 9  |             | FechaFinPeriodo    | Date       | Final date of contract.<br>In Energy, it is the final date of the delivery period of<br>the intial contract       |
| 10 |             | NoContratos        | Int        | Number of related contracts that are defined as follows. Maximum 31.  |
| 11 |             | ContratoFinal_1    | String(22) | Code of resulting contract  |
| 12 |             | FechaVencimiento_1 | Date       | Expiry date   |
| 13 |             | Multiplicador_1    | Float      | Nominal of the contract   |
| 14 |             | FechalniPeriodo_1  | Date       | Date of initial contract<br>In Energy it is the initial date of the delivery period of<br>the resulting contract. |
| 15 |             | FechaFinPeriodo_1  | Date       | Final date of contract.<br>In Energy, it is the final date of the delivery period of<br>the resulting contract    |
|    |             | ContratoFinal_n    | String(22) |   |
|    |             | FechaVencimiento_n | Date       |   |
|    |             | Multiplicador_n    | Float      |   |
|    |             | FechalniPeriodo_n  | Date       |   |
|    |             | FechaFinPeriodo_n  | Date       |   |
# A.2.2 Public daily information

# Contract daily data

|                 | CCONTRSTAT.DB              |
|-----------------|----------------------------|
| Group           | Public daily information   |
| Description     | Contract daily data        |
| Group of tables | RealTime - Historical data |

| #  | *               | Field                   | Туре       | Description  |
|----|-----------------|-------------------------|------------|--|
| 1  | <del>8</del> –1 | Fecha                   | Date       | Session date   |
| 2  | <del>8</del> -  | Camara                  | String(2)  | Clearing house code  |
| 3  | <del>8</del> -  | Contrato                | String(22) | Contract code  |
| 4  |                 | Alto                    | Float      | High price   |
| 5  |                 | Bajo                    | Float      | Low price  |
| 6  |                 | First                   | Float      | First price  |
| 7  |                 | Last                    | Float      | Last price   |
| 8  |                 | Cierre                  | Float      | Setllement price   |
| 9  |                 | VolatCierre             | Float      | Settlement volatility at the close of session. This field is not completed for long term options |
| 10 |                 | DeltaCierre             | Flota      | Settlement delta at the close of the session. This field is not completed for long term options  |
| 11 |                 | Open                    | Float      | Previous day settlement price  |
| 12 |                 | VolatApertura           | Float      | Previous day settlement volatility   |
| 13 |                 | DeltaApertura           | Float      | Previous day settlement delta  |
| 14 |                 | VolumenRegistrado       | Integer    | Total registered volume  |
| 15 |                 | NumTrades               | Integer    | Number of trades   |
| 16 |                 | OpenInterest            | Integer    | Open interest  |
| 17 |                 | AccruedInterest         | Float      | Accrued interest included in the settlement price.<br>Only for bonds                             |
| 18 |                 | RentabilidadCierre      | Price      | Yield  |
| 19 |                 | ForwardPrice            | Price      | Reference price (forward) for D+1 (only informed in currency derivative contracts)               |
| 20 |                 | PreviousDayForwardPrice | Price      | Previous day reference price (forward) (only informed in contracts with deferral feature)        |

# A.2.3 Private configuration data

## **Margin Accounts**

|                 | CMARGINACCOUNTS.DB                           |
|-----------------|--|
| Group           | Private Configuration Data                   |
| Description     | Information on the available margin accounts |
| Group of tables | RealTime - Maestro                           |

| #  | *           | Campo            | Тіро       | Descripción  |
|----|-------------|------------------|------------|--|
| 1  | 9 <b></b> 1 | Camara           | String(2)  | Contract Group code  |
| 2  | <b>-</b>    | MiembroGarantias | String(4)  | Member to which the margin account belongs   |
| 3  | <b>-</b>    | CuentaGarantias  | String(12) | Margin Account   |
| 5  |             | Compensador      | String(4)  | Clearing Member  |
| 6  |             | MiembroColateral | String(4)  | Collateral Account Member  |
| 7  |             | CuentaColateral  | String(12) | Collateral Account   |
| 8  |             | TipoGarantia     | String(2)  | IM: Initial Margin<br>IF: individual Fund<br>DF: Default Fund<br>EM: Extraordinary margins |
| 9  |             | FechaAct         | Date       | Last updated   |
| 10 |             | TipoCalculo      | String(1)  | G: Gross<br>N: Net<br>P: Bruto punta (compra o venta) - Sólo CRCC                          |

#### **Collateral Accounts**

|                 | CCOLLATERALACCOUNTS.DB                           |
|-----------------|--|
| Group           | Private Configuration Data                       |
| Description     | Information on the available collateral accounts |
| Group of tables | RealTime - Maestro                               |

| #  | * | Campo                | Тіро       | Descripción  |
|----|---|----------------------|------------|--|
| 1  | Ļ | Camara               | String(2)  | Contract Group code  |
| 2  | 8 | MiembroColateral     | String(4)  | Member to which the collateral account belongs   |
| 3  | 8 | CuentaColateral      | String(12) | Collateral Account   |
| 4  |   | Compensador          | String(4)  | Clearing Member  |
| 5  |   | AgentePagos          | String(4)  | Payments Agent   |
| 6  |   | GrupoMovEfectivo     | String(8)  | Cash Movements group within the Payments Agent   |
| 7  |   | TipoAjusteEfectivo   | String(1)  | Cash adjustment type<br>N – Buffer<br>Y - Automatic adjustment<br>D – Only deficit adjustment<br>A – N/A |
| 8  |   | IndicadorReinversion | String(1)  | Reinvestment indicator   |
| 9  |   | RefEstructuraCuenta  | String(12) | Account structure reference  |
| 10 |   | TipoEstructura       | String(2)  | Structure type see Table 19 in document 'Codification Tables'  |
| 11 |   | Modelo               | String(1)  | Model<br>P – principal to principal<br>A – Agency<br>N – Not applicable                                  |
| 12 |   | ClearingIndirecto    | String(1)  | Indirect clearing indicator (S/N)  |
| 13 |   | FechaAct             | Date       | Last updated   |

#### **Position Accounts**

|                 | CACCOUNTS.DB                                   |
|-----------------|--|
| Group           | Private configuration data                     |
| Description     | Information on the available position accounts |
| Group of tables | RealTime - Maestro                             |

| #             | * | Campo                    | Тіро       | Descripción   |
|---------------|---|--------------------------|------------|---|
| 1             | 8 | Camara                   | String(2)  | Clearing house code   |
| 2             | 8 | Miembro                  | String(4)  | Trading Member  |
| 3             | 8 | CuentaPosicion           | String(5)  | Position Account  |
| 4             |   | CuentaPosicionResidual   | String(5)  | This field is only significant when the record refers to<br>a daily account.<br>It is the position account where trades pending<br>assignment are moved when the extension of the<br>assignment of the daily account ends |
| 5             |   | FechaAct                 | Date       | Update date of the record   |
| 6             |   | Estado                   | Char       | Indicates if the account is currently active or not   |
| 7             |   | FechaUltModif            | Date       | Last update   |
| 8             |   | FechaAltaCuenta          | Date       | Date when the account was added   |
| 9             |   | MiembroECCDestino        | String(4)  | Member for external allocation in equities segment  |
| 10            |   | RefAsignacion            | String(18) | Allocation Reference for external allocation in equities segment  |
| 11            |   | Mnemotecnico             | String(10) | Allocation Mnemonic defined by the Origin Member (Give-up Trading Firm)   |
| 12            |   | RVPositionAccount        | String(5)  | Clearing account for internal assignment in equities<br>segment   |
| 13            |   | CodCliente               | String(16) | Client code (Account)   |
| 14            |   | MiembroGarantias         | String(4)  | Margin Account Member   |
| 15            |   | CuentaGarantias          | String(12) | Margin Account  |
| <del>16</del> |   | AgentePagos              | String(4)  | Payments Agent  |
| 17            |   | Compensador              | String(4)  | Clearing Member   |
| 18            |   | Clase                    | Char       | Position Account class see Table 18 in document 'Codification Tables'   |
| 19            |   | TipoPersona              | String(2)  | Person type<br>See Table 17 in "Codification Tables" document   |
| 20            |   | EntAuth                  | Char       | Authorised entity code  |
| 21            |   | RiskReducingPosIndicator | Char       | In segments with commodity derivatives subject to<br>MiFID II, it indicates if by default the positions held in<br>this account reduce or increase risk<br>S=Yes<br>N=No<br>Blank   |
| 22            |   | PropClient               | Char       | Account type from the point of view of the Exchange<br>Member<br>C=Client<br>P=Proprietary  |
| 23            |   | EICCode                  | String(16) |   |
| 24            |   | TipoAnotacion            | String (1) | Position record type<br>G: Gross<br>N:Net   |

| #  | * | Campo      | Тіро      | Descripción                         |
|----|---|------------|-----------|-------------------------------------|
| 25 |   | TitEICCode | String(1) | Titularidad EICCode<br>S=Si<br>N=No |

#### **Give-out references**

|                 | CGIVEOUTREF.DB  |
|-----------------|---|
| Group           | Private configuration data  |
| Description     | Give-Out references defined in the system by the Executing Broker |
| Group of tables | RealTime - Maestro  |

| #  | * | Field              | Туре       | Description   |  |
|----|---|--------------------|------------|---|--|
| 1  | 8 | Camara             | String(2)  | Clearing house code   |  |
| 2  | 8 | MiembroGiveOut     | String(4)  | Executing Broker, who configures the Give-Out references  |  |
| 3  | 8 | MnemonicGiveOut    | String(10) | Mnemonic that has a Give-In member and a Give-Up reference associated   |  |
| 4  |   | MiembroGiveIn      | String(4)  | Clearing Broker of the Give-Up associated to the mnemonic of the record   |  |
| 5  |   | RefGiveUp          | String(18) | Give-Up Reference. It is a common reference for Executing and Clearing Brokers that is used to identify the trade                         |  |
| 6  |   | OperadorGiveOut    | String(3)  | User who modified the reference   |  |
| 7  |   | FechaModif         | Date       | Date of last update   |  |
| 8  |   | HoraModif          | Time       | Time of last update   |  |
| 9  |   | FechaAct           | Date       | Last updated  |  |
| 10 |   | GiveOutInternalRef | String(18) | Reference assigned by the Executing Broker for<br>internal purposes. It is associated to a give-out<br>mnemonic and it can be not unique. |  |

#### **Give-In references**

|                 | CGIVEINREF.DB   |
|-----------------|---|
| Group           | Private configuration data                                      |
| Description     | Give-In references defined in the system by the Clearing Broker |
| Group of tables | RealTime - Maestro  |

| #  | * | Field                | Туре       | Description  |
|----|---|----------------------|------------|--|
| 1  | 8 | Camara               | String(2)  | Clearing house code  |
| 2  | 8 | MiembroGiveIn        | String(4)  | Clearing Broker that configures the Give-In references   |
| 3  | 8 | MiembroGiveOut       | String(4)  | Executing Broker   |
| 4  | 8 | RefGiveUp            | String(18) | Give-Up reference. It is a common reference for the Executing and Clearing Brokers used to identify the trade                                  |
| 5  |   | MnemonicGiveIn       | String(10) | Mnemonic assigned by the Clearing Broker to the combination of the Executing Broker and Give-Up reference for the record. Need not be provided |
| 6  |   | CuentaPosicionGiveIn | String(5)  | Give-In position account where the Give-In must be<br>registered if it is accepted   |
| 7  |   | OperadorGiveIn       | String(3)  | User who modified the reference  |
| 8  |   | FechaModif           | Date       | Date of last update  |
| 9  |   | HoraModif            | Time       | Time of last update  |
| 10 |   | FechaAct             | Date       | Last updated   |

