



MEFF Website

RAW DATA FILES

MEFF / BME CLEARING

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1. Introduction

1.1 Scope

The purpose of this document is to provide a technical description of the data files available at the MEFF Website.

This information will be provided in plain files, with their definition provided later in this document.

1.2 Structure of document

The first chapter contains general information about this document, including technical details on the format of files, the nature of the record delimiters, etc.

The remaining chapters define the files.

1.3 Conventions used in this document

1.3.1 Definition of files

For each file contained in this document two tables are displayed as described below.

The first table presents the generic information of the file with the following format:

	(1)
<i>Group</i>	(2)
<i>Description</i>	(3)

(1) – File name just as it is generated. All the files have as extension the code of their corresponding environment

(2) – Group that the file belongs to

(3) – Description of the file

The second table describes the format and content of the fields that make up each of the records of the file.

#	*	<i>Field</i>	<i>Type</i>	<i>Valid values</i>	<i>Description</i>
(1)	(2)	(3)	(4)	(5)	(6)

(1) – Number of field in the record.

(2) - Contains “↔” when the field forms part of the file key

(3) – Name of the field

(4) – Type of field as described in the next section

(5) – Valid values or range of values

(6) – Description of the field

1.3.2 Syntax in the files. Data types

This section summarises 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
 - **LongLocalTime**: Local time of file generation in HH:MM:SS.XXXXXX format
Valid values: HH = 00-23, MM = 00-59, SS = 00-59, XXXXXX=000000-999999

1.3.3 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.

1.4 Future versions of this document

1.4.1 New fields

Any new field will always be included at the end of the file affected, so that it has the least possible effect on those systems that have been developed taking the files included in this document as reference.

1.4.2 Fields eliminated

Any field that is eliminated from a file will be replaced by a "FILLER" field without content, which will facilitate compatibility between the previous version and the new version in which the field is eliminated. In each case, the validity of compatibility between versions will be specified.

1.4.3 New files

It should be noted that this document can be modified in the future to include new files.

1.4.4 Highlighting changes

All changes will be shown shaded in grey. The text eliminated from the previous version will be shown using the crossed out font and shaded in grey.

2. Trading Files

2.1 Contract daily data

	TCONTRSTAT.mk
Group	Public daily information
Description	Contract daily data
Destinations	All traders
Privacy	Contains public data
Timing	Static, it is only available at the close of the session.

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract group code
3	↔	ContractCode	String(22)		Contract code
4		HighPrice	Price		High price
5		LowPrice	Price		Low price
6		FirstPrice	Price		First price
7		LastPrice	Price		Last price
8		ClosingPrice	Price		Closing price
9		ClosingVolatility	float		Closing volatility at the close of session. This field is not completed for long term options.
10		ClosingDelta	float		Closing delta at the close of the session. This field is not completed for long term options.
11		PreviousDayClosingPrice	Price		Previous day closing price. It may not be provided in the event that it is the first day of settlement for the contract.
12		PreviousDayClosingVolatility	float		Previous day closing volatility. This field is not completed for long term options. It may also not be provided in the event that it is the first day of settlement for the contract.
13		PreviousDayClosingDelta	float		Previous day closing delta. This field is not completed for long term options. It may also not be provided in the event that it is the first day of settlement for the contract.
14		TotalTrdVolume	Qty		Total traded volume
15		NumberOfTrades	int		Number of trades
16		SessionHighBid	Price		Price of the highest buy order
17		SessionLowOffer	Price		Price of the lowest sell order
18		ForwardPrice	Price		Forward (D+1) reference price (only for FX contracts)

#	*	Field	Type	Valid values	Description
19		PreviousDayForwardPrice	Price		Previous day reference price (forward) (only informed in contracts with deferral feature)

2.2 General trades

TGENTRADES.mk	
Group	Trading
Description	Public information of executed trades

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	TradeExecID	String(12)		Trade register number
4		ContractCode	String(22)		Contract code
5		ExecTime	LongLocal Time		Execution time
6		TradePrice	Price		Price
7		Quantity	Qty		Volume
8		TradeType	char		Trade type
9		MarketID	String(4)		Operating MIC
10		MarketSegmentID	String(4)		Segment MIC
11		Market Mechanism	Char	0: Continuous Auction 3: Quote Driven Market. 4: Dark Order Book. 1: Off Book (including Voice or Messaging Trading). 5: Periodic Auction 6: Request for Quotes.	Trading mechanism
12		ISINCode	String(12)		ISIN Code of the contract. May be empty
13		PublishTime	LocalTime		Publication time

#	*	Field	Type	Valid values	Description
14		Post-TransparencyFlags	String(59)	BENC NPFT LRGS ILQD SIZE TPAC XFPH CANC AMND LMTF FULF DATF FULA VOLO FULV FWAF FULJ IDAF VOLW COAF	Comma-separated posttransparency flags
15		PreviousTradeExecID	String(12)		In case of trade cancellation, trade amendment or leg trade. In leg trades this field includes the Trade Registration Number of the trade in the strategy.
16		ExecDate	LocalDate		Execution Date
17		PublishDate	LocalDate		Publication Date

2.3 Available contracts on T+1

MCONTRACTS.mk	
Group	General Data
Description	General information on the contracts available in the session T+1

