

BME CLEARING

Technical Specifications

7000 Product

Contents

1	OBJECTIVE	6
1.1	File Availability	6
1.2	Client Support	6
2	FORMAT AND DATA DELIVERY	6
2.1	File Format.....	7
2.2	Data Format	7
2.3	Headings of TXT files.....	8
2.4	Data Delivery	8
2.5	Name of files	8
2.6	MIC Codes.....	12
3	BME CLEARING SEGMENTS	13
4	MASTER DATA CCP PRODUCT SPECIFICATIONS	13
4.1	CCONTRACTS_C2_YYYYMMDD.TXT / CCONTRACTS_C7_YYYYMMDD.TXT / CCONTRACTS_CD_YYYYMMDD.TXT	15
4.2	CCONTRREL_C2_YYYYMMDD.TXT / CCONTRREL_C7_YYYYMMDD.TXT	17
4.3	CHOLIDAYS_C2_YYYYMMDD.txt / CHOLIDAYS_C7_YYYYMMDD.txt / CHOLIDAYS_CD_YYYYMMDD.txt	18
4.4	CENTITIES_C2_YYYYMMDD.txt / CENTITIES_C7_YYYYMMDD.txt / CENTITIES_CD_YYYYMMDD.txt	18
4.5	CTRADETYP_C2_YYYYMMDD.txt / CTRADETYP_C7_YYYYMMDD.txt / CTRADETYP_CD_YYYYMMDD.txt	19
4.6	CCONTRDEL_C2_YYYYMMDD.txt / CCONTRDEL_C7_YYYYMMDD.txt	19
4.7	CCONTRRELDDET_C2_YYYYMMDD.TXT / CCONTRRELDDET_C7_YYYYMMDD.TXT	20
4.8	CUNDERLYINGS_C2_YYYYMMDD.TXT / CUNDERLYINGS_C2_YYYYMMDD.TXT	21

4.9	MCONTRACTS_C2_YYYYMMDD.txt / MCONTRACTS_C7_YYYYMMDD.txt / MCONTRACTS_CD_YYYYMMDD.TXT	22
4.10	CCurrency_C2_YYYYMMDD.TXT / CCurrency_C7_YYYYMMDD.TXT / CCurrency_CD_YYYYMMDD.TXT	24
4.11	CCONTRGRP_C2_YYYYMMDD.TXT/ CCONTRGRP_C7_YYYYMMDD.TXT / CCONTRGRP_CD_YYYYMMDD.TXT	24
4.12	CCONTRTYP_C2_YYYYMMDD.TXT / CCONTRTYP_C7_YYYYMMDD.TXT / CCONTRTYP_CD_YYYYMMDD.TXT	25
4.13	ADJUSTMENT NOTICES, CIRCULARS AND INSTRUCTIONS	27
4.14	CDEFERRALFEEDPAR_CD_YYYYMMDD.TXT	27
4.15	CDEFERRALFLOWPAR_CD_YYYYMMDD.TXT	27

5 DAILY SETTLEMENT PRICES PRODUCT SPECIFICATIONS 29

5.1	CCONTRSTAT_C2_YYYYMMDD.TXT / CCONTRSTAT_C7_YYYYMMDD.TXT / CCONTRSTAT_CD_YYYYMMDD.TXT	29
-----	--	----

6 CLEARING, MARGIN CALCULATIONS AND RISK METRICS PRODUCT SPECIFICATIONS 31

6.1	CCONTRGRP_C2_YYYYMMDD.TXT/ CCONTRGRP_C7_YYYYMMDD.TXT / CCONTRGRP_CD_YYYYMMDD.TXT	33
6.2	CCONTRTYP_C2_YYYYMMDD.TXT / CCONTRTYP_C7_YYYYMMDD.TXT / CCONTRTYP_CD_YYYYMMDD.TXT	33
6.3	CVOLATILITYSKEW_C2_YYYYMMDD.TXT	35
6.4	CTHEORPRICES_C2_YYYYMMDD.TXT / CTHEORPRICES_C7_YYYYMMDD.TXT	36
6.5	CTHEORPRICES_RETAIL_C2_YYYYMMDD.TXT / CTHEORPRICES_RETAIL_C7_YYYYMMDD.TXT	37
6.6	CDELTA_C2_YYYYMMDD.TXT / CDELTA_C7_YYYYMMDD.TXT	37
6.7	CDELTA_RETAIL_C2_YYYYMMDD.TXT / CDELTA_RETAIL_C7_YYYYMMDD.TXT	38
6.8	CVALARRAYS_C2_YYYYMMDD.TXT / CVALARRAYS_C7_YYYYMMDD.TXT	39
6.9	CINTRASPR_C2_YYYYMMDD.TXT / CINTRASPR_C7_YYYYMMDD.TXT	40
6.10	CINTERSPR_C2_YYYYMMDD.TXT / CINTERSPR_C7_YYYYMMDD.TXT	41
6.11	CDELIVERABLES_C2_YYYYMMDD.TXT	42
6.12	ADJUSTMENT NOTICES, CIRCULARS AND INSTRUCTIONS	43
6.13	CMARGINPARAMETERS_CD_YYYYMMDD.TXT	43

6.14	CLIQUIDITYMARGIN_CD_YYYYMMDD.TXT.....	44
6.15	CIMFACTORS_CD_YYYYMMDD.TXT	45
6.16	CSTRESSTESTPARAMETERS_CD_YYYYMMDD.TXT	46
6.17	CSCENARIOS_CD_YYYYMMDD.TXT.....	47
6.18	ROLLINGCALENDAR_CD_YYYYMMDD.TXT	48
6.19	CIMSINGLEPOSITION_CD_YYYYMMDD.TXT.....	48

7 ANNEX CODIFICATION TABLES 49

7.1	ANNEX TABLE 1. CURRENCIES	49
7.2	ANNEX TABLE 2. CFI Code	50
7.3	ANNEX TABLE 4. Markets and Trading Contract Group, Central Counterparty and Clearing Contract Group Codes.....	54
7.4	ANNEX TABLE 5. Contract subgroups	54
7.5	ANNEX TABLE 21. Underlying assets.....	59
7.6	ANNEX TABLE 28. PRODUCT Families.....	63
7.7	ANEXO TABLA TIPOS DE ACTIVO.....	65
7.8	ANEXO TABLA CODIGOS MIC	65
7.9	ANEXO TABLA 14 Tipos de entidades participantes.....	66
7.10	ANEXO TABLA 15. Códigos depositarios centrales de valores	66

EDITION CONTROL

Edition	Date	Author
1.00	18/05/2017	BME Market Data

DIFFUSION CONTROL

This Document is not distributed in paper format.

CONTROL OF MODIFICATIONS DUE TO EDITION CHANGE

1.00 18.05.2017 – New Document

1.01 13.09.2024 – New Template

1 OBJECTIVE

The BME CLEARING products contains information of:

- ☐ BME CLEARING (Files) (7000)
- ☐ Master Data CCP (Files) (7100)
- ☐ Daily Settlement Prices (File) (7200)
- ☐ Clearing, margin calculation and risk metrics (Files) (7300)

1.1 File Availability

The files will normally be available from 21:00 CET every trading day of the BME calendar, no later than 23:59 CET.

1.2 Client Support

ADDRESS	EMAIL	TELEPHONE
Palacio de la Bolsa Plaza de la Lealtad 1 28014 - Madrid	marketdata@grupobme.es	+ 34 91 709 58 10

Users have at their disposal a client support service Monday to Friday from 09:00 to 18:30 CET. BME Market Data will keep the Client updated on any modification on the files, as well as on any technical improvements.

2 FORMAT AND DATA DELIVERY

2.1 File Format

BME MARKET DATA provides the data for this product in files with txt format. 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.

2.2 Data Format

This section summarizes the distinct types of data used in the description of each of the files. 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”).
 - **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 ≠ 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). See “Table 1 – Currency codes” in document “Codification Tables”.
 - **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

2.3 Headings of TXT files

Frequently the files don't have headers, if yes it is the first line.

2.4 Data Delivery

The information is available via Internet through a sFTP (ssh File Transfer Protocol).

2.5 Name of files

Name of the file by product and type:

PRODUCT	CODES	Month / Day	FILE	DESCRIPTION
CCP MASTER DATA	7100, 7110	M/D	CCONTRACTS_C2_YYYYMMDD.TXT	General information on the contracts available in the session.
	7100, 7120	M/D	CCONTRACTS_C7_YYYYMMDD.TXT	
	7100, 7130	M/D	CCONTRACTS_CD_YYYYMMDD.TXT	
	7100, 7110	M/D	CCONTRREL_C2_YYYYMMDD.TXT	Relationship between the original contract and its resulting contracts.
	7100, 7120	M/D	CCONTRREL_C7_YYYYMMDD.TXT	
	7100, 7110	M/D	CENTITIES_C2_YYYYMMDD.txt	Public information on the entities that participate in the Clearing House.
	7100, 7120	M/D	CENTITIES_C7_YYYYMMDD.txt	
	7100, 7110	M/D	CHOLIDAYS_C2_YYYYMMDD.txt	Calendar of settlement holidays.

7100, 7120	M/D	CHOLIDAYS_C7_YYYYMMDD.txt	
7100, 7130	M/D	CHOLIDAYS_CD_YYYYMMDD.txt	
7100, 7110	M/D	CTRADETYP_C2_YYYYMMDD.txt	
7100, 7120	M/D	CTRADETYP_C7_YYYYMMDD.txt	Information on trade types handled in the Clearing House.
7100, 7130	M/D	CTRADETYP_CD_YYYYMMDD.txt	
7100, 7110	M/D	CCONTRDEL_C2_YYYYMMDD.txt	
7100, 7120	M/D	CCONTRDEL_C7_YYYYMMDD.txt	Information on contracts to be deleted today.
7100, 7110	M/D	CCONTRRELDDET_C2_YYYYMMDD.txt	Relationship between the original contract and its resulting contracts, in the case where in the group of contracts there are contracts whose position should be broken down into others of a lower nominal amount. For Energy this informs about the position which results from applying the theoretical cascade.
7100, 7120	M/D	CCONTRRELDDET_C7_YYYYMMDD.txt	
7100, 7110	M/D	CUNDERLYINGS_C2_YYYYMMDD.TXT	
7100, 7120	M/D	CUNDERLYINGS_C7_YYYYMMDD.TXT	Information on underlying assets.
7100, 7110	M/D	CCURRENCY_C2_YYYYMMDD.TXT	
7100, 7120	M/D	CCURRENCY_C7_YYYYMMDD.TXT	Currencies used by the CCP. Exchange rates to settlement currency.
7100, 7130	M/D	CCURRENCY_CD_YYYYMMDD.txt	
7100, 7110	M/D	MCONTRACTS_C2_YYYYMMDD.txt	General information of the contracts available in session D + 1.