### Filters for a Give-Out request. Executing Broker

|                 | CGIVEOUTFILT.DB                                  |
|-----------------|--|
| Group           | Private configuration data                       |
| Description     | Filtres for a Give-Out request. Executing Broker |
| Group of tables | RealTime - Maestro                               |

| # | * | Field                 | Туре       | Description   |
|---|---|-----------------------|------------|---|
| 1 | 8 | Camara                | String(2)  | Clearing house code   |
| 2 | 8 | MiembroGiveOut        | String(4)  | Executing Broker  |
| 3 | 8 | CuentaPosicionGiveOut | String(5)  | Give-Out position account   |
| 4 |   | MnemonicGiveOut       | String(10) | Mnemonic that has a Give-In member and a Give-Up reference associated |
| 5 |   | OperadorGiveOut       | String(3)  | User who modifies the filter last time                                |
| 6 |   | FechaModif            | Date       | Date of last update   |
| 7 |   | HoraModif             | Time       | Time of last update   |
| 8 |   | FechaAct              | Date       | Last updated  |

### Give-in acceptance filtres. Clearing Broker

|                 | CGIVEINFILT.DB  |
|-----------------|---|
| Group           | Private configuration data                                    |
| Description     | Give-In acceptance filters established by the Clearing Broker |
| Group of tables | RealTime - Maestro  |

| #  | *            | Field           | Туре       | Description   |
|----|--------------|-----------------|------------|---|
| 1  | 8 <b>-</b> 1 | Camara          | String(2)  | Clearing house code   |
| 2  | 8            | MiembroGiveIn   | String(4)  | Clearing Broker that configures the Give-In filters   |
| 3  | 8            | MiembroGiveOut  | String(4)  | Executing Broker of the Give-Up, for which the filter is defined, together with the reference   |
| 4  | 8-7          | RefGiveUp       | String(18) | Reference that the filter is defined for, together with the Executing and Clearing Broker of the Give-Up                              |
| 5  |              | NomMaxOperacion | Float      | Maximum amount for a Give-In that will be accepted automatically for this Executing Broker and reference.                             |
| 6  |              | NomMaxSesion    | Float      | Maximum accumulated amount per session of Give-<br>Ins that will be accepted automatically for this<br>Executing Broker and reference |
| 7  |              | OperadorGiveIn  | String(3)  | User who modifies the filter  |
| 8  |              | FechaModif      | Date       | Date of last update   |
| 9  |              | HoraModif       | Time       | Time of last update   |
| 10 |              | FechaAct        | Date       | Last updated  |

### Give-In acceptance filtres. Clearing Member

|                 | CGIVEINFILTCLM.DB   |
|-----------------|---|
| Group           | Private configuration data                                    |
| Description     | Give-In acceptance filters established by the Clearing Member |
| Group of tables | RealTime - Maestro  |

| #  | * | Field                | Туре      | Description   |
|----|---|----------------------|-----------|---|
| 1  | 8 | Camara               | String(2) | Clearing house code   |
| 2  | 8 | Compensador          | String(4) | Clearing Member   |
| 3  | 8 | MiembroGiveIn        | String(4) | Clearing Broker   |
| 4  | 8 | CuentaPosicionGiveIn | String(5) | Give-In position account  |
| 5  |   | NomMaxOperacion      | Float     | Maximum amount for a Give-In that will be accepted automatically for this Clearing Broker and account                               |
| 6  |   | NomMaxSesion         | Float     | Maximum accumulated amount per session of Give-<br>Ins that will be accepted automatically for this<br>Clearing Broker and account. |
| 7  |   | OperadorLiquidador   | String(3) | User who modifies the filter last time  |
| 8  |   | FechaModif           | Date      | Date of last update   |
| 9  |   | HoraModif            | Time      | Time of last update   |
| 10 |   | FechaAct             | Date      | Last updated  |

# A.2.4 Margin calculation data

### Valuation array parameters

|                 | CVALARRAYS.DB                                      |
|-----------------|--|
| Group           | Margin calculation data                            |
| Description     | Parameters for each of the margin valuation arrays |
| Group of tables | RealTime - Historical data                         |

| #  | *            | Field          | Туре      | Description   |
|----|--------------|----------------|-----------|---|
| 1  | 8            | Fecha          | Date      | Session date  |
| 2  | 8            | Camara         | String(2) | Clearing house code   |
| 3  | 8            | Matriz         | String(3) | Margin array code   |
| 4  | 9 <b>-</b> 1 | StdLargo       | Char      | Type de expiration<br>Codes: AZ y 09                                    |
| 5  |              | NumCols        | SmallIn   | Number of columns (<=41)  |
| 6  |              | TipoFluc       | Char      | Price fluctuaction type<br>"P"=Percentage<br>"T"=By price               |
| 7  |              | FluctUpL       | Integer   | Increase fluctuation (left)   |
| 8  |              | FluctDownR     | Integer   | Decrease fluctuation (right)  |
| 9  |              | AplicVola      | Char      | Form of applying variation of volatility<br>"P"=Percentage<br>"T"=Total |
| 10 |              | DeltaVola      | Float     | Volatility variation  |
| 11 |              | Grupo          | String(2) | Contract group reference for off-setting between different underlyings  |
| 12 |              | Тіро           | String(4) | Reference contract type for off-setting between different underlyings   |
| 13 |              | DeltaGarantias | Float     | Delta threshold for large positions margin calculation                  |
| 14 |              | NumColsLPos    | SmallInt  | Number of columns to account for large positions                        |

### Intra-commodity spreads

|                 | CINTRASPR.DB   |
|-----------------|--|
| Group           | Margin calculation data  |
| Description     | Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with the same array code |
| Group of tables | RealTime - Historical data   |

| # | * | Field          | Туре      | Description  |
|---|---|----------------|-----------|--|
| 1 | 8 | Fecha          | Date      | Session date                                       |
| 2 | 8 | Camara         | String(2) | Clearing house code                                |
| 3 | 8 | Matriz         | String(3) | Margin array code                                  |
| 4 |   | Factor         | Float     | Factor   |
| 5 |   | MinDif         | Float     | Minimum value                                      |
| 6 |   | Spread         | Float     | Spread   |
| 7 |   | HayVtosDiarios | Char      | "S"= "= Time between expiries is expressed in days |
|   |   |                |           | "N"= Time between expiries is expressed in months  |

### Inter-commodity spreads

|                 | CINTERSPR.DB  |
|-----------------|---|
| Group           | Margin calculation data   |
| Description     | Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with different array code |
| Group of tables | RealTime - Historical data  |

| #  | * | Field     | Туре      | Description   |
|----|---|-----------|-----------|---|
| 1  | 8 | Fecha     | Date      | Session date  |
| 2  | 8 | Camara    | String(2) | Clearing house code   |
| 3  | 8 | Prioridad | String(3) | Priority  |
| 4  |   | Matriz1   | String(3) | Array code 1  |
| 5  |   | Dto1      | Float     | Offset group 1 discount   |
| 6  |   | Factor1   | Integer   | Offset multiplier 1   |
| 7  |   | Matriz2   | String(3) | Array code 2  |
| 8  |   | Dto2      | Float     | Descuento en Group de compensación 2                            |
| 9  |   | Factor2   | Integer   | Offset group 2 discount   |
| 10 |   | TipoDto   | Char      | Discount type that is applied<br>"D"=Currency<br>"P"=Percentage |

### Theorectical prices

|                 | CTHEORPRICES.DB                 |
|-----------------|---------------------------------|
| Group           | Margin calculation data         |
| Description     | Theoretical prices of contracts |
| Group of tables | RealTime – Historical Data      |

| # | *           | Field     | Туре       | Description   |
|---|-------------|-----------|------------|---|
| 1 | 8 <b></b> 1 | Fecha     | Date       | Session date  |
| 2 | 8           | Camara    | String(2)  | Clearing house code   |
| 3 | 8 <b></b> 1 | Contrato  | String(22) | Contract code   |
| 4 |             | Columnas  | SmallIn    | Number of theoretical prices contained in the record.<br>It is followed by as many fields as indicated here |
| 5 |             | PrecioT_1 | Float      | Buy price 1   |
| 6 |             | PrecioD_1 | Float      | Sell price 1  |
|   |             | PrecioT_n | Float      | Fields PrecioT_n are repeated for n=247 257   |
|   |             | PrecioD_n | Float      | Fields PrecioD_n are repeated for n=247 257   |

## Deltas

|                 | CDELTAS.DB                 |
|-----------------|----------------------------|
| Group           | Margin calculation data    |
| Description     | Deltas of contracts        |
| Group of tables | RealTime - Historical data |

| # | *              | Field    | Туре       | Description  |
|---|----------------|----------|------------|--|
| 1 | <del>8 -</del> | Fecha    | Date       | Session date   |
| 2 | <del>9 -</del> | Camara   | String(2)  | Clearing house code  |
| 3 | 8 <b></b> 1    | Contrato | String(22) | Contract code  |
| 4 |                | Columnas | SmallIn    | Number of deltas contained in the record. It is followed by as many fields as indicated here |
| 5 |                | DeltaT_1 | Float      | Buy delta 1  |
| 6 |                | DeltaD_1 | Float      | Sell delta 1   |
|   |                | DeltaT_n | Float      | DeltaT_n fields are repeated for n=247 257   |
|   |                | DeltaD_n | Float      | DeltaD_n fields are repeated for n=247 257   |

#### Skew de volatilidad

|                 | CVOLATILITYSKEW.DB                                     |
|-----------------|--|
| Group           | Margin calculation data                                |
| Description     | Volatity curve used for theoretical proce calculations |
| Group of tables | RealTime - Historical data                             |

| #  | *           | Field           | Туре       | Description  |
|----|-------------|-----------------|------------|--|
| 1  | 8           | Fecha           | Date       | Session date   |
| 2  | ٦.          | Camara          | String(2)  | Clearing house code  |
| 3  | ŗ           | Contrato        | String(22) | Contract code  |
| 4  | 8 <b></b> 1 | Vencimiento     | Date       | Maturity date  |
| 5  | <b>"</b>    | Instrumento     | Char       | Instrument<br>"C"=Call<br>"P"=Put<br>"?"=Both  |
| 6  |             | VolaATM         | Float      | ATM volatity in percentage   |
| 7  |             | NumTramos       | SmallIn    | Number of ranges that this record contains. <=8  |
| 8  |             | DivisorPtosPorc | SmallIn    | Divisor of percentage points. Indicates at what percentage the increase of volatility is applied |
| 9  |             | VolaMaxima      | Float      | Maximum volatility. Expressed as percentage  |
| 10 |             | VolaMinima      | Float      | Minimum volatitily. Expressed as percentage  |
| 11 |             | PorVariSup_1    | Float      | Percentage change for strike price >= underlying<br>price  |
| 12 |             | PuntPorSup_1    | Float      | Percentage increase / decrease for the strike price >=<br>underlying price                       |
| 13 |             | PorVariInf_1    | Float      | Percentage change for strike price < underlying price  |
| 14 |             | PuntPorInf_1    | Float      | Percentage increase / decrease for the strike price < underlying price                           |
|    |             | PorVariSup_n    | Float      | Fields PorVariSup_n, PuntPorSup_n, PorVariInf_n<br>and PuntPorInf_n are repeated for n=28        |
|    |             | PuntPorSup_n    | Float      | Fields PorVariSup_n, PuntPorSup_n, PorVariInf_n<br>and PuntPorInf_n are repeated for n=28        |
|    |             | PorVariInf_n    | Float      | Fields PorVariSup_n, PuntPorSup_n, PorVariInf_n<br>and PuntPorInf_n are repeated for n=28        |
|    |             | PuntPorInf_n    | Float      | Fields PorVariSup_n, PuntPorSup_n, PorVariInf_n<br>and PuntPorInf_n are repeated for n=28        |

#### Dividends

|                 | CDIVIDENDS.DB  |
|-----------------|--|
| Group           | Margin calculation data  |
| Description     | Information in the dividends used for theoretical price calculations for each underlying |
| Group of tables | RealTime - Historical data   |

| #  | *              | Field         | Туре       | Description  |
|----|----------------|---------------|------------|--|
| 1  | 8              | Fecha         | Date       | Session date   |
| 2  | <del>8</del> – | Camara        | String(2)  | Clearing house code  |
| 3  | <b>9</b>       | Contrato      | String(22) | Contract code  |
| 4  |                | NumDividendos | Integer    | Number of dividends container in record <=42                       |
| 5  |                | FechaDiv_1    | Date       | Dividend date 1  |
| 6  |                | Importe_1     | Float      | Dividend amount 1  |
| 7  |                | Confirmado_1  | Char       | Indicates whether dividend 1 confirmed or not<br>"S"=Yes<br>"N"=No |
| 8  |                | FechaDiv_2    | Date       | Dividend date 2  |
| 9  |                | Importe_2     | Float      | Divident amount 2  |
| 10 |                | Confirmado_2  | Char       | Indicates whether dividend 2 confirmed or not<br>"S"=Yes<br>"N"=No |
|    |                | FechaDiv_n    | Date       | Fields FechaDiv, Importe y Confirmado are repeated for n=342       |
|    |                | Importe_n     | Float      | Fields FechaDiv, Importe y Confirmado are repeated for n=342       |
|    |                | Confirmado_n  | Char       | Fields FechaDiv, Importe y Confirmado are repeated for n=342       |

### Interest rate yield curve

|                 | CYIELDCURVE.DB   |
|-----------------|--|
| Group           | Margin calculation data  |
| Description     | Information of interest rates used for theoretical price calculations, by ranges |
| Group of tables | RealTime - Historical data   |

| # | * | Field       | Туре      | Description  |
|---|---|-------------|-----------|--|
| 1 | 8 | Fecha       | Date      | Session date   |
| 2 | 8 | Camara      | String(2) | Clearing house code  |
| 3 | 8 | TipoCalculo | Char      | Calculation type.<br>"2"=Margin<br>"3"=Cash value calculation for buyer positions<br>"4"=Cash value calculation for seller positions |
| 4 |   | NumTramos   | Integer   | Number of ranges container in record <= 50   |
| 5 |   | Dialnicio_1 | Integer   | Number of days from when specified interest rate is to be applied  |
| 6 |   | TipoInt_1   | Float     | Interest rate 1 on the yield curve   |
|   |   | Dialnicio_n | Integer   | Fields Dialnicio_n and TipoInt_n are repeated for n=250  |
|   |   | TipoInt_n   | Float     | Fields Dialnicio_n and TipoInt_n are repeated for<br>n=250   |

# A.2.5 Trades

#### Trades

|                 | CTRADES.DB                               |
|-----------------|--|
| Group           | Trades                                   |
| Description     | Information of all the trades registered |
| Group of tables | RealTime - Historical data               |

| #  | *              | Field          | Туре       | Description  |
|----|----------------|----------------|------------|--|
| 1  | 8              | Fecha          | Date       | Session date   |
| 2  | 8              | Camara         | String(2)  | Clearing house code  |
| 3  | <del>8</del> - | NumOperacion   | Integer    | Clearing house register number   |
| 4  | 8-7            | Signo          | Char       | Sign<br>"1"=Buy<br>"2"=Sell  |
| 5  |                | Miembro        | String(4)  | Member that account belongs to   |
| 6  |                | Operador       | String(3)  | User identification,<br>In case of automatically accepted Give-Ins, its value<br>is "SYS"  |
| 7  |                | CuentaPosicion | String(5)  | Position account   |
| 8  |                | Contrato       | String(22) | Contract code  |
| 9  |                | TipoOperacion  | Char       | Trade type<br>See Table 12 in "Codification tables" document   |
| 10 |                | Precio         | Float      | Price  |
| 11 |                | Volumen        | Integer    | Volume   |
| 12 |                | Referencia     | String(18) | Reference.<br>If it is an exchange trade, it may be the reference<br>assigned to the order of the original trade or that<br>assigned by the broker to the trade.<br>If the reference does not come from the exchange, it<br>contains the reference entered in clearing, the Give-<br>Up reference for example. |
| 13 |                | AbreCierra     | Char       | Indicates if the tarde opens or closes open position<br>"O"=Open<br>"C"=Close  |
| 14 |                | ComiNeg        | Float      | Trading fee.<br>The amount is settled by the Clearing House on<br>SettlDate<br>See note(1)   |
| 15 |                | ComiLiq        | Float      | Clearing fee<br>The amount is settled by the Clearing House on<br>SettlDate<br>See note (1)  |
| 16 |                | Divisa         | String(3)  | Currency   |
| 47 |                |                | Dete       |  |
| 17 |                |                | Date       |  |
| 18 |                |                | Date       | Register date on clearing house  |
| 19 |                | HoraRegistro   | lime       | Register time on clearing house  |

| #  | * | Field              | Туре       | Description  |
|----|---|--------------------|------------|--|
| 20 |   | NumOpProcedencia   | Integer    | Clearing house register number for previous trade. If<br>it is an initial trade it is its own clearing house register<br>number (TradeID)    |
| 21 |   | NumOpInicial       | Integer    | Initial clearing house register number. If it is an initial trade it is its own clearing house register number (TradeID)                     |
| 22 |   | Compensador        | String(4)  | Clearing Member  |
| 23 |   | MiembroInter       | String(4)  | Broker member  |
| 24 |   | OperadorInter      | String(3)  | Broker trader  |
| 25 |   | FechaRegOpeInicial | Date       | Initial trade trading date   |
| 26 |   | MercadoNeg         | String(2)  | Market code where initial trade was made   |
| 27 |   | NRegNeg            | String(12) | Exchange register number of initial trade  |
| 28 |   | NumOrdenSistema    | String(12) | Order number assigned by central host  |
| 29 |   | TipoOperacionIni   | Char       | Initial trade type   |
| 30 |   | FechaEjecucion     | Date       | Execution Date when it is an exchange trade. If the trade does not come from the Exchange, the field contains the date of the inicial trade. |
| 31 |   | HoraEjecucion      | String(15) | Execution Time when it is an exchange trade. If the trade does not come from the Exchange, the field contains the time of the inicial trade. |
| 32 |   | EfectivoOpe        | Amt        | Nominal/Efective of the transaction  |
| 33 |   | RefOriPrimaria     | String(18) | Primary original trade reference.<br>For repos, it's the common reference for both legs.   |
| 34 |   | RefOriSecundaria   | String(18) | Secondary original trade reference.<br>For repos, it refers to one of the legs.  |
| 35 |   | UTI                | String(52) | Unique trade identifier  |
| 36 |   | VolumenVivo        | Integer    | Live volume of the trade. Number of contracts associated to the trade, having subtracted those that have been transferred                    |
| 37 |   | NumOpPosterior     | Integer    | Next TradeID (average Price trades)  |
| 38 |   | Rentabilidad       | Float      | Yield  |
| 39 |   | MarketID           | String(4)  | Operating MIC, for trades executed in a trading venue  |
| 40 |   | MarketSegmentID    | String(4)  | Segment MIC, for trades executed in a trading venue  |
| 41 |   | PremiumMargin      | Amt        |  |
| 42 |   | FTL                | Date       |  |

(1) As from 1 July 2007 when new fees will be effective (see notice 35/06 dated 31 October 2006), Trading Fee and Clearing Fee fields will not be filled at trade level anymore.

# A.2.6 Management of Trades

### Assignments and transfers registered

|                 | CTRANSFTRADES.DB                   |
|-----------------|------------------------------------|
| Group           | Management of trades               |
| Description     | Assigment and transfers registered |
| Group of tables | RealTime - Historical data         |

| #  | * | Field                 | Туре       | Description  |
|----|---|-----------------------|------------|--|
| 1  | 8 | Fecha                 | Date       | Session date   |
| 2  | 8 | Camara                | String(2)  | Clearing house code  |
| 3  | 8 | IdTransaccion         | Integer    | Transfer identifier  |
| 4  |   | Miembro               | String(4)  | Member that makes assignment or transfer                     |
| 5  |   | Operador              | String(3)  | Identifier of clearing user that requested the action        |
| 6  |   | Contrato              | String(22) | Contract code  |
| 7  |   | NumOperacionOri       | Integer    | Clearing house register number of previous trade             |
| 8  |   | Signo                 | Char       | Sign<br>"1"=Buy<br>"2"=Sell                                  |
| 9  |   | CuentaPosicionOrigen  | String(5)  | Source Position account                                      |
| 10 |   | NumOperacion          | Integer    | Clearing house register number                               |
| 11 |   | CuentaPosicionDestino | String(5)  | Destination Position account                                 |
| 12 |   | Precio                | Float      | Price  |
| 13 |   | Volumen               | Integer    | Volume transferred   |
| 14 |   | TipoOperacion         | Char       | Trade type<br>See Table 12 in "Codification tables" document |
| 15 |   | HoraRegistro          | Time       | Trade register time  |
| 16 |   | FechaLiq              | Date       | Settlement date  |
| 17 |   | EfectivoOpe           | Amt        | Nominal/Efective of the transaction                          |

#### **Give-Outs**

|                 | CGIVEOUT.DB   |
|-----------------|---|
| Group           | Management of trades                                    |
| Description     | Status of Give-Outs in which source member participates |
| Group of tables | RealTime - Historical data                              |

| #  | *           | Field                | Туре       | Description   |
|----|-------------|----------------------|------------|---|
| 1  | 8 <b></b> 1 | Fecha                | Date       | Session date  |
| 2  | 1           | Camara               | String(2)  | Clearing house code   |
| 3  | Ţ           | IdTransaccion        | Integer    | Give-Up identifier  |
| 4  |             | Estado               | Char       | Give-Up status<br>See Table 11 in "Codification tables" document  |
| 5  |             | Miembro              | String(4)  | Executing Broker  |
| 6  |             | Operador             | String(3)  | Identifier of clearing user that requested the action   |
| 7  |             | Contrato             | String(22) | Contract code   |
| 8  |             | NumOperacionOri      | Integer    | Clearing house register number on which Give-Out has been requested   |
| 9  |             | Signo                | Char       | Sign of the trade on which Give-Out has been<br>requested<br>"1"=Buy<br>"2"=Sell  |
| 10 |             | CuentaPosicionOrigen | String(5)  | Source Position account   |
| 11 |             | NumOperacion         | Integer    | Clearing house Give-Up trade register number.<br>Only considered when the Give-up is accepted.  |
| 12 |             | Precio               | Float      | Price   |
| 13 |             | Volumen              | Integer    | Number of contracts to transfer   |
| 14 |             | MnemonicGiveOut      | String(10) | Give-Out mnemonic   |
| 15 |             | MiembroGiveIn        | String(4)  | Clearing Broker   |
| 16 |             | RefGiveUp            | String(18) | Give-Up reference   |
| 17 |             | HoraRegistro         | Time       | Time at which Give-Out changes to this status   |
| 18 |             | FechaLiq             | Date       | Settlement date<br>Only considered when the Give-up is accepted<br>This field is empty until the Give-up is accepted                      |
| 19 |             | GiveOutInternalRef   | String(18) | Reference assigned by the Executing Broker for<br>internal purposes. It is associated to a give-out<br>mnemonic and it can be not unique. |
| 20 |             | EfectivoOpe          | Amt        | Nominal/Efective of the transaction   |