	7100, 7120	M/D	MCONTRACTS_C7_YYYYMMDD.txt	
	7100, 7130	M/D	MCONTRACTS_CD_YYYYMMDD.txt	
	7100, 7110	M/D	CCONTRGRP_C2_YYYYMMDD.TXT	Contract subgroups information.
	7100, 7120	M/D	CCONTRGRP_C7_YYYYMMDD.TXT	
	7100, 7130	M/D	CCONTRGRP_CD_YYYYMMDD.TXT	
	7100, 7110	M/D	CCONTRTYP_C2_YYYYMMDD.TXT	Contract type information.
	7100, 7120	M/D	CCONTRTYP_C7_YYYYMMDD.TXT	
	7100, 7130	M/D	CCONTRTYP_CD_YYYYMMDD.TXT	
	7100, 7130	M/D	CDEFERRALFLOW_CD_YYYYMMDD.TXT	General Data. Deferral Flow rates to be used.
	7100, 7130	M/D	CDEFERRALFEEDPAR_CD_YYYYMMDD.TXT	General Data. Parameters for calculation of the deferral fee.
DAILY SETTLEMENT PRICES	7200, 7210	M/D	CCONTRSTAT_C2_YYYYMMDD.TXT	
	7200, 7220	M/D	CCONTRSTAT_C7_YYYYMMDD.TXT	Contract daily price and volumes data
	7200, 7230	M/D	CCONTRSTAT_CD_YYYYMMDD.TXT	
CLEARING, MARGIN CALCULATIONS AND RISK METRICS	7300, 7310	M/D	CCONTRGRP_C2_YYYYMMDD.TXT	Contract subgroups information.
	7300, 7320	M/D	CCONTRGRP_C7_YYYYMMDD.TXT	
	7300, 7310	M/D	CCONTRTYP_C2_YYYYMMDD.TXT	Contract type information.

7300, 7320	M/D	CCONTRTYP_C7_YYYYMMDD.TXT	
7300, 7310	M/D	CVOLATILITYSKEW_C2_YYYYMMDD.TXT	Volatility curve used for theoretical price calculations.
7300, 7310	M/D	CTHEORPRICES_C2_YYYYMMDD.TXT CTHEORPRICES_RETAIL_C2_YYYYMMDD.TXT	Theoretical prices of contracts used for initial margin calculations.
7300, 7320	M/D	CTHEORPRICES_C7_YYYYMMDD.TXT CTHEORPRICES_RETAIL_C7_YYYYMMDD.TXT	
7300, 7310	M/D	CDELTAS_C2_YYYYMMDD.TXT CDELTAS_RETAIL_C2_YYYYMMDD.TXT	Deltas of contracts used for initial margin calculations.
7300, 7320	M/D	CDELTAS_C7_YYYYMMDD.TXT CDELTAS_C7_RETAIL_YYYYMMDD.TXT	
7300, 7310	M/D	CVALARRAYS_C2_YYYYMMDD.TXT	Parameters for each of the margin valuation arrays.
7300, 7320	M/D	CVALARRAYS_C7_YYYYMMDD.TXT	
7300, 7310	M/D	CINTRASPR_C2_YYYYMMDD.TXT	Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with the same array code.
7300, 7320	M/D	CINTRASPR_C7_YYYYMMDD.TXT	
7300, 7310	M/D	CINTERSPR_C2_YYYYMMDD.TXT	Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with different array code.
7300, 7320	M/D	CINTERSPR_C7_YYYYMMDD.TXT	
7300, 7310	M/D	CDELIVERABLES_C2_YYYYMMDD.TXT	List of available deliverable contracts associated to a derivative contract.
7300, 7330	M/D	CMARGINPARAMETERS_CD_YYYYMMDD.TXT	Margin calculation data – scenario model. Parameters information corresponding to the IM calculation model – scenario model.
7300, 7330	M/D	CLIQUIDITYMARGIN_CD_YYYYMMDD.TXT	Datos Margin calculation data – scenario model. Parameters information corresponding to the adjustment of the position size, for each currency pair under normal and stressed market conditions. (scenario model).

7300, 7330	M/D	CIMFACTORS_CD_YYYYMMDD.TXT	Margin calculation data – scenario model. Information on the applicable sovereign risk factor and decay factor for each currency pair. (scenario model).
7300, 7330	M/D	CSTRESSTESTPARAMETERS_CD_YYYYMMDD.TXT	Margin calculation data – scenario model. Information of parameters corresponding to the Stress Test calculation model. (scenario model).
7300, 7330	M/D	CSCENARIOS_CD_YYYYMMDD.TXT	Margin calculation data – scenario model. Information on the scenarios used (historical, scaled historical or hypothetical) by the IM and stress test calculation algorithm. (scenario model).
7300, 7330	M/D	ROLLINGCALENDAR_CD_YYYYMMDD.TXT	Margin calculation data – scenario model. Calendar at underlying level, of the sessions in which technical trade should not be generated for the open position.
7300, 7330	M/D	CIMSINGLEPOSITION_CD_YYYYMMDD.TXT	Margin calculation data – scenario model. Required Initial Margin for a one-contract position.

BME CLEARING complete product is code = 7000.

The files are given every day (on a daily basis) or only the closing files of the month (on a monthly basis).

2.6 MIC Codes

MIC	OPERATING MIC	NAME-INSTITUTION DESCRIPTION
BMCL	BMEX	BME CLEARING S.A.
XMRV	BMEX	MEFF - Financial Derivatives
XMPW	BMEX	MEFF POWER
BMEX	XMFX	MEFF - Financial Derivatives FX

3 BME Clearing Segments

The BME CLEARING products include the following segments;

- ☐ C2 BME Clearing Financial Derivatives
- ☐ C7 BME Clearing Power
- ☐ CD BME Clearing CAMARA MEFF FX
- ☐ CN BME Clearing CAMARA MEFF FX

4 Master Data CCP Product Specifications

The information includes:

- ☐ BME CLEARING FINANCIAL DERIVATIVES C2
- ☐ BME CLEARING POWER C7
- ☐ BME CLEARING FINANCIAL DERIVATIVES FX CD

The files are the following:

FILES	FINANCIAL DERIVATIVES	POWER	FOREX	DESCRIPTION
CCONTRACTS_C2_YYYYMMDD.TXT CCONTRACTS_C7_YYYYMMDD.TXT CCONTRACTS_CD_YYYYMMDD.TXT	X	X	X	General information on the contracts available in the session.
CCONTRREL_C2_YYYYMMDD.TXT CCONTRREL_C7_YYYYMMDD.TXT	X	X		Relationship between the original contract and its resulting contracts.
CENTITIES_C2_YYYYMMDD.txt CENTITIES_C7_YYYYMMDD.txt CENTITIES_CD_YYYYMMDD.TXT	X	X	X	Public information on the entities that participate in the Clearing House.

CHOLIDAYS_C2_YYYYMMDD.txt CHOLIDAYS_C7_YYYYMMDD.txt CHOLIDAYS_CD_YYYYMMDD.txt	X	X	X	Calendar of settlement holidays.
CTRADETYP_C2_YYYYMMDD.txt CTRADETYP_C7_YYYYMMDD.txt CTRADETYP_CD_YYYYMMDD.txt	X	X	X	Information on trade types handled in the Clearing House.
CCONTRDEL_C2_YYYYMMDD.txt CCONTRDEL_C7_YYYYMMDD.txt	X	X		Information on contracts to be deleted today.
CCONTRRELDET_C2_YYYYMMDD.TXT CCONTRRELDET_C7_YYYYMMDD.TXT	X	X		Relationship between the original contract and its resulting contracts, in the case where in the group of contracts there are contracts whose position should be broken down into others of a lower nominal amount. For Energy this informs about the position which results from applying the theoretical cascade.
CUNDERLYINGS_C2_YYYYMMDD.TXT CUNDERLYINGS_C2_YYYYMMDD.TXT	X	X		Information on underlying assets.
CCURRENCY_C2_YYYYMMDD.TXT CCURRENCY_C7_YYYYMMDD.TXT CCURRENCY_CD_YYYYMMDD.txt	X	X		Currencies used by the CCP. Exchange rates to settlement currency
MCONTRACTS_C2_YYYYMMDD.txt MCONTRACTS_C7_YYYYMMDD.txt MCONTRACTS_CD_YYYYMMDD.txt	X	X		General information of the contracts available in session D + 1.
CCONTRGRP_C2_YYYYMMDD.TXT CCONTRGRP_C7_YYYYMMDD.TXT CCONTRGRP_CD_YYYYMMDD.TXT	X	X		Contract subgroups information.
CCONTRTYP_C2_YYYYMMDD.TXT CCONTRTYP_C7_YYYYMMDD.TXT CCONTRTYP_CD_YYYYMMDD.TXT	X	X		Contract type information.
CDEFERRALFLOW_CD_YYYYMMDD.TXT			X	General Data. Deferral Flow rates to be used.
CDEFERRALFEEDPAR_CD_YYYYMMDD.TXT			X	General Data. Parameters for calculation of the deferral fee.

4.1 CCONTRACTS_C2_YYYYMMDD.TXT / CCONTRACTS_C7_YYYYMMDD.TXT / CCONTRACTS_CD_YYYYMMDD.TXT

General data on contracts available in the trading day.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Trading day date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	String (2)	Contracts group code	SEE ANNEX TABLE 4
C2, C7, CD	CONTRACTCODE	String (22)	Contract code	
C2, C7, CD	CONTRACTSUBGROUPCODE	String (2)	Contract subgroup	SEE ANNEX TABLE 5
C2, C7, CD	CONTRACTTYPECODE	String (4)	Contract type	
C2, C7, CD	STRIKEPRICE	Price	Strike price	
C2, C7, CD	MATURITYDATE	LocalDate	Maturity date	YYYYMMDD
C2, C7, CD	TRADINGENDDATE	LocalDate	Trading end date	YYYYMMDD
C2, C7, CD	EXERCISEUNDERLYINGCONTRACTCODE	String (22)	Exercise underlying contract code	
C2, C7, CD	MARGINUNDERLYINGCONTRACTCODE	String (22)	Underlying asset contract code for the calculation of margin	
C2, C7, CD	ARRAYCODE	String (3)	Margin matrix code	
C2, C7, CD	FILLER	String (2)	Filler (not relevant)	
C2, C7, CD	FILLER	String (2)	Filler (not relevant)	
C2, C7, CD	EXPIRYSPAN	String (1)	Maturity type used for margin calculation	"S" - tranche 1 "M" - tranche 2 "L" - tranche 3 "X" - tranche 4 "Y" - tranche 5
C2, C7, CD	MATURITYMONTHYEAR	String (8)	Maturity identification	"YYYYMM" - MONTHLY AND QUARTERLY "YYYYMMDD" - NON STANDARD "YYYYMMwW" - WEEKLY being: "YYYY" - YEAR "MM" - MONTH "DD" - DAY