## **Give-Ins. Clearing Broker**

|                 | CGIVEIN.DB  |
|-----------------|---|
| Group           | Management of trades                                      |
| Description     | Status of Give-Ins where participating as Clearing Broker |
| Group of tables | RealTime - Historical data                                |

| #  | *              | Field          | Туре       | Description  |
|----|----------------|----------------|------------|--|
| 1  | <del>8 -</del> | Fecha          | Date       | Session date   |
| 2  | <b>*</b>       | Camara         | String(2)  | Clearing house code  |
| 3  | <del>8 -</del> | IdTransaccion  | Integer    | Give-up identifier   |
| 4  |                | Estado         | Char       | Give-Up status<br>See Tabla 11 in "Codification tables" document   |
| 5  |                | Miembro        | String(4)  | Clearing Broker  |
| 6  |                | Operador       | String(3)  | Identifier of Clearing Broker trader who accepted or<br>rejected the Give-up<br>In the case of automatically accepted Give-Ins, the<br>value of the field is "SYS"<br>In the case of Give-ups on which the Clearing Broker<br>did not take any action ,will be blank |
| 7  |                | Contrato       | String(22) | Contract code  |
| 8  |                | NumOperacion   | Integer    | Clearing house Give-Up trade register number<br>Only considered when the Give-up is accepted   |
| 9  |                | Signo          | Char       | Sign of trade on which Give-Up has been requested<br>"1"=Buy<br>"2"=Sell   |
| 10 |                | CuentaPosicion | String(5)  | Destination Position account   |
| 11 |                | Precio         | Float      | Price  |
| 12 |                | Volumen        | Integer    | Number of contracts to transfer  |
| 13 |                | MnemonicGiveIn | String(10) | Mnemonic assigned by the Clearing Broker to the combination of the Executing Broker and the Give-Up reference  |
| 14 |                | MiembroOrigen  | String(4)  | Executing Broker   |
| 15 |                | OperadorOrigen | String(3)  | Identifier of the Executing Member trader who requested the Give-up  |
| 16 |                | RefGiveUp      | String(18) | Give-Up reference  |
| 17 |                | HoraRegistro   | Time       | Time at which the Give-In changes to this status   |
| 18 |                | FechaLiq       | Date       | Settlement date<br>Only considered when the Give-up is accepted<br>This field is empty until the Give-up is accepted   |
| 19 |                | EfectivoOpe    | Amt        | Nominal/Efective of the transaction  |

## **Give-Ins. Clearing Member**

|                 | CGIVEINCLM.DB  |
|-----------------|--|
| Group           | Management of trades                                   |
| Description     | Status of the Give-Ins where acting as Clearing Member |
| Group of tables | RealTime - Historical data                             |

| #  | *            | Field                 | Туре       | Description  |
|----|--------------|-----------------------|------------|--|
| 1  | 8            | Fecha                 | Date       | Session date   |
| 2  | 8 <b>-</b> 1 | Camara                | String(2)  | Clearing house code  |
| 3  | <del>ا</del> | IdTransaccion         | Integer    | Give-Up identifier   |
| 4  |              | Estado                | Char       | Give-Up status<br>See Table 11 in "Codification tables" document   |
| 5  |              | Miembro               | String(4)  | Clearing Member  |
| 6  |              | Operador              | String(3)  | Identifier of trader of Clearing Member of the<br>Clearing Broker who accepted or rejected the Give-<br>up<br>In the case of automatically accepted Give-Ins, the<br>value of the field is "SYS"<br>In the case of Give-ups on which the Clearing<br>Member did not take any action ,will be blank |
| 7  |              | MiembroDestino        | String(4)  | Clearing Broker  |
| 8  |              | OperadorDestino       | String(3)  | Identifier of Clearing Broker trader who accepted the<br>Give-up<br>In the case of automatically accepted Give-Ins, the<br>value of the field is "SYS"   |
| 9  |              | Contrato              | String(22) | Contract code  |
| 10 |              | NumOperacion          | Integer    | Clearing house Give-Up trade register number<br>Only considered when the Give-up is accepted   |
| 11 |              | Signo                 | Char       | Sign of trade on which Give-Up has been requested<br>"1"=Buy<br>"2"=Sell   |
| 10 |              | CuentaPosicionDestino | String(5)  | Destination Position account   |
| 11 |              | Precio                | Float      | Price  |
| 12 |              | Volumen               | Integer    | Number of contracts to transfer  |
| 13 |              | MiembroOrigen         | String(4)  | Executing Broker   |
| 14 |              | RefGiveUp             | String(18) | Give-Up reference  |
| 15 |              | HoraRegistro          | Time       | Time at which the Give-In changes to this status   |
| 16 |              | FechaLiq              | Date       | Settlement date<br>Only considered when the Give-up is accepted<br>This field is empty until the Give-up is accepted   |
| 17 |              | EfectivoOpe           | Amt        | Nominal/Efective of the transaction  |

# A.2.7 Open position

#### **Open position balance at Position Account level**

|                 | COPENPOSITION.DB  |
|-----------------|---|
| Group           | Open position   |
| Description     | Information on open position by position account and contract (only for those that have position) |
| Group of tables | RealTime - Historical data  |

| # | * | Field          | Туре       | Description   |
|---|---|----------------|------------|---|
| 1 | 8 | Fecha          | Date       | Session date  |
| 2 | 8 | Camara         | String(2)  | Clearing house code                                 |
| 3 | 8 | Miembro        | String(4)  | Member that account belongs to                      |
| 4 | 8 | CuentaPosicion | String(5)  | Position account                                    |
|   |   | Titular        | String(3)  | Holder  |
|   |   | Subcuenta      | String(2)  | Account   |
| 5 | 8 | Contrato       | String(22) | Contract code                                       |
| 6 |   | LongPosition   | Integer    | Buy position for the position account and contract  |
| 7 |   | ShortPosition  | Integer    | Sell position for the position account and contract |
| 8 |   | Compensador    | String(4)  | Clearing Member                                     |

### Open position balance at Margin Account level

|                 | CMARGINOPENPOSITION.DB  |
|-----------------|---|
| Group           | Open Position   |
| Description     | Information on open position by margin account and contract (only for those that have position) |
| Group of tables | Histórico   |

| # | *            | Campo            | Тіро       | Descripción                                       |
|---|--------------|------------------|------------|---|
| 1 | <del>ا</del> | Fecha            | Date       | Session date                                      |
| 2 | 8 <b></b> 1  | Camara           | String(2)  | Contract Group code                               |
| 3 | <del>.</del> | MiembroGarantias | String(4)  | Member to which the margin account belongs        |
| 4 | 8            | CuentaGarantias  | String(12) | Margin account                                    |
| 5 | 8            | Contrato         | String(22) | Contract code                                     |
| 6 |              | LongPosition     | Integer    | Buy position for the margin account and contract  |
| 7 |              | ShortPosition    | Integer    | Sell position for the margin account and contract |
| 8 |              | Compensador      | String(4)  | Clearing Member                                   |

# Open position balance by Clearing Member

|                 | COPENPOSITIONCLM.DB  |
|-----------------|--|
| Grupo           | Open Position  |
| Descripción     | Information on open position by Clearing Member and contract (only for those that have position) |
| Grupo de tablas | Historical data  |

| # | *           | Campo       | Тіро       | Descripción   |
|---|-------------|-------------|------------|---|
| 1 | 9 <b></b> 1 | Fecha       | Date       | Session date  |
| 2 | 8           | Camara      | String(2)  | Contract Group code                                   |
| 3 | 8           | Compensador | String(4)  | Clearing Member                                       |
| 6 | 8           | Contrato    | String(22) | Contract code   |
| 7 |             | Position    | Integer    | Net position (positive for buy and negative for sell) |
| 8 |             | UTI         | String(52) | Unique position identifier                            |

### **Position adjustments**

|                 | CPOSADJUST.DB                                |
|-----------------|--|
| Group           | Open position                                |
| Description     | Position adjustments made during the session |
| Group of tables | RealTime - Historical data                   |

| #  | *        | Field          | Туре       | Description  |
|----|----------|----------------|------------|--|
| 1  | 8        | Fecha          | Date       | Session date   |
| 2  | <b>.</b> | Camara         | String(2)  | Clearing house code  |
| 3  | ŗ        | NumOperacion   | Integer    | Clearing house register number   |
| 4  |          | Miembro        | String(4)  | Member that account belongs to   |
| 5  |          | CuentaPosicion | String(5)  | Position account   |
| 6  |          | Contrato       | String(22) | Contract code  |
| 7  |          | Operador       | String(3)  | Trader code  |
| 8  |          | Volumen        | Integer    | Number of contracts by which position is adjusted  |
| 9  |          | Signo          | Char       | Indicates whether the position is increased or<br>decreased.<br>"1"=Decrease in position<br>"2"=Increase in position |
| 10 |          | HoraRegistro   | Time       | Position adjustment time   |
| 11 |          | Compensador    | String(4)  | Clearing Member  |

# A.2.8 Exercise – Expiration – Delivery

#### Deliverables

|                 | CDELIVERABLES.DB  |
|-----------------|---|
| Group           | Exercise – Expiration – Delivery  |
| Descripction    | List of available deliverable contracts associated to a derivative contract |
| Grupo de tablas | RealTime - Historical data  |

| #  | *           | Field          | Туре       | Descrption   |
|----|-------------|----------------|------------|--|
| 1  | 9 <b></b> 1 | Fecha          | Date       | Session date   |
| 2  | 8           | Camara         | String(2)  | Clearing House code  |
| 3  | 8           | Contrato       | String(22) | Contract code in derivatives market  |
| 4  | 8           | CodigoCSD      | Char       | Code of the Central Security Depositary<br>See table 9 in "Codification tables" document   |
| 5  | 8-1         | Entregable     | String(22) | Deliverable contract code used in the Clearing House   |
| 6  |             | NumOrden       | Integer    | Issue order number of the deliverable contract   |
| 7  |             | ISINEntregable | String(12) | ISIN code of the deliverable contract  |
| 8  |             | FechaVto       | Date       | Maturity and delivery date.  |
| 9  |             | Factor         | Float      | Conversion factor (for Bonds)  |
| 10 |             | Cupon          | Float      | Accrued interest (for Bonds)   |
| 11 |             | Field1         | String(20) | BME CLEARING: Reserved for future use<br>CRCC:<br>* If the asset is delivered in DECEVAL, this field<br>corresponds to the Código ISIN ANNA. String(12).<br>* If the asset is delivered in DCV, this field<br>corresponds to the Código título, String(3).                         |
| 12 |             | Field2         | String(20) | BME CLEARING: Reserved for future use<br>CRCC:<br>* If the asset is delivered in DECEVAL, this field<br>corresponds to the CSV Code where the ISIN is<br>located String(10).<br>* If the asset is delivered in DCV, this field<br>corresponds to the Número de Emisión, String(7). |
| 13 |             | NemotecnicoBVC | String(35) | BME CLEARING: Reserved for future use<br>CRCC: Mnenomic in BVC   |

### **Exercise request**

|                 | CEXERCISERQT.DB                       |
|-----------------|---------------------------------------|
| Group           | Exercise – Expiration – Delivery      |
| Description     | Information on live exercise requests |
| Group of tables | RealTime - Historical data            |

| # | *           | Field          | Туре       | Description   |
|---|-------------|----------------|------------|---|
| 1 | 8           | Fecha          | Date       | Session date  |
| 2 | 8           | Camara         | String(2)  | Clearing house code   |
| 3 | 8 <b></b> 1 | Miembro        | String(4)  | Member that account belongs to  |
| 4 | 8           | CuentaPosicion | String(5)  | Position account  |
| 5 | 8           | Contrato       | String(22) | Contract code   |
| 6 |             | Operador       | String(3)  | Identifier of user that requested the action  |
| 7 |             | Volumen        | Integer    | Number of contracts to exercise. This value should<br>not be considered when there is a petition not to<br>exercise.<br>It is blank if the petition is for all the existing volume.                         |
| 8 |             | Ejercitar      | Char       | Indicates if the record refers to an express petition to<br>exercise or not to exercise, or if it is to be<br>automatically exercised by the system<br>"S"=Exercise<br>"N"=Do not exercise<br>"A"=Automatic |

## Spot trades

|                 | CSPOTTRADES.DB  |
|-----------------|---|
| Group           | Exercise – Expiration – Delivery  |
| Description     | Information about delivery trades to be made outside of MEFF:<br>- BONO expiry. |
| Group of tables | RealTime - Historical data  |

| #  | *        | Field                   | Туре       | Description  |
|----|----------|-------------------------|------------|--|
| 1  | 8        | Fecha                   | Date       | Session date   |
| 2  | <b>9</b> | Camara                  | String(2)  | Clearing house code  |
| 3  | <b>9</b> | Miembro                 | String(4)  | Member   |
| 4  | <b>1</b> | Contrato                | String(22) | Deliverable contract code  |
| 5  | ۳.       | IndEjerc                | Char       | Indicates if the delivery arises from early exercise or<br>at expiration<br>"A"=Early<br>"V"=Expiration  |
| 6  | 8        | Contraparte             | String(4)  | Counterparty Member  |
| 7  | 8-7      | Signo                   | Char       | Sign of trade<br>"1"=Buy<br>"2"=Sell   |
| 8  | 8        | Precio                  | Float      | Price  |
| 9  | 8        | Compensador             | String(4)  | Clearing member  |
| 10 | 8        | IndCapacidad            | Char       | Capacity indicator   |
| 11 | 8        | IndCapacidadContraparte | Char       | Capacity indicator (Counterparty Member)   |
| 12 | 8        | NumOperacion            | Integer    | Trade Reference for BONO delivery. Zero in any other case.   |
| 13 |          | Volumen                 | Integer    | Delivered quantity (with sign).  |
| 14 |          | SibeMiembro             | String(4)  | Member code in market where delivery takes place.  |
| 15 |          | SibeContraparte         | String(4)  | Counterparty member code in market where delivery takes place.   |
| 16 |          | FechaContado            | Date       | Trade register date  |
| 17 |          | ImporteEfectivo         | Float      | For equity products: cash amount of the trade.<br>For fixed income products: cash amount = number of<br>contracts * (settlement price *nominal of one contract<br>* conversion factor + accrued Interest). |
| 18 |          | Divisa                  | String(3)  | Currency   |
| 19 |          | Nominal                 | Float      | Fixed income: nominal value  |

### Spot trades broken down by Margin Account

|                 | CSPOTTRADESBRKD.DB  |
|-----------------|---|
| Group           | Exercise – Expiration – Delivery  |
| Description     | Detail at holder level of the trades to be made outside BME CLEARING:<br>- BONO expiry. |
| Group of tables | RealTime - Historical data  |

| #  | *              | Field            | Туре       | Description  |
|----|----------------|------------------|------------|--|
| 1  | 8              | Fecha            | Date       | Session date   |
| 2  | 8              | Camara           | String(2)  | Clearing house code  |
| 3  | <del>8 -</del> | MiembroGarantias | String(4)  | Member to which the margin account belongs   |
| 4  | 8              | CuentaGarantias  | String(12) | Margin Account   |
| 5  | 8-             | Contrato         | String(22) | Deliverable contract code  |
| 6  | 8              | IndEjerc         | Char       | Indicates if the delivery arises from early exercise or<br>at expiration<br>"A"=Early<br>"V"=Expiration  |
| 7  | <b>9</b>       | Precio           | Float      | Price  |
| 8  | 8              | Signo            | Char       | Sign of trade<br>"1"=Buy<br>"2"=Sell   |
| 9  | 8-7            | NumOperacion     | Integer    | Trade ID<br>BME CLEARING: always zero.   |
| 10 | 8              | MiembroEntrega   | String(4)  | Member acting as Account Holder in the CSD where<br>delivery takes place   |
| 11 |                | Volumen          | Integer    | Delivered quantity (with sign).  |
| 12 |                | FechaContado     | Date       | Trade register date  |
| 13 |                | Compensador      | String(4)  | Clearing Member  |
| 14 |                | CodCSD           | Char       | CSD code<br>See table 9 in "Codification tables" document  |
| 15 |                | ImporteEfectivo  | Float      | For equity products: cash amount of the trade.<br>For fixed income products: cash amount = number of<br>contracts * (settlement price *nominal of one contract<br>* conversion factor + accrued Interest). |
| 16 |                | Divisa           | String(3)  | Currency   |
| 17 |                | Nominal          | Float      | Fixed income: nominal value  |

### Spot trades broken down by position account

|                 | CSPOTTRADESBRKDDET.DB   |
|-----------------|---|
| Group           | Exercise – Expiration – Delivery  |
| Description     | Detail at account level of the stock trades to be made outside MEFF, due to the exercise of options in the session, futures expity and deltas |
| Group of tables | RealTime - Historical data  |

| #  | *            | Field             | Туре       | Description   |
|----|--------------|-------------------|------------|---|
| 1  | 8 <b>-</b> 1 | Fecha             | Date       | Session date  |
| 2  | 8-           | Camara            | String(2)  | Clearing house code   |
| 3  | 8            | Miembro           | String(4)  | Member of holder  |
| 4  | 8            | CuentaPosicion    | String(5)  | Position account  |
| 5  | 8-1          | Contrato          | String(22) | Contract code in spot market  |
| 6  | 8            | IndEjerc          | Char       | Indicates if the delivery arises from early exercise or<br>at expiration<br>"A"=Early<br>"V"=Expiration (options)<br>"F"=Expiration (futures) |
| 7  | 8            | Precio            | Float      | Price   |
| 8  | 8            | Signo             | Char       | Sign of trade<br>"1"=Buy<br>"2"=Sell  |
| 9  | 8            | NumOperacion      | Integer    | BME Clearing: Register number for unique key (stocks).  |
| 10 |              | Volumen           | Integer    | Número de acciones  |
| 11 |              | FechaContado      | Date       | Fecha de registro de la operación de contado  |
| 12 |              | Compensador       | String(4)  | Clearing Member   |
| 13 |              | CodCSD            | Char       | CSD code<br>See table 9 in "Codification tables" document   |
| 14 |              | ImporteEfectivo   | Float      | Effective of the transaction  |
| 15 |              | Divisa            | String(3)  | Currency  |
| 16 |              | IndCapacidad      | String(1)  |   |
| 17 |              | CodSibeMiembro    | String(4)  |   |
| 18 |              | CtaCompensacion   | String(3)  |   |
| 19 |              | CodCliente        | String(16) |   |
| 20 |              | MiembroECCDestino | String(4)  |   |
| 21 |              | RefAsignacion     | String(18) |   |
| 22 |              | Mnemotecnico      | String(10) |   |
| 23 |              | CodSibeContrap    | String(4)  |   |

## Details of gas physical delivery

|                 | CPHYSDELDET.DB                   |
|-----------------|----------------------------------|
| Group           | Exercise – Expiration – Delivery |
| Description     | Details about physical delivery  |
| Group of tables | RealTime - Histórico             |

| #  | *              | Campo                                | Тіро       | Descripción  |
|----|----------------|--------------------------------------|------------|--|
| 1  | 8              | Fecha                                | Date       | Session date   |
| 2  | <del>8</del> – | Camara                               | String(2)  | Contract Group code  |
| 3  | <b>9</b>       | Miembro                              | String(4)  | Member   |
| 4  | 8-7            | CuentaPosicion                       | String(5)  | Position Account   |
| 5  | <del>8</del> - | Infraestructura                      | String(10) | Infrastructure   |
| 6  | 8-7            | Contrato                             | String(22) | Derivative contract code that results in the delivery obligation                   |
| 7  | 8              | FechaEntrega                         | Date       | Delivery date  |
| 8  | <b>9</b>       | PrecioLiquidacion                    | Float      | Settlement price   |
| 9  |                | EICCode                              | String(16) | EIC code   |
| 10 |                | <del>Liquidador</del><br>Compensador | String(4)  | Clearing Member  |
| 11 |                | Signo                                | Char       | Sign of trade<br>"1"=Buy<br>"2"=Sell   |
| 12 |                | Quantity                             | Integer    | Number of contracts to deliver   |
| 13 |                | QuantityToDeliver                    | Float      | Quantity to be delivered   |
| 14 |                | UnitOfMeasure                        | Char(20)   | Unit of measure of quantity to be delivered  |
| 15 |                | DeliveryAmt                          | float      | Cash amount before taxes   |
| 16 |                | Divisa                               | String(3)  | Currency<br>See table 1 in "Codification Tables" document                          |
| 17 |                | TaxRate                              | Float      | Tax rate   |
| 18 |                | TaxAmount                            | float      | Tax amount   |
| 19 |                | GrossDeliveryAmt                     | float      | Total cash amount including taxes  |
| 20 |                | NominationStatus                     | Char       | Nomination status<br>P=Forecast<br>N=Notification<br>A=Accepted<br>I=Disabled User |

# Nominations for gas physical delivery at EIC level

|                 | CPHYSDEL.DB  |
|-----------------|--|
| Group           | Exercise – Expiration – Delivery                   |
| Description     | Nominations for gas physical delivery at EIC level |
| Group of tables | RealTime - Histórico                               |

| #  | *        | Campo             | Тіро       | Descripción   |
|----|----------|-------------------|------------|---|
| 1  | 8        | Fecha             | Date       | Session date  |
| 2  | 8        | Camara            | String(2)  | Contract Group code   |
| 3  | 8        | Compensador       | String(4)  | Clearing Member   |
| 4  | 8        | Miembro           | String(4)  | Member  |
| 5  | 8        | Infraestructura   | String(10) | "PVB"= Spanish Virtual Balance Point                            |
| 6  | 8        | EICCode           | String(16) | EIC code  |
| 7  | <b>9</b> | FechaEntrega      | Date       | Delivery date   |
| 8  | 8-7      | ContractType      | Char       | Contract type<br>N=Non intraday                                 |
| 9  |          | Signo             | Char       | Sign of trade<br>"1"=Buy<br>"2"=Sell                            |
| 10 |          | QuantityToDeliver | float      | Quantity to be delivered<br>Up to 3 decimails                   |
| 11 |          | UnitOfMeasure     | Char(20)   | Unit of measure of quantity to be delivered                     |
| 12 |          | NominationStatus  | char       | Nomination status<br>P=Forecast<br>N=Notification<br>A=Accepted |

# A.2.9 Fees

#### **Detail of Fees**

|                 | CFEESBRKD.DB    |
|-----------------|-----------------|
| Group           | Fees            |
| Description     | Detaild of fees |
| Group of tables | Historical data |

| #  | *            | Field              | Туре       | Description   |
|----|--------------|--------------------|------------|---|
| 1  | 8 <b>-</b> 1 | Fecha              | Date       | Session date  |
| 2  | 8            | Camara             | String(2)  | Clearing house code   |
| 3  | 8            | NumOperacion       | Integer    | Clearing house register number  |
| 4  | 8            | Signo              | Char       | Sign<br>"1"=Buy<br>"2"=Sell   |
| 5  | 8            | FechaUltimoCalculo | Date       | In case of charge of fees, this date corresponds to the current session date  |
|    |              |                    |            | fees' calculation was made for this trade   |
| 6  | 8            | GrupoComision      | String(2)  | Fee group associated to the underlying, instrument<br>and account type<br>See table 15 in "Codification Tables" document  |
| 7  |              | TipoComision       | String(2)  | Fee type  |
| 8  |              | ConceptoComision   | char       | Fee concept<br>1=Per contraact<br>2=CAP<br>3=FLOOR<br>4=Per MWh<br>5=Effective amt<br>6=Effective/term  |
| 9  |              | Divisa             | String(3)  | Currency for fees   |
| 10 |              | FechaRegistro      | Date       | Register date on clearing house   |
| 11 |              | FechaOpProcedencia | Date       | Date for previous trade<br>This field eases the tracj of fees in case of give-out<br>and transfers  |
| 12 |              | Compensador        | String(4)  | Clearing Member   |
| 13 |              | Miembro            | String(4)  | Trading Member  |
| 14 |              | CuentaPosicion     | String(5)  | Position account  |
| 15 |              | Contrato           | String(22) | Contract code   |
| 16 |              | Precio             | Float      | Price   |
| 17 |              | NumeroOrdenSistema | String(12) | Order number. Informed in case of an Exchange trade   |
| 18 |              | Volumen            | Integer    | Volume  |
| 19 |              | VolumenVivo        | Integer    | Live volume of the trade. Number of contracts associated to the trade, having subtracted those that have been transferred                                       |
| 20 |              | AbreCierra         | Char       | Information only relevant for accounts that record<br>position on gross basis: indicates if the trade opens<br>or closes open position<br>"O"=Open<br>"C"=Close |
| #  | * | Field               | Туре       | Description  |
|----|---|---------------------|------------|--|
| 21 |   | ComisionPorConcepto | Float      | Fee to be applied for this concept   |
| 22 |   | TotalComision       | Float      | Total fees. Can be zero  |
|    |   |                     |            | In case of applying Cap/floor concept for ione<br>transaction componed of several trades, the total<br>amount will be informed just in one of these trades   |
| 23 |   | TipoOperacion       | Char       | Trade type<br>See table 12 in "Codification tables" document   |
| 24 |   | Referencia          | String(18) | Reference<br>If it is an Exchange trade, it is the referente assigned<br>to the order of the original trade<br>If it is a cross trade, corresponds to the reference<br>assigned by the broker to the trade<br>If it is an assignment or a transfer, corresponds to the<br>reference informed in the previous trade |
| 25 |   | NumOpProcedencia    | Integer    | Clearing house register number for the previous trade. If it is an initial trade, it is its own clearing house register number (TradeID)   |
| 26 |   | CantidadPorConcepto | Integer    | Quantity for that the fee is applied   |
| 27 |   | NumDias             | Integer    | Days between the two legs of the repo trade  |
| 28 |   | ImporteEfectivo     | Float      | Cash amount of the transaction   |
| 29 |   | ImporteFijo         | Float      | Fixed amount per trade   |
| 30 |   | ComiNeg             | Float      | Trading fee  |
| 31 |   | ComiLiq             | Float      | Clearing fee   |