"W" - W
"W" - WEEK

C2, C7, CD	ISINCODE	String (12)	Contract ISIN code	For informational purposes as it can be left blank The first 2 characters are the country code. The 9 following characters are the national ID code of the instrument. Last character is a control character.
C2, C7, CD	STARTMATURITYMONTHYEAR	LocalDate	Start delivery date for Energy segment contracts	YYYYMMDD
C2, C7, CD	ENDMATURITYMONTHYEAR	LocalDate	End delivery date for Energy segment contracts	YYYYMMDD
C2, C7, CD	VersionNumber	Integer	Version number (0 if no adjustments have taken place)	
C2, C7, CD	ForwardMaturityDate	LocalDate	For contracts with deferral feature, it is the theoretical maturity date of the forward. In general, D+3.	YYYYMMDD
C2, C7, CD	SpotMaturityDate	LocalDate	For contracts with deferral feature, it is the theoretical maturity date of the spot. In general, D+2.	YYYYMMDD
C2, C7, CD	ClosingPositionType	String(1)	It indicates whether the position can be closed by one of the counterparties before the expiry date	M: Market C: By buyer V: By seller A: By either
C2, C7, CD	BuyReferenceRate	String(1)	Buy Reference Rate In FLEX it will only be informed in one of the two sides (buy or sell) the one corresponding to the financed party.	S: €STR F: FISAnalytics M:MEFF lending rate 0: Zero ' ': N/A Buy reference rate
C2, C7, CD	BuyReferenceRateMarkup	float	Markup on top of buy reference rate Percentage with sign and up to 4 decimal places	-100.0000 to 100.0000
C2, C7, CD	SellReferenceRate	String(1)	Sell Reference Rate	S: €STR F: FISAnalytics

			In FLEX it will only be informed in one of the two sides (buy or sell) the one corresponding to the financed party.	M:MEFF lending rate 0: Zero '': N/A Buy reference rate
C2, C7, CD	SellReferenceRateMarkup	float	Markup on top of sell reference rate Percentage with sign and up to 4 decimal places	-100.0000 to 100.0000
C2, C7, CD	DividendPercentageApplied	float	Percentage applied to dividend payments. Percentage without sign and up to 2 decimal places. It is used to include an effect similar to the corresponding tax or part of it.	0.00-100.00
C2, C7, CD	DividendDateOffset	Int	Offset between dividend date and actual payment. 0 indicates exdate 999 indicates effective date	0-999
C2, C7, CD	RetailArrayCode	String(3)	Underlying contract code for margin calculation for retails	
C2, C7, CD	RetailExpirySpan	char	Expiry span type used for margin calculations for retails	codes:A..Z, 0..9

4.2 CCONTRREL_C2_YYYYMMDD.TXT / CCONTRREL_C7_YYYYMMDD.TXT

Relationship between the original contract and its resulting contracts, in the case where in the group of contracts there are contracts whose position should be broken down into others of a lower nominal amount. Information available in the trading day. These files are not supplied every day.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	LocalDate	Trading day date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contracts group code	SEE ANNEX MEFF TABLE 4

C2, C7	CONTRACTCODE	String (22)	Contract code	
C2, C7	NUMBEROFRELATEDCONTRACTS	Price	Number of related contracts that are defined as follows.	Maximum 31.
C2, C7	RELATEDCONTRACTCODE	String (22)	Code of resulting contract	
C2, C7	CONTRACTINITIALDATE	LocalDate	Contract Initial Date. In Power it is the initial date of the delivery period of the resulting contract.	YYYYMMDD
C2, C7	CONTRACTFINALDATE	LocalDate	Contract Final Date. In Power, it is the final date of the delivery period of the resulting contract.	YYYYMMDD

4.3 CHOLIDAYS_C2_YYYYMMDD.txt / CHOLIDAYS_C7_YYYYMMDD.txt / CHOLIDAYS_CD_YYYYMMDD.txt

Calendar of settlement holidays:

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Session Date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	String (2)	Contract Group Code	SEE ANNEX 4
C2, C7, CD	HOLIDAYDATE	LocalDate	Holiday Date	
C2, C7, CD	REGISTRATIONOPEN	Char	Open For Registration	S/N

4.4 CENTITIES_C2_YYYYMMDD.txt / CENTITIES_C7_YYYYMMDD.txt / CENTITIES_CD_YYYYMMDD.txt

Public information on the entities that participate in the Clearing House:

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Session Date	YYYYMMDD

C2, C7, CD	CONTRACTGROUP	String (2)	Contract Group Code	SEE ANNEX 4
C2, C7, CD	ENTITYCODE	String (4)	Code of the Entity in the Contract Group.	
C2, C7, CD	ENTITYTYPE	Char	Type of Entity	SEE ANNEX 14
C2, C7, CD	ENTITYDESCRIPTION	String (75)	Name of Entity	
C2, C7, CD	ENTITYECBCODE	String (6)	Code of the Entity in the European Central Bank.	
C2, C7, CD	LEI	String (20)	Entity LEI	

4.5 CTRADE_TYP_C2_YYYYMMDD.txt / CTRADE_TYP_C7_YYYYMMDD.txt / CTRADE_TYP_CD_YYYYMMDD.txt

Information on trade types handled in the Clearing House:

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Session Date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	String (2)	Contract Group Code	SEE ANNEX 4
C2, C7, CD	TRADETYPE	Char	Trade Type	SEE ANNEX 19
C2, C7, CD	TRADETYPEDESCRIPTION	String (20)	Trade Type Description	

4.6 CCONTRDEL_C2_YYYYMMDD.txt / CCONTRDEL_C7_YYYYMMDD.txt

Information on contracts to be deleted today: These files are not supplied every day.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	LocalDate	Session Date	YYYYMMDD

C2, C7	CONTRACTGROUP	String (2)	Contract Group Code	SEE ANNEX 4
C2, C7	CONTRACTCODE	String (22)	Contract Code	
C2, C7	ISINCode	String (12)	ISIN contract code for information purposes..	Can be not filled

4.7 CCONTRRELDDET_C2_YYYYMMDD.TXT / CCONTRRELDDET_C7_YYYYMMDD.TXT

Information on Related contracts to be deleted today. These files are not supplied every day.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	LocalDate	Session Date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract Group Code	SEE ANNEX 4
C2, C7	CONTRACTCODE	String (22)	Contract code	
C2, C7	MATURITYDATE	LocalDate	Expiry date	YYYYMMDD
C2, C7	CASCADEDATE	LocalDate	Cascade date	YYYYMMDD
C2, C7	NOMINAL	Amt	Nominal of the contract	
C2, C7	UNITOFMEASURE	Char(20)	Unit of measure of the multiplier	
C2, C7	CONTRACTINITIALDATE	LocalDate	Date of initial contract.. In Energy it is the initial date of the delivery period of the initial contract.	YYYYMMDD
C2, C7	CONTRACTFINALDATE	LocalDate	Final date of contract. In Energy, it is the final date of the delivery period of the initial contract.	YYYYMMDD
C2, C7	NUMBEROFRELATEDCONTRACTS	Int	Number of related contracts that are defined as follows.	Maximum 31.
C2, C7	RELATEDCONTRACTCODE	String (22)	Code of resulting contract.	
C2, C7	RELATEDMATURITYDATE	LocalDate	Expiry date.	YYYYMMDD

C2, C7	RELATEDNOMINAL	Amt	Nominal of the contract.	
C2, C7	RELATEDCONTRACTINITIALDATE	LocalDate	Date of initial contract.. In Energy it is the initial date of the delivery period of the resulting contract.	YYYYMMDD
C2, C7	RELATEDCONTRACTFINALDATE	LocalDate	Final date of contract. In Energy, it is the final date of the delivery period of the resulting contract.	YYYYMMDD

4.8 CUNDERLYINGS_C2_YYYYMMDD.TXT / CUNDERLYINGS_C2_YYYYMMDD.TXT

Information on underlying assets.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	LocalDate	Session Date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract Group Code	SEE ANNEX 4
C2, C7	CONTRACTCODE	String (22)	Contract code.	
C2, C7	UnderlyingISINCode	String(12)	ISIN underlying code.	
C2, C7	UnderlyingDescription	String(20)	Description of the underlying.	
C2, C7	UnderlyingContractGroup	String(2)	Contract Group code in which the asset is listed.	
C2, C7	CFICode	String(6)	Codification of financial instruments in accordance with ISO standard 10962.	
C2, C7	AssetType	String(3)	Asset class.	SEE ANNEX 2
C2, C7	Currency	Currency	Asset currency code.	SEE ANNEX 1
C2, C7	ExpiryDate	LocalDate	Expiry date for asset.	YYYYMMDD
C2, C7	LastAuctionDate	LocalDate	Last auction date for the asset.	YYYYMMDD

C2, C7	StartCouponDate	LocalDate	Date on which the asset starts to accrue coupon. Only for bonds.	YYYYMMDD
C2, C7	CouponNo	int	Number of annual coupons. Only for bonds.	> 0 y <= 12
C2, C7	Coupon	Float	Coupon as percentage of nominal. Only for bonds.	
C2, C7	CalcMethod	Char	Accrued interest calculation method, depending on the way of estimating the number of days between the coupon dates. Only for bonds Real base: Considers the actual number of days between the coupon dates.	1 = Real Base

4.9 MCONTRACTS_C2_YYYYMMDD.txt / MCONTRACTS_C7_YYYYMMDD.txt / MCONTRACTS_CD_YYYYMMDD.TXT

General information of the contracts available in session D + 1.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	X(8)	Session Date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	X(2)	Contract Group Code	SEE ANNEX 4
C2, C7, CD	CONTRACTCODE	X(22)	Contract code	
C2, C7, CD	CONTRACTSUBGROUPCODE	X(2)	Contract subgroup	Description included in the file CCONTRGRP Table 20
C2, C7, CD	CONTRACTTYPECODE	X(4)	Type of contract	Description included in the file CCONTRTYP
C2, C7, CD	STRIKEPRICE	9(5)V9(4)	Strike price	
C2, C7, CD	MATURITYDATE	X(8)	Maturity date	YYYYMMDD
C2, C7, CD	TRADINGSTARTDATE	X(8)	Trading start date	YYYYMMDD
C2, C7, CD	TRADINGENDDATE	X(8)	Trading end day	YYYYMMDD

C2, C7, CD	TSBUYINGCONTRACTCODE	X(22)	Time spread buyer contract code (for buy orders)	
C2, C7, CD	TSSELLINGCONTRACTCODE	X(22)	Time spread seller contract code (for selling orders)	
C2, C7, CD	TSZEROBASE	9(5)V9(4)	Time spread zero base for trading	
C2, C7, CD	MATURITYMONTHYEAR	X(8)	Maturity id	"YYYYMM" - MONTHLY AND QUARTERLY "YYYYMMDD" - NOT STANDARD "YYYYMMwW" - WEEKLY being: "YYYY" - YEAR "MM" - MONTH "DD" - DAY "W" - w "W" - WEEK
C2, C7, CD	ISINCODE	X(12)	Contract isin code	For informational purposes, as it may be left blank The first 2 characters are the country code The 9 following characters are the national ID code of the instrument. Last character is a control character.
C2, C7, CD	StartMaturityMonthYear	X(8)	Start maturity date (Energy contracts)	YYYYMMDD
C2, C7, CD	EndMaturityMonthYear	X(8)	End Maturity date (Energy contracts)	YYYYMMDD
C2, C7, CD	AssetClass	X(4)	Asset class	COMM: commodities CRDT: Credit CURR: currency EQUI: equities INTR: Interest rate EMAL: Emission allowances
C2, C7, CD	Baseproduct	X(4)	See Delegated Regulation EU 2017/585	Only for AssetClass=COMM
C2, C7, CD	SubProduct	X(4)	See Delegated Regulation EU 2017/585	
C2, C7, CD	FurtherSubproduct	X(4)	See Delegated Regulation EU 2017/585	
C2, C7, CD	SSTI_Pre	AMT	SSTI-pre threshold (Size Specific to Instrument)	
C2, C7, CD	LIS_Pre	AMT	LIS-pre threshold (Large in Scale)	
C2, C7, CD	SSTI_Post	AMT	SSTI-post threshold (Size Specific to Instrument)	

C2, C7, CD	LIS_Post	AMT	LIS-post threshold (Large in Scale)	
C2, C7, CD	VersionNumber	X(N)	Contract version	(0 of no changes have been applied)

4.10 CCurrency_C2_YYYYMMDD.TXT / CCurrency_C7_YYYYMMDD.TXT / CCurrency_CD_YYYYMMDD.TXT

Currencies used by the CCP. Exchange rates to settlement currency.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Trading day date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	String (2)	Contracts group code	SEE ANNEX TABLE 4
C2, C7, CD	CURRENCY	String (3)	Currency. For the FX Contracts, the quote currency or the second of the pair.	ISO CURRENCY CODE
C2, C7, CD	SETTLCURRENCY	String (3)	Currency. Currency in which cash amounts are settled..	ISO CURRENCY CODE
C2, C7, CD	CONVERSIONRATE	Price	Conversion rate to the settlement currency.	

4.11 CCONTRGRP_C2_YYYYMMDD.TXT/ CCONTRGRP_C7_YYYYMMDD.TXT / CCONTRGRP_CD_YYYYMMDD.TXT

Contract subgroups information.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4

C2, C7, CD	CONTRACTSUBGROUPCODE	String (2)	Contract code	SEE ANNEX TABLE 5
C2, C7, CD	CONTRACTSUBGROUPDESCRIPTION	String (20)	Contract subgroup description	
C2, C7, CD	CONTRACTSUBGROUPUNDERLYING	String (22)	Contract subgroup underlying asset	See ANNEX TABLE 21 UNDERLYING ASSETS

4.12 CCONTRTYP_C2_YYYYMMDD.TXT / CCONTRTYP_C7_YYYYMMDD.TXT / CCONTRTYP_CD_YYYYMMDD.TXT

Contract type information file content:

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7, CD	CONTRACTSUBGROUPCODE	String (2)	Contract code	SEE ANNEX TABLE 5
C2, C7, CD	CONTRACTTYPECODE	String (4)	Type of contract	
C2, C7, CD	CONTRACTTYPEDESCRIPTION	String (20)	Type of contract description	
C2, C7, CD	PRICEMULTIPLIER	Price	Price multiplier to be applied to the price of the contract	
C2, C7, CD	NOMINAL	Price	Nominal of these types of contracts	
C2, C7, CD	CURRENCY	String (3)	Currency of the price of these types of contracts	SEE ANNEX TABLE 1
C2, C7, CD	CALCMETHOD	String (1)	Price calculation method for these types of contracts	"1" - Black-76 "2" - Binominal
C2, C7, CD	Internalcode	String (6)	Filler	
C2, C7, CD	CONTRACTFAMILY	String (5)	Contract family	SEE ANNEX TABLE 28
C2, C7, CD	AII	String (12)	Identification completed	CFICODE + " " + UNDERLYING (SEE ANNEX MEFF TABLE TABLA 21)
C2, C7, CD	PRICETYPE	String (1)	Price type	1 = Price / 2= Yield

C2, C7, CD

	SECURITYTYPE	String (1)	Security type	"E"= Strategy "F"=Future "M"=Forward "O"=Option "R"=Roll-over "W"=Swap "X"=Other "G"=xRolling	
C2, C7, CD	FLEXIBLEINDICATOR	String (1)	Flexible indicator	"Y" – No standard	"N" - Standard
C2, C7, CD	EXERCISESTYLE	String (1)	Exercise style	"A" - American European	"E" -
C2, C7, CD	SETTMETHOD	String (1)	Settlement method	"P" – physical cash	"C" -
C2, C7, CD	PUTORCALL	String (1)	Put or Call	"P" – Put	"C" - Call
C2, C7, CD	PERIODICITY	String (1)	Periodicity	"Y" – Yearly "S" - Biannual "Q" – Quarterly "M" – Monthly "m" – Balance of the month "K" – full week (Mon-Sun) "k" – Balance of the week "B" – weekly working days (Mon-Fri) "E" – week-End (Sat-Sun) "D" – Daily (except Future LNG TTF) "d" - Daily (Future LNG TTF) "A" - Monthly (auxiliar)	
C2, C7, CD	ADJUSTMENTSRULE	String (1)	Adjustments rule	"E" – extraordinary "T" - All	
C2, C7, CD	CFICODE	String (6)	CFI Code official EMIR Reporting	SEE ANNEX TABLE 2 CFI CODE	
C2, C7, CD	UnitOfMeasure	X(20)	Unit of measure of the multiplier		
C2, C7, CD	BaseCurrency	X(3)	Currency of the nominal of contracts of this type	Table 1 in document 'Codification Tables'	
C2, C7, CD	SettlCurrency	X(3)	Currency into which settlements of these contracts are converted	Table 1 in document 'Codification Tables'	

4.13 ADJUSTMENT NOTICES, CIRCULARS AND INSTRUCTIONS

Periodically, corporate actions such as capital increases, splits/reverse splits, etc affecting the underlying securities of derivatives products will lead to adjustments in the futures and derivatives contracts. These adjustments will be disseminated as a pdf file that will be sent via e-mail and FTP once the market publishes the communication.

4.14 CDEFERRALFEEDPAR_CD_YYYYMMDD.TXT

General Data. Parameters for calculation of the deferral fee:

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Fecha de sesión	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	ContractCode	String(22)	Contract code	
CD	FloorMarkUp	Amt	Mark-up floor	
CD	CapMarkUp	Amt	Mark-up cap	
CD	NumberOfTranches	int	Number of tranches that are defined as follows. Maximum 15	<=15
CD	TrancheThreshold	float	Tranche Threshold	
CD	BuyMarkUp	float	Mark-up buy tranche	
CD	SellMarkUp	float	Mark-up sell tranche	

4.15 CDEFERRALFLOWPAR_CD_YYYYMMDD.TXT

General Data. Parameters for calculation of the deferral fee:

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Fecha de sesión	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	ContractCode	String(22)	Contract code	
CD	BuyDeferralFlowRate	Float	Expressed in percent with 4 decimal places. It can be negative For standard contacts it shall be €STR	
CD	SellDeferralFlowRate	Float	Expressed in percent with 4 decimal places. It can be negative For standard contacts it shall be €STR	
CD	BuyReferenceRateMarkup	Float	Buy Mark up expressed in percentage with 4 decimal places	
CD	SellReferenceRateMarkup	Float	Sell Mark up expressed in percentage with 4 decimal places	
CD	Stockborrowrate	Float	Stock borrow rate. Expressed as a percentage with 4 decimal places.	
CD	BuyReferenceRateLP	Float	Resulting applicable rate to LPs long, with 4 decimal places	
CD	SellReferenceRateLP	Float	Resulting applicable rate to LPs short, with 4 decimal places.	
CD	BuyReferenceRateXR	Float	Resulting applicable rate to XRs long, with 4 decimal places	
CD	SellReferenceRateXR	Float	Resulting applicable rate to XRs short, with 4 decimal places.	
CD	DeferralDays	int	Number of deferral days	
CD	FloorMarkUp	Amt	Mark-up floor	
CD	CapMarkUp	Amt	Mark-up cap	
CD	NumberOfTranches	int	Number of tranches that are defined as follows. Maximum 15	<=15
CD	TrancheThreshold	float	Tranche Threshold	

CD	BuyMarkUp	float	Mark-up buy tranche
CD	SellMarkUp	float	Mark-up sell tranche

5 Daily Settlement Prices Product Specifications

The information includes:

- ☐ BME CLEARING FINANCIAL DERIVATIVES C2
- ☐ BME CLEARING POWER C7
- ☐ BME CLEARING DERIVADOS FINANCIEROS FX CD, CN

The files are the following:

FILES	FOREX	FINANCIAL DERIVATIVES	POWER	DESCRIPTION
CCONTRSTAT_C2_YYYYMMDD.TXT CCONTRSTAT_C7_YYYYMMDD.TXT CCONTRSTAT_CD_YYYYMMDD.TXT	X	X	X	Contract daily price and volumes data

5.1 CCONTRSTAT_C2_YYYYMMDD.TXT / CCONTRSTAT_C7_YYYYMMDD.TXT / CCONTRSTAT_CD_YYYYMMDD.TXT

File with end of day prices for options and futures including financial and energy segments:

- ☐ CCONTRSTAT_C2_YYYYMMDD.TXT Daily Settlement Prices Financial Segment.
- ☐ CCONTRSTAT_C7_YYYYMMDD.TXT Daily Settlement Prices Energy Segment.
- ☐ CCONTRSTAT_CD_YYYYMMDD.TXT Precios de cierre de derivados financieros FX

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	X(8)	Trading date	YYYYMMDD
C2, C7	CONTRACTGROUP	X(2)	Contract group code	See annex table 4
C2, C7	CONTRACTCODE	X(22)	Contract code	
C2, C7	HIGHPRICE	9(4)V9(3)	Trading day high price	
C2, C7	LOWPRICE	9(4)V9(3)	Trading day low price	
C2, C7	FIRSTPRICE	9(4)V9(3)	Trading day first price	
C2, C7	LASTPRICE	9(4)V9(3)	Trading day last price	
C2, C7	SETTLPRICE	9(4)V9(3)	Trading day settlement price	
C2, C7	SETTLVOLATILITY	9(13)V9(6)	Trading day closing settlement volatility	This field is not available for long options
C2, C7	SETTLDELTA	9(13)V9(6)	Trading day closing settlement delta	This field is not available for long options
C2, C7	PREVIOUSDAYSETTLPRICE	9(4)V9(3)	Previous trading day settlement price	This field might not be available for the first settlement day of the contract
C2, C7	PREVIOUSDAYSETTLVOLATILITY	9(13)V9(6)	Previous trading day closing settlement volatility	This field is not available for long options This field might not be available for the first settlement day of the contract
C2, C7	PREVIOUSDAYSETTLDELTA	9(13)V9(6)	Previous trading day closing settlement delta	This field is not available for long options This field might not be available for the first settlement day of the contract
C2, C7	TOTALREGVOLUME	9(15)	Trading day turnover	
C2, C7	NUMBEROFTRADES	9(5)	Trading day traded volume	
C2, C7	OPENINTEREST	9(15)	Open interest	
C2, C7	ACCRUEDINTEREST	9(5)V9(4)	Accrued interest included in the daily settlement price. Only for fixed income instruments.	
C2, C7	YIELD	9(5)V9(4)	Yield	
C2, C7	ReferencePrice	9(13)V9(6)	Reference price (forward) for D+1 (only informed in currency derivative contracts)	