#### Fees

|                 | CFEES.DB                     |
|-----------------|------------------------------|
| Group           | Fees                         |
| Description     | Fees at Trading Member level |
| Group of tables | Historical data              |

| #  | *              | Field                 | Туре       | Description  |
|----|----------------|-----------------------|------------|--|
| 1  | 8              | Fecha                 | Date       | Session date   |
| 2  | <del>9 -</del> | Camara                | String(2)  | Clearing House code  |
| 3  | 8-             | FechaRegistro         | Date       | Register date on clearing house  |
| 4  | 8-1            | FechaUltimoCalculo    | Date       | In case of charge of fees, this date corresponds to<br>the current session date.<br>Otherwise, this field indicates the last trade when<br>fees' calculation was made for this trade |
| 5  | 9 <del></del>  | GrupoComision         | String(2)  | Fee group associated to the underlying, instrument<br>and account type<br>See table 15 in "Codificaton tables" document  |
| 6  | 8-7            | TipoComision          | String(2)  | Fee type<br>See table 16 in "Codification tables" document   |
| 7  | 8              | ConceptoComision      | char       | Fee concepto<br>1=Per contract<br>2=CAP<br>3=FLOOR<br>4=Per MWh<br>5=Effective amt<br>6=Effective/term   |
| 8  | <b>8</b> –     | Compensador           | String(4)  | Clearing Member  |
| 9  | <del>ا</del>   | Miembro               | String(4)  | Trading Member   |
| 10 | 8 <b>-</b> 1   | Divisa                | String(3)  | Currency for fees  |
| 11 |                | TotalVolumenVivo      | Integer    | Total live volume for the trades aggregated in this register. Can be zero  |
| 12 |                | TotalNumTransacciones | Integer    | Total number of transactions. Can be zero  |
| 13 |                | TotalNumLineas        | Integer    | Total number of lines in CFEESBRKSD table that<br>compose this aggregated register. Can be zero  |
| 14 |                | CantidadPorConcepto   | Integer    | Quantity for that the concept is applied   |
| 15 |                | ComisionPorConcepto   | Float      | Fee to applied for this concept  |
| 16 |                | TotalComision         | Float      | Total fees. Can be zero  |
| 17 |                | Texto                 | String(30) | Informative text.  |
| 18 |                | ImporteFijo           | Float      | Fixed amount per trade   |
| 19 |                | ComiNeg               | Float      | Trading fee  |
| 20 |                | ComiLiq               | Float      | Clearing fee   |

# A.2.10Results at Position Account level

## **Option premiums**

|                 | CPREMIUMS.DB                             |
|-----------------|--|
| Group           | Results at Position Account level        |
| Description     | Premium associated with an options trade |
| Group of tables | RealTime - Historical data               |

| #  | *               | Field          | Туре       | Description                                 |
|----|-----------------|----------------|------------|---|
| 1  | <del>8</del> –1 | Fecha          | Date       | Session date                                |
| 2  | <del>8</del> -  | Camara         | String(2)  | Clearing house code                         |
| 3  | <del>8</del> -  | NumOperacion   | Integer    | Clearing House register number of the trade |
| 4  | 8               | Signo          | Char       | Sign<br>"1"=Buy<br>"2"=Sell                 |
| 5  |                 | Miembro        | String(4)  | Member that account belongs to              |
| 6  |                 | CuentaPosicion | String(5)  | Position account                            |
| 7  |                 | Contrato       | String(22) | Contract code                               |
| 8  |                 | Prima          | Float      | Premium                                     |
| 9  |                 | Divisa         | String(3)  | Currency that premium is quoted in          |
| 10 |                 | Compensador    | String(4)  | Clearing Member                             |

### Variation Margin

|                 | CVARMARGIN.DB   |
|-----------------|---|
| Group           | Results at Position Account level   |
| Description     | <ul> <li>Detail of daily settlement of profits and losses:</li> <li>1. For contracts with daily settlement it is calculated as the valuation difference. For positions: between previous day settlement price and end of day settlement price. For day trades between trade price and settlement price.</li> <li>2. For forwards and swaps (cash settlement at expiration) calculated as the valuation of all the historical positions, included the expiration ones, between trade price and the settlement price</li> </ul> |
| Group of tables | RealTime - Historical data  |

| #  | *           | Field             | Туре       | Description   |
|----|-------------|-------------------|------------|---|
| 1  | 8 <b></b> 1 | Fecha             | Date       | Session date  |
| 2  | 8           | Camara            | String(2)  | Clearing house code   |
| 3  | 8           | Miembro           | String(4)  | Member that account belongs to  |
| 4  | 8           | CuentaPosicion    | String(5)  | Position account  |
| 5  | <b>8</b> –1 | Contrato          | String(22) | Contract code   |
| 6  | 8           | TradeInd          | Char       | Indicates if it is valuing the open position at the start<br>of the session, a trade settled in the current session<br>or a trade for rollover mark-to market<br>"1"=Open position at start of the session<br>"2"=Trade in current session<br>"4"=Trade for Rollover Mark-to-Market |
| 7  | 8           | NumOperacion      | Integer    | If TradeInd = 2 or 4, it is the clearing house trade register number  |
| 8  | 8           | Signo             | Char       | Sign<br>"1"=Buy<br>"2"=Sell   |
| 9  |             | Volumen           | Integer    | Volume  |
| 10 |             | Precio            | Float      | Initial price:<br>If TradeInd = "1", it is the closing price from the<br>previous session.<br>If TradeInd = "2" or or "4", it is the Trade price  |
| 11 |             | InitialValue      | Float      | Initial value of the position / trade referenced in the record. It is the result of multiplying the initial valuation price by the volume by contract multiplier The sign is positive when buying and negative when selling   |
| 12 |             | PrecioLiquidacion | Float      | Price of final valuation:<br>If the session has not ended it is the last trade price<br>of the contract.<br>If the session has ended it is the settlement price for<br>the contract.  |
| 13 |             | Valor             | Float      | Final valuation of the position / trade referenced in<br>the record. It is the result of multiplying the final<br>settlement price by the volume and by contract<br>multiplier.<br>The sign is positive when buying and negative when<br>selling                                    |
| 14 |             | VariationMargin   | Float      | Profits and losses generated by the position / trade referenced in the record. It is the difference between the final and initial valuation.  |
| 15 |             | Divisa            | String(3)  | Currency used to express valuation  |

| #  | * | Field             | Туре      | Description                      |
|----|---|-------------------|-----------|----------------------------------|
| 16 |   | FechalnitialValue | Date      | InitialValue date of calculation |
| 17 |   | Compensador       | String(4) | Clearing Member                  |

### **Variation Margin Pending**

|                 | CVARMARGINPEND.DB  |
|-----------------|--|
| Group           | Results at Position Account level  |
| Description     | For forwards and swaps (cash settlement at expiration) it contains the detail of valuation differences of trades (between trade price and current valuation price). Same format as CVARMARGIN table. |
| Group of tables | RealTime - Historical data   |

| #  | *  | Field             | Туре       | Description  |
|----|----|-------------------|------------|--|
| 1  | ۹, | Fecha             | Date       | Session date   |
| 2  | 8  | Camara            | String(2)  | Clearing house code  |
| 3  | 8  | Miembro           | String(4)  | Member that account belongs to   |
| 4  | 8  | CuentaPosicion    | String(5)  | Position account   |
| 5  | 8  | Contrato          | String(22) | Contract code  |
| 6  | 8  | TradeInd          | Char       | "3"="Trade to be valued"   |
| 7  | 8  | NumOperacion      | Integer    | the clearing trade register number   |
| 8  | 8  | Signo             | Char       | Sign<br>"1"=Buy<br>"2"=Sell  |
| 9  |    | Volumen           | Integer    | Volume   |
| 10 |    | Precio            | Float      | Initial price:<br>If TradeInd = "3", it is the Trade price   |
| 11 |    | InitialValue      | Float      | Initial value of the position / trade referenced in the<br>record. It is the result of multiplying the initial<br>valuation price by the volume by contract multiplier<br>For debt trades (single and repos) this amount is<br>adjusted according to interest rate.<br>The sign is positive when buying and negative when<br>selling |
| 12 |    | PrecioLiquidacion | Float      | Price of final valuation:<br>If the session has not ended it is the last trade price<br>of the contract.<br>If the session has ended it is the settlement price for<br>the contract.   |
| 13 |    | Valor             | Float      | Final valuation of the position / trade referenced in<br>the record. It is the result of multiplying the final<br>settlement price by the volume and by contract<br>multiplier.<br>The sign is positive when buying and negative when<br>selling   |
| 14 |    | Diferencia        | Float      | Profits and losses generated by the position / trade referenced in the record. It is the difference between the final and initial valuation.   |
| 15 |    | Divisa            | String(3)  | Currency used to express valuation   |
| 16 |    | FechalnitialValue | Date       | InitialValue date of calculation   |
| 17 |    | Compensador       | String(4)  | Miembro compensador  |