C2, C7	PreviousReferencePrice	9(13)V9(6)	Previous day reference price (forward) (only informed in contracts with deferral feature)
C2, C7	NextDaySwapPoints	9(13)V9(6)	Next session expected Swap Points
C2, C7	DiscountFactor	9(13)V9(6)	Discount Factor

6 Clearing, Margin Calculations And Risk Metrics Product Specifications

The information includes:

- ☐ BME CLEARING FINANCIAL DERIVATIVES C2
- ☐ BME CLEARING POWER C7
- ☐ BME CLEARING DERIVADOS FINANCIEROS FX CN, CD

The files are the following:

FILES	FINANCIAL DERIVATIVES	POWER	FOREX	DESCRIPTION
CCONTRGRP_C2_YYYYMMDD.TXT CCONTRGRP_C7_YYYYMMDD.TXT CCONTRGRP_CD_YYYYMMDD.TXT	X	X	X	Contract subgroups information.
CCONTRTYP_C2_YYYYMMDD.TXT CCONTRTYP_C7_YYYYMMDD.TXT CCONTRTYP_CD_YYYYMMDD.TXT	X	X	X	Contract type information.
CVOLATILITYSKEW_C2_YYYYMMDD.TXT	X			Volatility curve used for theoretical price calculations.
CTHEORPRICES_C2_YYYYMMDD.TXT CTHEORPRICES_RETAIL_C2_YYYYMMDD.TXT CTHEORPRICES_C7_YYYYMMDD.TXT CTHEORPRICES_RETAIL_C7_YYYYMMDD.TXT	X	X		Theoretical prices of contracts used for initial margin calculations.
CDELTA_C2_YYYYMMDD.TXT	X	X		Deltas of contracts used for initial margin calculations.

CDELTAS_RETAIL_C2_YYYYMMDD.TXT
CDELTAS_C7_YYYYMMDD.TXT
CDELTAS_RETAIL_C7_YYYYMMDD.TXT

CVALARRAYS_C2_YYYYMMDD.TXT CVALARRAYS_C7_YYYYMMDD.TXT	X	X	Parameters for each of the margin valuation arrays.
CINTRASPR_C2_YYYYMMDD.TXT CINTRASPR_C7_YYYYMMDD.TXT	X	X	Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with the same array code.
CINTERSPR_C2_YYYYMMDD.TXT CINTERSPR_C7_YYYYMMDD.TXT	X	X	Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with different array code
CDELIVERABLES_C2_YYYYMMDD.TXT	X	X	List of available deliverable contracts associated to a derivative contract.
CMARGINPARAMETERS_CD_YYYYMMDD.TXT		X	Margin calculation data – scenario model. Parameters information corresponding to the IM calculation model – scenario model.
CLIQUIDITYMARGIN_CD_YYYYMMDD.TXT		X	Datos Margin calculation data – scenario model. Parameters information corresponding to the adjustment of the position size, for each currency pair under normal and stressed market conditions. (scenario model).
CIMFACTORS_CD_YYYYMMDD.TXT		X	Margin calculation data – scenario model. Information on the applicable sovereign risk factor and decay factor for each currency pair. (scenario model).
CSTRESSTESTPARAMETERS_CD_YYYYMMDD.TXT		X	Margin calculation data – scenario model. Information of parameters corresponding to the Stress Test calculation model. (scenario model).
CSCENARIOS_CD_YYYYMMDD.TXT		X	Margin calculation data – scenario model. Information on the scenarios used (historical, scaled historical or hypothetical) by the IM and stress test calculation algorithm. (scenario model).
ROLLINGCALENDAR_CD_YYYYMMDD.TXT		X	Margin calculation data – scenario model. Calendar at underlying level, of the sessions in which technical trade should not be generated for the open position.
CIMSINGLEPOSITION_CD_YYYYMMDD.TXT		X	Margin calculation data – scenario model. Required Initial Margin for a one-contract position.

Fields available in each file are the following.

6.1 CCONTRGRP_C2_YYYYMMDD.TXT/ CCONTRGRP_C7_YYYYMMDD.TXT / CCONTRGRP_CD_YYYYMMDD.TXT

Contract subgroups information.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7, CD	CONTRACTSUBGROUPCODE	String (2)	Contract code	SEE ANNEX TABLE 5
C2, C7, CD	CONTRACTSUBGROUPDESCRIPTION	String (20)	Contract subgroup description	
C2, C7, CD	CONTRACTSUBGROUPUNDERLYING	String (22)	Contract subgroup underlying asset	See ANNEX TABLE 21 UNDERLYING ASSETS

6.2 CCONTRTYP_C2_YYYYMMDD.TXT / CCONTRTYP_C7_YYYYMMDD.TXT / CCONTRTYP_CD_YYYYMMDD.TXT

Contract type information file content:

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7, CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2, C7, CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7, CD	CONTRACTSUBGROUPCODE	String (2)	Contract code	SEE ANNEX TABLE 5
C2, C7, CD	CONTRACTTYPECODE	String (4)	Type of contract	
C2, C7, CD	CONTRACTTYPEDESCRIPTION	String (20)	Type of contract description	
C2, C7, CD	PRICEMULTIPLIER	Price	Price multiplier to be applied to the price of the contract	
C2, C7, CD	NOMINAL	Price	Nominal of these types of contracts	

C2, C7, CD	CURRENCY	String (3)	Currency of the price of these types of contracts	SEE ANNEX TABLE 1	
C2, C7, CD	CALCMETHOD	String (1)	Price calculation method for these types of contracts	"1" - Black-76 "2" - Binominal	
C2, C7, CD	INTERNALCODE	String (6)	INTERNAL CODE		
C2, C7, CD	CONTRACTFAMILY	String (5)	Contract family	SEE ANNEX TABLE 28	
C2, C7, CD	AII	String (12)	Identification completed	CFICODE + " " + UNDERLYING (SEE ANNEX MEFF TABLE TABLA 21)	
C2, C7, CD	PRICETYPE	String (1)	Price type	1 = Price / 2= Yield	
C2, C7, CD	SECURITYTYPE	String (1)	Security type	"E"= Strategy "F"=Future "M"=Forward "O"=Option "R"=Roll-over "W"=Swap "X"=Other	
C2, C7, CD	FLEXIBLEINDICATOR	String (1)	Flexible indicator	"Y" - No standard "N" - Standard	
C2, C7, CD	EXERCISESTYLE	String (1)	Exercise style	"A" - American European	"E" - European
C2, C7, CD	SETTMETHOD	String (1)	Settlement method	"P" - physical cash	"C" - cash
C2, C7, CD	PUTORCALL	String (1)	Put or Call	"P" - Put	"C" - Call
C2, C7, CD	PERIODICITY	String (1)	Periodicity	"Y" - Yearly "S" - Biannual "Q" - Quarterly "M" - Monthly "m" - Balance of the month "K" - full week (Mon-Sun) "k" - Balance of the week "B" - weekly working days (Mon-Fri) "E" - week-End (Sat-Sun) "D" - Daily (except Future LNG TTF) "d" - Daily (Future LNG TTF) "A" - Monthly (auxiliar)	
C2, C7, CD	ADJUSTMENTSRULE	String (1)	Adjustments rule	"E" - extraordinary "T" - All	
C2, C7, CD	CFICODE	String (6)	CFICode official EMIR Reporting	SEE ANNEX TABLE 2 CFI CODE	

C2, C7, CD	UnitOfMeasure	X(20)	Unit of measure of the multiplier	
C2, C7, CD	BaseCurrency	X(3)	Currency of the nominal of contracts of this type	Table 1 in document 'Codification Tables'
C2, C7, CD	SettlCurrency	X(3)	Currency into which settlements of these contracts are converted	Table 1 in document 'Codification Tables'

6.3 CVOLATILITYSKEW_C2_YYYYMMDD.TXT

Volatility curve used for theoretical price calculations.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2	SESSIONDATE	Localdate	Session date	
C2	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2	UNDERLYING	String(22)	Stock code in cash market	
C2	MATURITYDATE	Localdate	Maturity date	
C2	INSTRUMENTTYPE	Char	Indicator of whether the record refers to call options, put options, or both	"C"=Call "P"=Put "?"=All(Call and Put)
C2	VOLATILITYATM	Float	Volatility at the money. Expressed as percentage.	
C2	DIVISOR	Int	Divisor of percentage points. Indicates at what percentage the increase of volatility is applied	
C2	MINIMUMVOLATILITY	Float	Minimum volatility. Expressed as percentage.	
C2	MAXIMUMVOLATILITY	Float	Maximum volatility. Expressed as percentage.	
C2	NUMBEROFRANGES	Int	Number of ranges that this record contains. It will be followed by four fields as described below for each range	
C2	VARIATIONPERCENTAGE1	Float	Percentage change for strike price >= underlying price. It is expressed as a percentage of the reference price and is accumulative. For example, if it is 10% for the first tranche	

and 15% for the second tranche, this means that it is 10+15% of the reference price. Expressed as a percentage.

C2	VARIATIONPOINTS1	Float	Percentage increase / decrease for the strike price >= underlying price
C2	VARIATIONPERCENTAGE2	Float	Percentage change for strike price < underlying price. It is expressed as a percentage of the reference price and is accumulative. For example, if it is 10% for the first tranche and 15% for the second tranche, this means that it is 10+15% of the reference price. Expressed as a percentage.
C2	VARIATIONPOINTS2	Float	Percentage increase / decrease for the strike price < underlying price

6.4 CTHEORPRICES_C2_YYYYMMDD.TXT / CTHEORPRICES_C7_YYYYMMDD.TXT

Theoretical prices of contracts used for initial margin calculations. (institutional margin calculation criterion)

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7	CONTRACTCODE	String (22)	Contract code	SEE ANNEX TABLE 5
C2, C7	SIDE	Char	Indicates if the record contains theoretical prices for long or short positions	"1"=Buy "2"=Sell
C2, C7	NUMBEROFTHEORETICALPRICES	Int	Number of theoretical prices contained in the record. It corresponds of NumberOfColumns from CVALARRAYS file. Note: The total number of fields displayed corresponds to the addition of numbers in fields NumberOfColumns and NumberOfColumnsLPos from CVALARRAYS file.	

C2, C7	THEORETICALPRICES	Price	Theoretical Price (institutional margin calculation criterion)
--------	-------------------	-------	--

6.5 CTHEORPRICES_RETAIL_C2_YYYYMMDD.TXT / CTHEORPRICES_RETAIL_C7_YYYYMMDD.TXT

Theoretical prices of contracts used for initial margin calculations. (retail margin calculation criterio)

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7	CONTRACTCODE	String (22)	Contract code	SEE ANNEX TABLE 5
C2, C7	SIDE	Char	Indicates if the record contains theoretical prices for long or short positions	"1"=Buy "2"=Sell
C2, C7	NUMBEROFTHEORETICALPRICES	Int	Number of theoretical prices contained in the record. It corresponds of NumberOfColumns from CVALARRAYS file. Note: The total number of fields displayed corresponds to the addition of numbers in fields NumberOfColumns and NumberOfColumnsLPos from CVALARRAYS file.	
C2, C7	THEORETICALPRICES	Price	Theoretical Price (retail margin calculation criterion)	

6.6 CDELTAS_C2_YYYYMMDD.TXT / CDELTAS_C7_YYYYMMDD.TXT

Deltas of contracts used for initial margin calculations. (institutional margin calculation criterion)

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
------------	------------	--------	-------------	--------------------------

C2, C7	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7	CONTRACTCODE	String(22)	Contract code	SEE ANNEX TABLE 5
C2, C7	SIDE	Char	Indicates if the record contains theoretical prices for long or short positions	"1"=Buy "2"=Sell
C2, C7	NUMBEROFDELTAS	Int	Number of deltas contained in the record. It corresponds of NumberOfColumns from CVALARRAYS file. Note: The total number of fields displayed corresponds to the addition of numbers in fields NumberOfColumns and NumberOfColumnsLPos from CVALARRAYS file.	
C2, C7	DELTA	Price	Delta (institutional margin calculation criterion)	

6.7 CDELTAS_RETAIL_C2_YYYYMMDD.TXT / CDELTAS_RETAIL_C7_YYYYMMDD.TXT

Deltas of contracts used for initial margin calculations. (retail margin calculation criterion)

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7	CONTRACTCODE	String(22)	Contract code	SEE ANNEX TABLE 5
C2, C7	SIDE	Char	Indicates if the record contains theoretical prices for long or short positions	"1"=Buy "2"=Sell
C2, C7	NUMBEROFDELTAS	Int	Number of deltas contained in the record. It corresponds of NumberOfColumns from CVALARRAYS file. Note: The total number of fields displayed corresponds to the addition of numbers in fields NumberOfColumns and NumberOfColumnsLPos from CVALARRAYS file.	

C2, C7 DELTA Price Delta (retail margin calculation criterion)

6.8 CVALARRAYS_C2_YYYYMMDD.TXT / CVALARRAYS_C7_YYYYMMDD.TXT

Parameters for each of the margin valuation arrays.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	Localdate	Session date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7	ArrayCode	String(3)	Margin array code	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	ExpirySpan	Char	Expiry span type	Codes: A, B, C, D, E, F, G, H, L, M, S, W, X, Y, Z
C2, C7	NumberOfColumns	Int	Number of columns absent large positions.	<=41
C2, C7	PriceFluctuationType	Char	Price fluctuation type	"P"=Percentage "T"=By price
C2, C7	PriceIncFluctuation	Float	Increase fluctuation (left)	
C2, C7	PriceDecFluctuation	Float	Decrease fluctuation (right)	
C2, C7	VolatilityVariationType	Char	Form of applying variation of volatility	"P"=Percentage "T"=Total
C2, C7	VolatilityVariation	Float	Volatility variation	
C2, C7	ContractSubgroupCode	String(2)	Contract subgroup reference for off-setting between different underlyings	
C2, C7	ContractTypeCode	String(4)	Reference contract type for off-setting between different underlyings	
C2, C7	LargePosThreshold	Float	Delta from which guarantees for large positions are in use.	

C2, C7	FILLER	Int	Filler
C2, C7	NumberOfColumnsLPos	Int	<=16 Number of columns
C2, C7	RegulatorMarginPercentage	Float	Minimum Margin Percentage set by the regulator
C2, C7	MinTheoreticalPriceApplies	Float	The field indicates whether the minimum price applies for the calculation of margins in upcoming Gas deliverable contracts.
C2, C7	MinTheoreticalPrice	Float	The field indicates whether the minimum price applies for the calculation of margins in upcoming Gas deliverable contracts.

6.9 CINTRASPR_C2_YYYYMMDD.TXT / CINTRASPR_C7_YYYYMMDD.TXT

Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with the same array code.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	Localdate	Session date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7	ArrayCode	String(3)	Margin array code	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	FILLER	String(4)	Filler (contents not relevant)	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	FILLER	String(4)	Filler (contents not relevant)	

C2, C7	FILLER	String(2)	Filler (contents not relevant)
C2, C7	Factor	Float	Factor
C2, C7	MinimumValue	Float	Minimum value
C2, C7	Spread	Float	Spread
C2, C7	FILLER	String(2)	Filler (contents not relevant)
C2, C7	DayCalc	Char	"S"= Time between expiries is expressed in days "N"= Time between expiries is expressed in months

6.10 CINTERSPR_C2_YYYYMMDD.TXT / CINTERSPR_C7_YYYYMMDD.TXT

Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with different array code.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2, C7	SESSIONDATE	Localdate	Session date	YYYYMMDD
C2, C7	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2, C7	OffsetPriority	String(3)	Priority	
C2, C7	ArrayCode1	String(3)	Array code 1	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	FILLER	String(4)	Filler (contents not relevant)	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	GroupOffsetDiscount1	Amt	Offset group 1 discount	
C2, C7	OffsetMultiplier1	Float	Offset multiplier 1	
C2, C7	ArrayCode2	String(3)	Array code 2	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	FILLER	String(4)	Filler (contents not relevant)	

C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	FILLER	String(2)	Filler (contents not relevant)	
C2, C7	GroupOffsetDiscount2	Amt	Offset group 2 discount	
C2, C7	OffsetMultiplier2	Float	Offset multiplier 2	
C2, C7	FILLER	Amt	Filler (not relevant content)	
C2, C7	DiscountType	Char	Discount type that is applied	"D"=Currency "P"=Percentage

6.11 CDELIVERABLES_C2_YYYYMMDD.TXT

List of available deliverable contracts associated to a derivative contract.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
C2	SESSIONDATE	LocalDate	Session date	YYYYMMDD
C2	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
C2	CONTRACTCODE	String (22)	Contract code	SEE ANNEX TABLE 5
C2	CODCSD	Char	Code of the Central Security Depositary.	SEE ANNEX TABLE 15
C2	DERIVERABLECONTRACTCODE	String (22)	Deliverable contract code used in the Clearing House.	
C2	DERIVERABLEORDERNO	Int	Issue order number of the deliverable contract.	>0
C2	DERIVERABLEISINCODE	String(12)	ISIN code of the deliverable contract.	
C2	MATURITYDATE	Localdate	Maturity and delivery date.	YYYYMMDD
C2	FACTOR	Float	Conversion factor (for Bonds).	
C2	ACCRUEDINTEREST	Amt	Accrued interest (for Bonds).	
C2	FIELD1	String(20)	BME CLEARING: Reserved for future uses	
C2	FIELD2	String(20)	BME CLEARING: Reserved for future uses.	

C2	BVCONTRACTCODE	String(35)	BME CLEARING: Reserved for future uses
C2	CFICODE	String(6)	CFI CODE

6.12 ADJUSTMENT NOTICES, CIRCULARS AND INSTRUCTIONS

Periodically, circulars and operating instructions are produced on calculations for settlement and guarantees. All circulars and instructions to publish BME CLEARING relating thereto shall be sent by email. These adjustments will be disseminated as a pdf file that will be sent via e-mail and FTP once the market publishes the communication.

6.13 CMARGINPARAMETERS_CD_YYYYMMDD.TXT

Margin calculation data – scenario model. Parameters information corresponding to the IM calculation model – scenario model.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	MporHouse	Int	Number of days - Mpor House	
CD	MporClient	Int	Number of days - Mpor Client	
CD	HvarCI	float	Confidence level HVAR	Percentage, expressed in parts per one: 5% equals 0.05 (with 4 decimal places). Should correspond to the 25th worst-case scenario.
CD	EsCI	float	Confidence level ES	Percentage, expressed in parts per one: 5% equals 0.05 (with 4 decimal places). Should correspond to the average of the 18th worst scenarios.

CD	LookBackPeriod	Int	The number of historical scenarios used to calculate the IM. The same number will be applied for HVaR and ES.	In principal, 2520.
CD	NonScaledScenariosNumberFV	Int	Number of non-scaled scenarios for a full valuation. (Do not apply for FX RSF).	
CD	ScaledScenariosNumberFV	Int	Number of scaled scenarios for a full valuation. (Do not apply for FX RSF).	
CD	IMbaseBuffer	float	Base IM multiplier factor	
CD	IMFloorFactor	float	Base IM multiplier factor to obtain the Initial Margin floor	Percentage, expressed in parts per one: 20% equals 0.20 (with 4 decimal places)
CD	Currency	Currency	Currency of following risk data or "Margin Calculation Currency"	See table 1 of the "Codification Tables" document.
CD	DaysSmoothingParam	Int	N (DaySmoothingParam) corresponds to the value computed in the smoothing parameter defined as $2/(N+1)$.	The default value is set to 10.

6.14 CLIQUIDITYMARGIN_CD_YYYYMMDD.TXT

Margin calculation data – scenario model. Parameters information corresponding to the adjustment of the position size, for each currency pair under normal and stressed market conditions. (scenario model).

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	ContractSubgroupCode	String(2)	Contract subgroup code	table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.

CD	ContractSubgroupDescription	String(20)	Description of the contract subgroup	table 21 of the "Codification Tables"
CD	QuantityMax	Int	Maximum market volume	
CD	NumberOfIntervals	Int	Number of intervals that are defined as follows.	Maximum 10.
CD	QuantityInterval	Int	The value of this field by QuantityMax marks the border with the following maximum market volume tranche	(usually 5 intervals)
CD	Surcharge	float	Illiquidity surcharge expressed in quote Currency	

6.15 CIMFACTORS_CD_YYYYMMDD.TXT

Margin calculation data – scenario model. Information on the applicable sovereign risk factor and decay factor for each currency pair. (scenario model).

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	ContractSubgroupCode	String(2)	Contract subgroup code	table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.
CD	ContractSubgroupDescription	String(20)	Description of the contract subgroup	table 21 of the "Codification Tables"
CD	RiskFactorBuffer	float	Multiplier factor used to calculate returns..	
CD	DecayFactorSpot	float	Value of between 0 and 1 used in the EWMA method.	Value of between 0 and 1
CD	DecayFactorSwapPoints	float	Value of between 0 and 1 used in the EWMA method.	Value of between 0 and 1

6.16 CSTRESSTESTPARAMETERS_CD_YYYYMMDD.TXT

Margin calculation data – scenario model. Information of parameters corresponding to the Stress Test calculation model. (scenario model).