## Valuation for products without daily settled variation margin

|                 | CVALUATIONOTH.DB  |
|-----------------|---|
| Group           | Results at Position Account level   |
| Description     | <ul> <li>Valuation detail at trade or position level for products without daily settlement of profits and losses.</li> <li>For trades from previous sessions: it is calculated at position level, using open position at the start of day. The valuation is based on the difference between previous day settlement price and end of day settlement price.</li> <li>For day trades: it is calculated at trade level. The valuation is based on the difference between trade price and settlement price</li> </ul> |
| Group of tables | RealTime - Historical data  |

| #  | *            | Field             | Туре       | Description  |
|----|--------------|-------------------|------------|--|
| 1  | 9 <b>-</b> 1 | Fecha             | Date       | Session date   |
| 2  | 8            | Camara            | String(2)  | Clearing house code  |
| 3  | 8            | Miembro           | String(4)  | Member that account belongs to   |
| 4  | 8            | CuentaPosicion    | String(5)  | Position account   |
| 5  | 8            | Contrato          | String(22) | Contract code  |
| 6  | 8-1          | TradeInd          | Char       | Indicates if it is valuing the open position at the start<br>of the session or a trade settled in the current session<br>"1"=Open position at start of the session<br>"2"=Trade in current session   |
| 7  | 8            | NumOperacion      | Integer    | If TradeInd = 2, it is the clearing house trade register number  |
| 8  | 8            | Signo             | Char       | Sign<br>"1"=Buy<br>"2"=Sell  |
| 9  |              | Volumen           | Integer    | Volume   |
| 10 |              | Precio            | Float      | Initial price:<br>If TradeInd = "1", it is the closing price from the<br>previous session.<br>If TradeInd = "2", it is the Trade price   |
| 11 |              | InitialValue      | Float      | Initial value of the position / trade referenced in the record. It is the result of multiplying the initial valuation price by the volume by contract multiplier The sign is positive when buying and negative when selling                      |
| 12 |              | PrecioLiquidacion | Float      | Price of final valuation:<br>If the session has not ended it is the last trade price<br>of the contract.<br>If the session has ended it is the settlement price for<br>the contract.   |
| 13 |              | Valor             | Float      | Final valuation of the position / trade referenced in<br>the record. It is the result of multiplying the final<br>settlement price by the volume and by contract<br>multiplier.<br>The sign is positive when buying and negative when<br>selling |
| 14 |              | VariationMargin   | Float      | Profits and losses generated by the position / trade referenced in the record. It is the difference between the final and initial valuation.   |
| 15 |              | Divisa            | String(3)  | Currency used to express valuation   |
| 16 |              | FechalnitialValue | Date       | InitialValue date of calculation   |
| 17 |              | Compensador       | String(4)  | Clearing Member  |

# A.2.11 Results at Margin Account Level

### Detail of the calcualtion of initial margin

|                 | CINIMARGINCALC.DB   |
|-----------------|---|
| Group           | Results at Margin Account level   |
| Description     | Detailed information of the calculation of the initial margin for each holder |
| Group of tables | Historical data   |

| #  | *   | Field              | Туре       | Description   |
|----|-----|--------------------|------------|---|
| 1  | 8-7 | Fecha              | Date       | Session date  |
| 2  | 8   | Camara             | String(2)  | Clearing house code   |
| 3  | 8   | MiembroGarantias   | String(4)  | Member to which the margin account belongs                          |
| 4  | 8   | CuentaGarantias    | String(12) | Margin Account  |
| 5  | 8   | Matriz             | String(3)  | Margin array code   |
| 6  |     | GarantiaPosNeta    | Float      | Net position margin   |
| 7  |     | GarantiaTimeSpread | Float      | Time-spread margin  |
| 8  |     | Escenario          | Integer    | Scenario  |
| 9  |     | DeltaPosCompra     | Float      | Long position delta   |
| 10 |     | DeltaPosVenta      | Float      | Short position delta  |
| 11 |     | DeltaNeta          | Float      | Net delta   |
| 12 |     | DeltaGrupo         | Float      | Delta to apply in each offset group                                 |
| 13 |     | DtoSpread          | Float      | Credit for spreads obtained in the offsets                          |
| 14 |     | DeltaFinal         | Float      | Final delta   |
| 15 |     | GarantiaGrupo      | Float      | Group Margin (prior to offsetting of underlyings)                   |
| 16 |     | GarantiaFinal      | Float      | Garantía final  |
| 17 |     | Divisa             | String(3)  | Currency in which amounts of this record are shown                  |
| 18 |     | GarantiaGrupoNeta  | Float      | Group Margin (after offsetting underlying)                          |
| 19 |     | VarMarginPendiente | Float      | Guaranty adjustments for VariationMarginPend                        |
| 20 |     | Escenariolni       | Integer    | Worst scenario without taking into account large position scenarios |
| 21 |     | DeltaNetaIni       | Float      | Net delta without taking into account large position scenarios      |
| 22 |     | Compensador        | String(4)  | Clearing Member   |
| 23 |     | PrimaGarantia      | Float      |   |

#### Settlement and margins by holder

|                 | CACCOUNTSETTL.DB                                     |
|-----------------|--|
| Group           | Results at Margin Account level                      |
| Description     | Amounts by holder of settlements and initial margins |
| Group of tables | Historical data                                      |

| #  | *            | Field                | Туре       | Description  |
|----|--------------|----------------------|------------|--|
| 1  | 8            | Fecha                | Date       | Session date   |
| 2  | <b>.</b>     | Camara               | String(2)  | Clearing house code  |
| 3  | ŗ            | MiembroGarantias     | String(4)  | Member to which the margin account belongs   |
| 4  | 8 <b>-</b> 1 | CuentaGarantias      | String(12) | Margin Account   |
| 5  | -            | Divisa               | String(3)  | Currency   |
| 6  |              | InitialMargin        | Float      | Daily margins required the following working day to<br>SessionDate<br>See note (1) |
| 7  |              | InitialMarginPledged | Float      | Valuation of the collateral pledged by holder                                      |
| 8  |              | InitialMarginDif     | Float      | Difference between the daily margins required and the collateral pledged.          |
| 9  |              | VariationMargin      | Float      | Profits and losses generated   |
| 10 |              | ComiNeg              | Float      | Trading fees<br>See note (2)   |
| 11 |              | ComiLiq              | Float      | Clearing fees<br>See note(2)   |
| 12 |              | Primas               | Float      | Option premiums  |
| 13 |              | Compensador          | String(4)  | Clearing fees  |
| 16 |              | GrossDeliveryAmt     | Float      | Amount to be settled due to gas physical delivery                                  |
| 17 |              | DeferralFee          | Float      |  |

(1) As from the changes to the General Conditions of Stock Futures and Options Contracts (see Notices 17/06 and 26/06), this field will not include post-exercice margin anymore.:

(2) As from the new fees will be effective (minimum fees per transaction), Trading Fee and Clearing Fee fields will not be filled at holder level anymore.

### **Back Testing Disclosure Data**

|                 | CBACKTESTING.DB                                       |
|-----------------|---|
| Group           | Results at Margin Account level                       |
| Description     | Amounts of the Back Testing results by account holder |
| Group of tables | Historical data                                       |

| #  | *           | Campo            | Тіро       | Descripción  |
|----|-------------|------------------|------------|--|
| 1  | 8           | Fecha            | Date       | Session date   |
| 2  | 8           | Camara           | String(2)  | Contract Group code  |
| 3  | 8           | Compensador      | String(4)  | Clearing Member  |
| 4  | 8           | MiembroGarantias | String(4)  | Member to which the margin account belongs   |
| 5  | 8           | CuentaGarantias  | String(12) | Margin Account   |
| 6  | 8 <b></b> 1 | Divisa           | String(3)  | Currency   |
| 7  |             | CurrentPosValue  | Float      | Value of the position being analysed at the closing price of the earliest session date analysed. |
| 8  |             | InitialMargin    | Float      | Initial Margin of the earliest session date analysed.  |
| 9  |             | MaximumRisk      | Float      | Maximum loss   |
| 10 |             | UncoveredRisk    | Float      | Loss not covered by the Initial Margin   |
| 11 |             | 1DayRisk         | Float      | 1-day Loss   |
| 12 |             | 2DayRisk         | Float      | 2-day Loss   |
| 13 |             | 3DayRisk         | Float      | 3-day Loss   |
| 14 |             | 4DayRisk         | Float      | 4-day Loss   |
| 15 |             | 5DayRisk         | Float      | 5-day Loss   |

#### Información de las Pruebas de Resistencia

|                 | CSTRESSTESTING.DB                                     |
|-----------------|---|
| Group           | Results at Margin Account level                       |
| Description     | Amounts of the Stress Tests results by account holder |
| Group of tables | Historical data                                       |

| #  | *           | Campo               | Тіро       | Descripción  |
|----|-------------|---------------------|------------|--|
| 1  | 8           | Fecha               | Date       | Session date   |
| 2  | <b>8</b> –1 | Camara              | String(2)  | Contract Group code  |
| 3  | <b>8</b> –1 | Compensador         | String(4)  | Clearing Member  |
| 4  | ₽           | MiembroGarantias    | String(4)  | Member to which the margin account belongs                                   |
| 5  | 8 <b>-</b>  | CuentaGarantias     | String(12) | Margin Account   |
| 6  | 9 <b></b> 1 | Divisa              | String(3)  | Currency   |
| 7  |             | WorstScenario       | int        | Clearing Member's worst case scenario  |
| 8  |             | WorstScenarioMargin | Float      | Margin required under worst case scenario parameters                         |
| 9  |             | InitialMargin       | Float      | Initial Margin ( regardless of Variation Margin and Large positions Margins) |
| 10 |             | StressTestRisk      | Float      | Stress Test Risk   |

### Gas delivery settlements at Margin Account level

|                 | CDELIVSETTL.DB  |
|-----------------|---|
| Group           | Results at Margin Account level                         |
| Description     | Settlements due to gas delivery at Margin Account level |
| Group of tables | RealTime - Historical data                              |

| #  | *        | Campo             | Тіро       | Descripción  |
|----|----------|-------------------|------------|--|
| 1  | 8        | Fecha             | Date       | Session date   |
| 2  | 8        | Camara            | String(2)  | Contract Group code                                    |
| 3  | <b>9</b> | MiembroGarantias  | String(4)  | Member to which the margin account belongs             |
| 4  | <b>1</b> | CuentaGarantias   | String(12) | Margin Account   |
| 5  | 8        | Divisa            | String(3)  | Currency see Table 1 in document "Codification Tables" |
| 6  | ۲,       | Infraestructura   | String(10) | "PVB"= Spanish Virtual Balance Point                   |
| 7  | ۲,       | FechaEntrega      | Date       | Delivery date  |
| 8  |          | Signo             | Char       | Sign of trade<br>"1"=Buy<br>"2"=Sell                   |
| 9  |          | QuantityToDeliver | float      | Quantity to be delivered                               |
| 10 |          | UnitOfMeasure     | Char(20)   | Unit of measure of quantity to be delivered            |
| 11 |          | DeliveryAmt       | float      | Cash amount before taxes                               |
| 12 |          | TaxRate           |            | Tax rate   |
| 13 |          | TaxAmount         | float      | Tax amount   |
| 14 |          | GrossDeliveryAmt  | float      | Total cash amount including taxes                      |
| 15 |          | Compensador       | String(4)  |  |

# A.2.12Results per Collateral Account at CCP level

### Settlement and margins per Collateral Account at CCP level

|                 | CCPACCOUNTSETTL.DB   |
|-----------------|--|
| Group           | Results per Collateral Account at CCP level                      |
| Description     | Amounts by Collateral Account of settlements and initial margins |
| Group of tables | Historical data  |

| #  | *              | Field                | Туре       | Description   |
|----|----------------|----------------------|------------|---|
| 1  | 8              | Fecha                | Date       | Session date  |
| 2  | <del>8</del> – | CCPCode              | String(2)  | Clearing house code   |
| 3  | 8-             | Compensador          | String(4)  | Clearing fees   |
| 4  | 8              | MiembroColateral     | String(4)  | Member to which the collateral account belongs                            |
| 5  | 8              | CuentaColateral      | String(12) | Collateral Account  |
| 6  | ۲,             | Divisa               | String(3)  | Currency  |
| 7  |                | InitialMargin        | Float      | Daily margins required the following working day to SessionDate           |
| 8  |                | InitialMarginPledged | Float      | Valuation of the collateral pledged by collateral account.                |
| 9  |                | InitialMarginDif     | Float      | Difference between the daily margins required and the collateral pledged. |
| 10 |                | VariationMargin      | Float      | Profits and losses generated  |
| 11 |                | Primas               | Float      | Option premiums   |
| 12 |                | GrossDeliveryAmt     | Float      | Amount to be settled due to gas physical delivery                         |
| 13 |                | DeferralFee          | Float      |   |