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	StressHistPeriod	Int	Number of historical scenarios used calculate the Stress Test.	"-1" = all scenarios "1, 2,...,n" = number of scenarios to be used in the calculations
CD	StressHypoPeriod	Int	Number of hypothetical scenarios used calculate the Stress Test.	"-1" = all scenarios "1, 2,...,n" = number of scenarios to be used in the calculations
CD	StressNivelConfidenceHist	float	Percentage, expressed in parts per one: 5% equals 0.05 (with 4 decimal places)	Confidence level used to calculate the stress test according to historical scenarios (1 -> Worst; 0 -> Least negative)
CD	StressNivelConfidenceHypo	float	Percentage, expressed in parts per one: 5% equals 0.05 (with 4 decimal places)	Confidence level used to calculate the stress test according to hypothetical scenarios (1 -> Worst; 0 -> Least negative)
CD	StressNumScenariosDDBB	Int	Number of worst-case scenarios to be recorded in the database as a result of the Stress Test	
CD	StressAvgHist	char	Averages the losses and gains generated in historical scenarios that correspond to the established confidence level. "N"= No, "Y"= Yes	"N"= No, "Y"= Yes
CD	StressAvgHypo	char	Averages the losses and gains generated in hypothetical scenarios that correspond to the established confidence level. "N"= No, "Y"= Yes	"N"= No, "Y"= Yes
CD	Currency	Currency	Currency of following risk data or "Stress Test Calculation Currency"	see table 1 of the "Codification Tables" document.

6.17 CSCENARIOS_CD_YYYYMMDD.TXT

Margin calculation data – scenario model. Information on the scenarios used (historical, scaled historical or hypothetical) by the IM and stress test calculation algorithm. (scenario model).

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	ContractSubgroupCode	String(2)	Contract subgroup code	table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.
CD	ContractTypeCode	String(4)	Contract type	
CD	ScenarioType	String(4)	Historical (HIST) or hypothetical (HYPO) scenario	
CD	ScenarioID	String(18)	Date for historical scenarios Name for hypothetical scenarios	
CD	Currency	Currency	Currency in which returns are expressed	see table 1 of the "Codification Tables" document.
CD	ReturnShiftNonScalated	float	Return not scaled	Percentage, expressed in parts per one: 5% equals 0.05 (with a maximum of 15 decimal places)
CD	ReturnShiftScalated	float	Return scaled	Percentage, expressed in parts per one: 5% equals 0.05 (with a maximum of 15 decimal places)

6.18 ROLLINGCALENDAR_CD_YYYYMMDD.TXT

Margin calculation data – scenario model. Calendar at underlying level, of the sessions in which technical trade should not be generated for the open position.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	ContractSubgroupCode	String(2)	Contract subgroup code	table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.
CD	ContractSubgroupDescription	String(20)	Description of the contract subgroup	table 21 of the "Codification Tables"
CD	NumberOfHolidays	Int	Number of holidays that are defined as follows. Maximum 40.	<=40
CD	HolidayDate	LocalDate	Session date in which technical trade does not apply to the contracts related to these subgroup of contracts.	

6.19 CIMSINGLEPOSITION_CD_YYYYMMDD.TXT

Margin calculation data – scenario model. Required Initial Margin for a one-contract position.

ASSET TYPE	FIELD NAME	LENGTH	DESCRIPTION	FORMAT / POSSIBLE VALUES
CD	SESSIONDATE	LocalDate	Session date	YYYYMMDD
CD	CONTRACTGROUP	String (2)	Contract group code	SEE ANNEX TABLE 4
CD	ContractSubgroupCode	String(2)	Contract subgroup code	table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.

CD	ContractSubgroupDescription	String(20)	Description of the contract subgroup	table 21 of the "Codification Tables"
CD	Currency	Currency	Currency of following risk data or "Margin Calculation Currency"	see table 1 of the "Codification Tables" document."
CD	InitialMarginLongOnecontract	Amt	Required Initial Margin for a long one-contract position	
CD	InitialMarginShortOnecontract	Amt	Required Initial Margin for a short one-contract position	
CD	ContractTypeCode	String(4)	Contract type	

7 Annex Codification Tables

7.1 ANNEX TABLE 1. CURRENCIES

The currency codes used are those defined by ISO-4217. The current values can be consulted at the following site:

<http://www.xe.com/iso4217.htm>

CODE	CONCEPT
AUD	Australian Dollar
BRL	Brazilian Real
CAD	Canadian Dollar
CHF	Swiss Franc
EUR	Euro
GBP	British Pound
JPY	Japanese Yen
MXN	Mexican Peso

NZD	New Zealand Dollar
USD	US Dollar

7.2 ANNEX TABLE 2. CFI Code

7.2.1 Index Derivatives

DESCRIPTION	CFICODE
Standard financial future on an index. Cash settlement.	FFICSX
Non-standardized financial future on an index. Cash settlement.	FFICNX
Strategies.	KEXXXX
Time spread of a future on an index. Cash settlement.	KEXXXX
Standardized European call option on an index. Cash settlement.	OCEFCS
Non-standardized European call option on an index. Cash settlement.	OCEFCN
Standardized European put option on an index. Cash settlement.	OPEFCS
Non-standardized European put option on an index. Cash settlement.	OPEFCN
Referential instrument on an index (IBEX series) Referential instrument (Impacto Dividendo)	TIECPX

7.2.2 Stocks Derivatives

DESCRIPTION	CFICODE
Standardized financial future on stocks. Physical delivery.	FFSPSX

Non-standardized financial future on stocks. Physical delivery.	FFSPNX
Standardized financial future on stocks. Cash settlement.	FFSCSX
Non-standardized financial future on stocks. Cash settlement.	FFSCNX
Standardized financial future on others (dividend). Cash settlement.	FFVCSX
Non-standardized financial future on others (dividend). Cash settlement.	FFVCNX
Strategies.	KEXXXX
Time spread of a future on stocks with physical delivery.	KEXXXX
Time spread of a future on stocks with cash settlement.	KEXXXX
Time spread of a future on others (dividend). Cash settlement.	KEXXXX
Facility on futures on stocks.	KEXXXX
Standardized American call option on stocks. Physical delivery.	OCASPS
Non-standardized American call option on stocks. Physical delivery.	OCASPN
Standardized American put option on stocks. Physical delivery.	OPASPS
Non-standardized American put option on stocks. Physical delivery.	OPASPN
Standardized European call option on stocks. Physical delivery.	OCESPS
Non-standardized European call option on stocks. Physical delivery.	OCESPN
Standardized European put option on stocks. Physical delivery.	OPESPS
Non-standardized European put option on stocks. Physical delivery.	OPESPN
Standardized European call option on stocks. Cash settlement.	OCESCS
Non-standardized European call option on stocks. Cash settlement.	OCESCN
Standardized European put option on stocks. Cash settlement.	OPESCS
Non-standardized European put option on stocks. Cash settlement.	OPESCN
Referential instrument for stocks derivatives (external contract).	MRSXXX
Stocks (cash).	ESXXXX
Referential instrument (dividend)	TDSXXX

7.2.3 Fixed Income Derivatives

DESCRIPTION	CFICODE
Standardized financial future on fixed income. Physical delivery.	FFDPSX
Standardized financial future on fixed income. Cash settlement.	FFDCSX
Time-spread of futures on fixed income. Physical delivery.	FKMXXXX
Strategies.	KMXXXX
Standardized European call option on fixed income. Physical delivery.	OCEDPS
Standardized European put option on fixed income. Physical delivery.	OPEDPS
Non-standardized European call option on fixed income. Physical delivery.	OCEDPN
Non-standardized European put option on fixed income. Physical delivery.	OPEDPN
Standardized European call option on fixed income. Cash settlement.	OCEDCS
Standardized European put option on fixed income. Cash settlement.	OPEDCS
Non-standardized European call option on fixed income. Cash settlement.	OCEDCN
Non-standardized European put option on fixed income. Cash settlement.	OPEDCN

7.2.4 Currency Derivatives

DESCRIPTION	CFICODE
Standardized financial future on currencies. Cash settlement	FFCCSX
Standardized European call option on currencies. Cash settlement	OCECCS
Standardized European put option on currencies. Cash settlement	OCECCS
FX Rolling Spot Futures	FFCCSX
Currency Spot	IFXXXP

7.2.5 Commodity Derivatives

DESCRIPTION	CFICODE
Standardized future on agricultural commodities. Physical delivery	FCAPSX
Time-spread of futures on agricultural commodities. Physical delivery	KTXXXX
Strategies	KTXXXX
Commodities	TTAXXX

7.2.6 Energy Derivatives

DESCRIPTION	CFICODE
Standardized Yearly future on energy. Cash settlement.	FCHCSX
Standardized Quarterly future on energy. Cash settlement.	FCHCSX
Standardized Monthly future on energy. Cash settlement.	FCHCSX
Standardized full week future on energy (Mon-Sun). Cash settlement.	FCHCSX
Standardized weekly working days future on energy (Mon-Fri). Cash settlement.	FCHCSX
Standardized week-End future on energy (Sat-Sun). Cash settlement.	FCHCSX
Standardized Yearly swap on energy. Cash settlement.	FCHCSX
Standardized Quarterly swap on energy. Cash settlement.	FCHCSX
Standardized Monthly swap on energy. Cash settlement.	FCHCSX
Full week Energy Swap Contract (Mon-Sun). Cash settlement.	FCHCSX
Weekly working days Energy Swap Contract (Mon-Fri). Cash settlement.	FCHCSX
Week-End Energy Swap Contract (Sat-Sun). Cash settlement.	FCHCSX
Daily Energy Swap Contract. Cash settlement.	FCHCSX

Gas Futures. Physical delivery	N/A
Gas Spot. Physical delivery	N/A

7.3 ANNEX TABLE 4. Markets and Trading Contract Group, Central Counterparty and Clearing Contract Group Codes

CODE	DESCRIPTION	Tipo
M3	MEFF Financial Contract Group	Negociación
M7	MEFF Energy Contract Group	Negociación
MD	MEFF – Financial Derivatives Currencies	Negociación
C2	BME Clearing Financial Derivatives	Liquidación
C7	BME Clearing Energy	Liquidación
CM	BME Clearing - CCP	Liquidación
C8	BME Clearing Repo	Liquidación
C0	BME Clearing Equities CCP	Liquidación
C9	BME Clearing IRS	Liquidación
CD	BME Clearing Financial Derivatives Currencies	Liquidación
CN	BME Clearing – Currencies CCP	Liquidación

7.4 ANNEX TABLE 5. Contract subgroups

7.4.1 FINANCIAL CONTRACT SUBGROUP

CODE	DESCRIPTION
02	BONO 10
19	IBEX MICRO
20	MINI IBEX
21	IBEX
23	BBVA
25	ENDESA
27	IBERDROLA
28	SCH
30	REPSOL
31	TELEFONICA
33	ACERINOX
35	BANKINTER
37	NATURGY
38	INDRA
41	AMADEUS
43	INDITEX
45	ACS
46	B.SABADELL
48	ACCIONA
50	SACYR
51	FCC
52	ENAGAS
53	RED ELECTRICA
54	SIEMENS GAMESA
56	MEDIASET

57	MAPFRE
58	ATRESMEDIA
68	GRIFOLS
72	ARCELORMITTAL
73	TÉCNICAS REUNIDAS
74	OBRASCÓN HUARTE
75	FERROVIAL
76	EBRO FOODS
78	IAG
80	CAIXABANK
82	DIA
85	VISCOFAN
87	AENA
88	MERLIN
89	CELLNEX
90	MELIA
91	CIE AUTOMOTIVE
92	ENCE
94	ALMIRALL
95	PHARMA MAR
96	SOLARIA
97	CAIXABANK 68
98	FLUIDRA
99	IBEX IMPACTO DIV
D1	TEF DIVIDENDOS
D2	SAN DIVIDENDOS

D3	BBVA DIVIDENDOS
D4	REP DIVIDENDOS
D5	IBE DIVIDENDOS
D6	ITX DIVIDENDOS
D7	CAIXABANK DIVIDENDOS
D8	GAS NATURAL DIVIDENDOS
E1	TELEFONICA DIV25
E2	SANTANDER DIV25
E3	BBVA DIV25
E4	REPSOL DIV25
E5	IBERDROLA DIV25
E6	INDITEX DIV25
E7	CAIXABANK DIV25
E8	GAS NATURAL DIV25
S1	IBEX BANCOS
S2	IBEX ENERGIA

7.4.2 CURRENCY CONTRACT SUBGROUP

CURRENCY CONTRACT SUBGROUP	
F0	xRolling EURAUD
F1	xRolling EURCHF
F2	xRolling EURGBP
F3	xRolling EURJPY
F4	xRolling EURUSD
F5	xRolling GBPCHF

F6	xRolling GBPUSD
F7	xRolling USDBRL
F8	xRolling USDCAD
F9	xRolling USDCHF
G0	xRolling USDJPY
G1	xRolling USDMXN
G2	xRolling AUDJPY
G3	xRolling AUDUSD
G4	xRolling NZDUSD
G5	xRolling EURMXN
G6	xRolling EURBRL

7.4.3 ENERGY CONTRACT SUBGROUP

ENERGY CONTRACT SUBGROUP	
01	FUTURE BASE MIBEL
02	SWAP BASE MIBEL
03	FUTURE MINI BASE MIBEL
04	SWAP MINI BASE MIBEL
05	SWAP BASE WIND
11	FUTURE PEAK MIBEL
12	SWAP PEAK MIBEL
13	FUTURE MINI PEAK MIBEL
14	SWAP MINI PEAK MIBEL
41	GAS FUTURE AND SPOT DELIVERABLE at PVB

7.5 ANNEX TABLE 21. Underlying assets

7.5.1 FINANCIAL CONTRACT SUBGROUP

CODE	DESCRIPTION
ANA	ACCIONA
ACX	ACERINOX
ACS	ACS
AENA	AENA
ALM	ALMIRALL
AMS	AMADEUS
A3M	A3MEDIA
MTS	ARCELORMITTAL
SAB	B.SABADELL
BKIA	BANKIA
BKT	BANKINTER
BBVA	BBVA
BBVD	BBVA DIVIDENDOS
BBVDD	BBVA DIV25
B10	BONO 10
CABK	CAIXABANK
CABD	CAIXABANK DIV
CABDD	CAIXABANK DIV25
CAD	CAIXABANK 68
CLNX	CELLNEX
CIE	CIE AUTOMOTIVE

COL	COLONIAL
DIA	DIA
EBRO	EBRO FOODS
ENG	ENAGAS
ENC	ENCE
ELE	ENDESA
FCC	FCC
FER	FERROVIAL
FDR	FLUIDRA
SGRE	SIEMENS GAMESA
NTGY	GAS NATURAL
GASD	GAS NATURAL DIV
GASDD	GAS NATURAL DIV25
GRF	GRIFOLS
IAG	IAG
IBEDD	IBERDROLA DIV25
IBED	IBERDROLA DIVIDENDOS
IBE	IBERDROLA
FIE	IBEX
IBB	IBEX BANCARIO
IBH	IBEX IMPACTO DIV
FIEC	IBEX MICRO
FIEM	IBEX MINI
IBU	IBEX UTILITIES
ITX	INDITEX
ITXD	INDITEX DIV
ITXDD	INDITEX DIV25
IDR	INDRA

LDA	LINEA DIRECTA
MAP	MAPFRE
TL5	MEDIASET
MEL	MELIA HOTELES
MRL	MERLIN
OHLA	OBRASCÓN HUARTE LAIN
PHM	PHARMA MAR
REE	RED ELECTRICA
REPDD	REP DIV25
REPD	REP DIVIDENDOS
REP	REPSOL
SCYR	SACYR VALLE
SANDD	SAN DIV25
SAND	SAN DIVIDENDOS
SAN	SANTANDER
SLR	SOLARIA
TRE	TÉCNICAS REUNIDAS
TEFDD	TEF DIV25
TEFD	TEF DIVIDENDOS
TEF	TELEFONICA
VIS	VISCOFAN

7.5.2 CURRENCY CONTRACT SUBGROUP

CODE	DESCRIPTION (CURRENCY CONTRACTS)
sEURAUD	EURAUD
sEURCHF	EURCHF

sEURGBP	EURGBP
sEURJPY	EURJPY
sEURUSD	EURUSD
sGBPCHF	GBPCHF
sGBPUSD	GBPUSD
sUSDBRL	USDBRL
sUSDCAD	USDCAD
sUSDCHF	USDCHF
sUSDJPY	USDJPY
sUSDMXN	USDMXN
sAUDJPY	AUDJPY
sAUDUSD	AUDUSD
sNZDUSD	NZDUSD
sEURMXN	EURMXN
sEURBRL	EURBRL

7.5.3 ENERGY CONTRACT SUBGROUP

V CODE	DESCRIPTION (ENERGY CONTRACTS)
MIBFTB	FUTURO BASE MIBEL
MIBSWB	SWAP BASE MIBEL
MIBFTBM	FUTURO MINI BASE MIBEL
MIBSWBM	SWAP MINI BASE MIBEL
MIBFTP	FUTURO PUNTA MIBEL
MIBSWP	SWAP PUNTA MIBEL

MIBFTPM	FUTURO MINI PUNTA MIBEL
MIBSWPM	SWAP MINI PUNTA MIBEL
EOLSWB	SWAP BASE EÓLICO
GASPVB	FUTURE AND SPOT GAS PVB

7.6 ANNEX TABLE 28. PRODUCT Families

CODE	DESCRIPTION
EIBXO	Strategies Options MINI IBEX 35
ESTCF	Strategies Single Stock Futures
ESTCO	Strategies Single Stock Options
FBONO	BONO E10 Futures RF
FENGMM	Fut. Energy Monthly
FENGQ	Fut. Energy Quarterly
FENGW	Fut. Energy Weekly
FENGY	Fut. Energy Annual
FGASB	Balance of the Month Gas Future. Physical delivery
FGASD	Daily Gas Spot. Physical delivery
FGASM	Monthly Gas Future. Physical delivery
FGASO	Balance of the Week Gas Future. Physical delivery
FGASQ	Quarterly Gas Future. Physical delivery
FGASS	Seasonal Gas Future. Physical delivery
FGASW	Weekly Gas Future. Physical delivery
FGASY	Yearly Gas Future. Physical delivery

FIBX	Futuros IBEX 35
FIBXD	Futures Ibex Impacto Div
FIBXM	Futures MINI IBEX 35
FIBXS	Sector Futures IBEX 35
FIBXT	Futures IBEX Total Return
FSTCD	Futures s/Div acc
FSTCE	25 Stock Dividend Futures
FSTCK	Single Stock Futures
OIBXM	Options MINI IBEX 35
OSTCK	Single Stock Options
SENGD	Swaps Energy Daily
SENGM	Swaps Energy Monthly
SENGQ	Swaps Energy Quarterly
SENGW	Swaps Energy Weekly
SENGY	Swaps Energy Annual
TBONO	BONO E10 Time-spread
TIBX	Time-spread IBEX 35
TIBXD	Time-spread Ibex impacto Div
TIBXM	Time-spread MINI IBEX 35
TSTCD	Time-spread on Stock Dividends
TSTCK	Single Stock Time-spread
FXRL1	Rolling Spot Futures on currencies 1
FXRL2	Rolling Spot Futures on currencies 2
FXRL3	Rolling Spot Futures on currencies 3
FEROL	Rolling Spot Futures on stocks
FIROL	Rolling Spot Futures on indexes

7.7 ANEXO TABLA TIPOS DE ACTIVO

CODE	DESCRIPTION
ACE	Acciones Españolas
BA	German Bond
BAU	Austrian Bond
BB	Belgian Bond
BF	French Bond
BH	Dutch Bond
BI	Italian Bond
BON	Bonos del Estado Españoles (up to 5 years)
BPV	Basque Bond
BRU	UK Bond
BU	American Bond
CSH	Efectivo
IDX	Deuda indexada
LET	Letras del Tesoro
OBL	Obligaciones del Estado

7.8 ANEXO TABLA CODIGOS MIC

Operating MIC	Segment MIC	DESCRIPCIÓN
---------------	-------------	-------------

BME	XMRV	MEFF - Derivados Financieros
BME	XMPW	MEFF - Derivados Energía
BME	XMTX	MEFF - Derivados Financieros FX

7.9 ANEXO TABLA 14 Tipos de entidades participantes

CODE	DESCRIPTION
L	CLEARING / Compensador
G	Clearing Member General
P	Proprietary Account Trading
N	Non Clearing Member
D	Direct Clearing Client
T	Sponsored Direct Clearing Client
O	Ordinary Non Clearing Member

7.10 ANEXO TABLA 15. Códigos depositarios centrales de valores

CODE	DESCRIPTION
0	NOT APPLY
1	IBERCLEAR
2	CLEARSTREAM
3	EUROCLEAR
4	DECEVAL

5	DCV
6	CUD

Este material ha sido preparado por Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros S. A. (BME) y/o sus filiales (en conjunto, "BME") para el uso exclusivo de las personas a las que BME entrega este material. Este material o cualquiera de sus contenidos no debe interpretarse como un acuerdo vinculante, una recomendación, un consejo de inversión, solicitud, invitación u oferta de compra o venta de información financiera, productos, soluciones o servicios. Dicha información tampoco es un reflejo de posiciones (propias o de terceros) en firme de los intervinientes en el Mercado de Valores Español. BME no tiene ninguna obligación de actualizar, revisar o mantener al día el contenido de este material, y estará sujeto a cambios sin previo aviso en cualquier momento. Ninguna representación, garantía o compromiso -expreso o implícito- es compromiso -expreso o implícito- es o será dado por BME en cuanto a la exactitud, integridad, suficiencia, idoneidad o fiabilidad del contenido de este material.

Al reflejar opiniones teóricas, su contenido es meramente informativo y por tanto no debe ser utilizado para valoración de carteras o patrimonios, ni servir de base para recomendaciones de inversión. Ni las Entidades contribuidoras, ni Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros S.A.(BME) ni de ninguna de sus filiales, serán responsables de ninguna pérdida financiera, ni decisión tomada sobre la base de la información contenida en este material. En general, Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros S. A. (BME) ni ninguna de sus filiales, ni las Entidades contribuidoras, sus administradores, representantes, asociados, sociedades controladas, directores, socios, empleados o asesores asumen responsabilidad alguna en relación con dicha información, ni de cualquier uso no autorizado del mismo.

Este material es propiedad de BME y no puede ser impreso, copiado, reproducido, publicado, transmitido, divulgado o distribuido de ninguna forma sin el consentimiento previo por escrito de BME.

2023 Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros S. A. Todos los derechos reservados.