# Detail of Margin pledged at CCP level

|                 | CCPPLEDGES.DB  |
|-----------------|--|
| Group           | Results per Collateral Account at CCP level  |
| Description     | Valuation of the assets pledged as margins in the date of session, detailed by asset and destination |
| Group of tables | RealTime - Historical data   |

| #  | *           | Field             | Туре       | Description   |
|----|-------------|-------------------|------------|---|
| 1  | 9 <b></b> 1 | Fecha             | Date       | Session date  |
| 2  | 8           | CCPCode           | String(2)  | Clearing house code   |
| 3  | 8           | Compensador       | String(4)  | Clearing Member   |
| 4  | 8           | MiembroColateral  | String(4)  | Member to which the collateral account belongs  |
| 5  | 8           | CuentaColateral   | String(12) | Collateral Account  |
| 6  | 8           | CodigoActivo      | String(12) | Code of the delivered asset. At BME CLEARING this field corresponds to the ISIN Code of the asset. Note that the ISIN code for the Euro is 'EU0009656420'   |
| 7  | 8           | ModoMatGarant     | Char       | Method of posting margins<br>See Table 6 in "Codification tables" document  |
| 8  | <b>.</b>    | Divisa            | String(3)  | Currency in which amounts in this record are shown  |
| 9  | 8           | CodigoCSD         | Char       | Code of the Central Security Depositary. See table 9 in "Codification Tables" document.   |
| 10 |             | TipoActivo        | String(3)  | Asset type delivered<br>See Table 2 in "Codification tables" document   |
| 11 |             | DescripActivo     | String(40) | Description of asset delivered  |
| 12 |             | NombreDepositario | String(20) | Name of asset in Central Security Depositary<br>See Table 9 in "Codification tables" document   |
| 13 |             | Haircut           | Float      | Coefficient applied to the price in the valuation of the asset. Expressed as percentage.  |
| 14 |             | PrecioActivo      | Float      | Asset price at close. Accrued interest included for bonds   |
| 15 |             | Nominal           | Float      | Nominal value of asset delivered.<br>If it is a repo, it is its nominal   |
| 16 |             | Importe           | Float      | Asset Value: Nominal * Price * Haircut<br>If it is a repo, it is the nominal valued to market price.  |
| 17 |             | CFICode           | String(6)  | Codificación de instrumentos financieros según el estándar ISO 10962  |
| 18 |             | Field1            | Sring(20)  | <ul> <li>BME CLEARING: Reserved for future use</li> <li>CRCC:</li> <li>If the asset is delivered in DECEVAL, this field corresponds to the Código ISIN unido. String(12).</li> <li>If the asset is delivered in DCV, this field corresponds to the Código título, String(3).</li> </ul> |
| 19 |             | Field2            | String(20) | <ul> <li>BME CLEARING: Reserved for future use</li> <li>CRCC:</li> <li>If the asset is delivered in DECEVAL, this field corresponds to the Código Fungible. String(10).</li> <li>If the asset is delivered in DCV, this field corresponds to the Número do Emición String(7)</li> </ul> |
| 20 |             | Field3            | String(20) | Reserved for future use.  |

| #  | * | Field  | Туре       | Description              |
|----|---|--------|------------|--------------------------|
| 21 |   | Field4 | String(20) | Reserved for future use. |

# A.2.13Second-Tier Register. Results at Position Account level

These tables will be provided for those Members who have the second-tier register at MEFF.

### Detalle del cálculo de garantía diaria por subcuenta

|                 | CINIMARGINCALCDET.DB   |
|-----------------|--|
| Group           | Second-Tier Register. Results at Position Account level                        |
| Description     | Detailed information of the calculation of the initial margin for each account |
| Group of tables | Historical data  |

| #  | *   | Campo              | Тіро      | Descripción  |
|----|-----|--------------------|-----------|--|
| 1  | 8-1 | Fecha              | Date      | Session date   |
| 2  | 8   | Camara             | String(2) | Clearing house code  |
| 3  | 8   | Miembro            | String(4) | Member   |
| 4  | 8-7 | CuentaPosicion     | String(5) | Position account   |
| 5  | 8   | Matriz             | String(3) | Margin array code  |
| 6  |     | GarantiaPosNeta    | Float     | Net position margin  |
| 7  |     | GarantiaTimeSpread | Float     | Time-spread margin   |
| 8  |     | Escenario          | Integer   | Scenario   |
| 9  |     | DeltaPosCompra     | Float     | Long position delta  |
| 10 |     | DeltaPosVenta      | Float     | Short position delta   |
| 11 |     | DeltaNeta          | Float     | Net delta  |
| 12 |     | DeltaGrupo         | Float     | Delta to apply in each offset group                                    |
| 13 |     | DtoSpread          | Float     | Credit for spreads obtained in the offsets                             |
| 14 |     | DeltaFinal         | Float     | Final delta  |
| 15 |     | GarantiaGrupo      | Float     | Group Margin (prior to offsetting of underlyings)                      |
| 16 |     | GarantiaFinal      | Float     | Garantía final   |
| 17 |     | Divisa             | String(3) | Currency in which amounts of this record are shown                     |
| 18 |     | GarantiaGrupoNeta  | Float     | Group Margin (after offsetting underlying)                             |
| 19 |     | VarMarginPendiente | Float     | Guaranty adjustments for VariationMarginPend                           |
| 20 |     | EscenarioIni       | Integer   | Worst scenario without taking into account large<br>position scenarios |
| 21 |     | DeltaNetaIni       | Float     | Net delta without taking into account large position scenarios         |
| 22 |     | PrimaGarantia      | Float     |  |

### Settlement and margins by account

|                 | CACCOUNTSETTLDET.DB  |
|-----------------|--|
| Group           | Second-Tier Register. Results at Position Account level        |
| Description     | Amounts by Position Account of settlements and initial margins |
| Group of tables | Historical data  |

| #  | *           | Campo            | Тіро      | Descripción   |
|----|-------------|------------------|-----------|---|
| 1  | 8 <b></b> 1 | Fecha            | Date      | Session date  |
| 2  | <b>8</b> –1 | Camara           | String(2) | Clearing house code   |
| 3  | <b>8</b> –1 | Miembro          | String(4) | Member of the holder  |
| 4  | <b>8</b> –1 | CuentaPosicion   | String(5) | Position account  |
| 5  | 8-          | Divisa           | String(3) | Currency  |
| 8  |             | InitialMargin    | Float     | Daily margins required the following working day to SessionDate |
| 9  |             | VariationMargin  | Float     | Profits and losses generated                                    |
| 10 |             | Primas           | Float     | Option premiums   |
| 11 |             | GrossDeliveryAmt | Float     | Amount to be settled due to gas physical delivery               |
| 12 |             | DeferralFee      | Float     |   |

# A.2.14Results for Clearing Members

### Clearing Member cash movements at CCP level

|                 | CCPCASHMOVCLM.DB  |
|-----------------|---|
| Group           | Results for Clearing Members  |
| Description     | Information of total cash movement to be made in Banco de España multilateral<br>clearing system by a Clearing Member, broken down by Trading Member and concept.<br>Includes daily and monthly concepts. |
| Group of tables | Historical data   |

| #  | *            | Field        | Туре       | Description   |
|----|--------------|--------------|------------|---|
| 1  | 8            | Fecha        | Date       | Session date  |
| 2  | 8            | CCPCode      | String(2)  | Clearing house code   |
| 3  | 8            | Camara       | String(2)  | Contract Group  |
| 4  | 8            | Compensador  | String(4)  | Clearing Member   |
| 5  | 8 <b>-</b> 1 | Negociador   | String(4)  | Trading Member that the debit or credit is attributed to as detailed in the record (may be blank) |
| 6  | 9 <b></b> 1  | Concepto     | String(2)  | Concept of cash movement<br>See Table 4 in "Codification tables" document                         |
| 7  | 8            | Divisa       | String(3)  | Currency  |
| 8  | 9 <b></b> 1  | MetodoPago   | String(2)  | Payment method<br>See Table 5 in "Codification tables" document                                   |
| 9  | 8            | CashMovGroup | String(8)  | Cash Movements group within the Payments Agent  |
| 10 |              | DescConcepto | String(50) | Concept description (if the concept code is "99")   |
| 11 |              | Importe      | Float      | Resulting cash movement amount (debit if it is < 0, credit if it is > 0)                          |
| 12 |              | FechaValor   | Date       | Value date of cash movement   |

# A.2.15Results for Agents

## Treasury Entity cash movements at CCP level

|                 | CCPCASHMOVTREAS.DB                               |
|-----------------|--|
| Group           | Results for Agents                               |
| Description     | Cash movements to be made by the Treasury Entity |
| Group of tables | Historical data                                  |

| #  | *              | Field           | Туре      | Description   |
|----|----------------|-----------------|-----------|---|
| 1  | <del>8 -</del> | Fecha           | Date      | Session date  |
| 2  | <del>9 -</del> | CCPCode         | String(2) | Clearing house code   |
| 3  | 8-7            | AgentePagos     | String(4) | Payment Agent   |
| 4  | 8-7            | Compensador     | String(4) | Clearing Member that cash movement corresponds to   |
| 5  | 8 <b></b> 1    | Divisa          | String(3) | Currency  |
| 6  | 8              | MetodoPago      | String(2) | Payment method<br>See Table 5 in "Codification tables" document                           |
| 7  | 8-7            | TipoLiquidacion | char      | BME CLEARING: This field is not applicable. Value is always 1.                            |
|    |                |                 |           | de liquidación que están exentos de impuestos<br>(valor1) o sujetos a impuestos (valor 2) |
| 8  | 8 <b>-</b> -   | CashMovGroup    | String(8) | Cash Movements group within the Payments Agent  |
| 9  |                | Importe         | Float     | Resulting cash movement amount (debit if it is < 0, credit if it is > 0)                  |
| 10 |                | FechaValor      | Date      | Value date of cash movement   |

# Appendix B Predefined Codes

This appendix offers a list with the codeso f the data codes offered by MEFFServer.

Categories:

• Feed

Feed messages in ticket mode, providing semi-elaborated information.

General Information

Data on the current session and the contract specifications

### B.1 Feed

All these items are made up of various fields. The separator character of them is ASCII 9 (tab).

| ltem       | Description                       | Parameters (bols accept wildcard "?")          |
|------------|-----------------------------------|--|
| FEEDOPEGEN | General Trades (6 Fields)         | Environment+Contract                           |
| FEEDOPPRO  | Registered Trades (15 Fields)     | ClearingHouse+Contract+Member+ PositionAccount |
| FEEDMS     | Messages to Supervisor (2 Fields) | Environment                                    |

# **B.2 General Information**

| ltem        | Description                       | Parameters (bols accept wildcard "?") |
|-------------|-----------------------------------|---------------------------------------|
| CIERRE      | Closing/Settlement price          | Environment+Contract                  |
| CIERREANT   | Previous closing/settlement price | Environment+Contract                  |
| CODVENCI    | Contract code for a maturity date | Environment+Group+Type+MaturityDate   |
| CODVENCI1   | Contract code (first expiry date) | Environment+Group+Type                |
| DECDIVCAM   | Number of decimals                | Environment                           |
|             |                                   |                                       |
| EXPDATE     | Maturity date                     | Environment+Contract                  |
| FECHASESI   | Session date                      | Environment                           |
| HORASESI    | Session time                      | Environment                           |
| NOMINAL     | Nominal                           | Environment+Contract                  |
| NOPER       | Number of Trades                  | Environment+Contract                  |
| NUMDEC      | Number of Decimals for the        | Environment+Contract                  |
|             | contract                          |                                       |
| NUMVENCI    | Expiry number                     | Environment+Contract                  |
| OINTNETULTI | Previous open interes             | Environment+Contract                  |
| OPENINT     | Open Interest                     | Environment+Contract                  |
| STRIKE      | Strike price                      | Environment+Contract Options          |
| SUBYACENTE  | Underlying contract               | Environment+Contract Options          |
| TICKVAL     | Tick value                        | Environment+Contract                  |
| TYPEINTMER  | Interest rate                     | Environment                           |
| ULTIMSESI   | Previous session date             | Environment                           |
| VOLATCIERRE | Closing/Settlment volatility      | Environment+Contract                  |