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Current session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	ContractCode	String(22)		Contract code
4		ContractSubgroupCode	String(2)	See Table 20 in document 'Codification Tables' or the data in file CCONTRGRP.ch	Contract subgroup
5		ContractTypeCode	String(4)		Contract type
6		StrikePrice	Price		Strike price
7		MaturityDate	LocalDate		Maturity date
8		TradingStartDate	LocalDate		Initial trading date
9		TradingEndDate	LocalDate		Last trading date
10		TSBuyingContractCode	String(22)		Buying Time-Spread contract code (as for the buying order)
11		TSSellingContractCode	String(22)		Selling Time-Spread contract code (as for the buying order)
12		TSZeroBase	Price		Zero base for Time-Spread
13		MaturityMonthYear	String(8)	See NOTE on description	Identifier of maturity. NOTE: - YYYYMM: monthly and quarterly - YYYYMMDD: Not standard - YYYYMMwW: weekly Being: YYYY=year, MM=month, DD=day, w="w", W=week
14		ISINCode	String(12)		ISIN contract code for information purposes. Need not be provided.
15		StartMaturityMonthYear	LocalDate		Start delivery date for Energy segment contracts
16		EndMaturityMonthYear	LocalDate		End delivery date for Energy segment contracts

#	*	Field	Type	Valid values	Description
17		AssetClass	Char(4)	COMM: commodities CRDT: Credit CURR: currency EQU: equities INTR: Interest rate EMAL: Emission allowances	
18		Base product	Char(4)	See Delegated Regulation EU 2017/585	Only for AssetClass=COMM
19		Sub-product	Char(4)	See Delegated Regulation EU 2017/585	
20		Further subproduct	Char(4)	See Delegated Regulation EU 2017/585	
21		SSTI-pre	Amt		
22		LIS-pre	Amt		
23		SSTI-post	Amt		
24		LIS-post	Amt		
25		VersionNumber	Char		Version number (0 if no adjustments have taken place)

3. Clearing Files

3.1 General Data

3.1.1 Holidays

CHOLIDAYS.ch	
Group	General Data
Description	Calendar of settlement holidays

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract Group code
3	↔	HolidayDate	LocalDate		Holiday date
4		RegistrationOpen	Char	S/N	Open for registration

3.1.2 Contract subgroups

CCONTRGRP.ch	
Group	Clearing
Description	Contract subgroups Same content as tables 20 and 21 in document 'Codification Tables'

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	ContractSubgroupCode	String(2)		Contract subgroup
4		ContractSubgroupDescription	String(20)		Description
5		ContractSubgroupUnderlying	String(22)	See Table 21 in document 'Codification Tables'	Code of spot contract for subgroup

3.1.3 Contract types

CCONTRTYP.ch	
Group	Clearing
Description	Contract Types

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date

#	*	Field	Type	Valid values	Description
2		ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	ContractSubgroupCode	String(2)	See Table 20 in document 'Codification Tables' or the data in file CCONTRGRP.ch	Contract subgroup
4	↔	ContractTypeCode	String(4)		Contract type
5		ContractTypeDescription	String(20)		Description
6		PriceMultiplier	float		Multiplier that has to be applied to the contract price
7		Nominal	Amt		Nominal for this type of contract
8		Currency	Currency	see Table 1 in document 'Codification Tables'	Currency in which the price of this type of contract is expressed
9		CalcMethod	char	"1"=Black-76 "2"=Binomial "3"=Black Scholes	Method for calculating prices for this type of contract
10		InternalCode	String(6)		
11		ContractFamily	String(5)	see Table 28 in document "Codification Tables"	
12		All	String(12)		All Identifier
13		PriceType	Int	1 = Price 2= Yield	
14		SecurityType	String(1)	"E"= Strategy "F"=Future "M"=Forward "O"=Option "R"=Roll-over "W"=Swap "S"=Spot "X"=Other	
15		FlexibleIndicator	String(1)	"Y" – No standard "N" - Standard	
16		ExerciseStyle	String(1)	"A"- American "E" - European	
17		SettMethod	String(1)	"P" – physical "C" - cash	
18		PutorCall	String(1)	"P" – Put "C" - Call	

#	*	Field	Type	Valid values	Description
19		Periodicity	Strin(1)	"Y" – Anual "S" – Biannual "Q" – Quaterly "M" – Mensual "m" – Balance of the month "K" – Weekly (L-D) "k" – Balance of the week "B" – Weekly (L-V) "E" – Weekly (S-D) "D" – Daily	
20		AdjustmentsRule	String(1)	"E" – extraordinary "T" – All	
21		CFICode	String(6)	see Table 16 in document 'Codification Tables'	CFICode official EMIR Reporting
22		UnitOfMeasure	Char(20)		Unit of measure of the multiplier
23		BaseCurrency	Char(3)	see Table 1 in document 'Codification Tables'	Currency of the nominal of contracts of this type
24		SettlCurrency	Char(3)	see Table 1 in document 'Codification Tables'	Currency into which settlements of these contracts are converted

3.1.4 Contracts

CCONTRACTS.ch	
Group	Clearing
Description	General information on the contracts available in the session

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	ContractCode	String(22)		Contract code
4		ContractSubgroupCode	String(2)	See Table 20 in document 'Codification Tables' or file CCONTRGRP	Contract subgroup
5		ContractTypeCode	String(4)		Contract type
6		StrikePrice	Price		Strike price
7		MaturityDate	LocalDate		Maturity date
8		TradingEndDate	LocalDate		Last trading date

#	*	Field	Type	Valid values	Description
9		ExerciseUnderlyingContractCode	String(22)		Underlying contract code for exercise
10		MarginUnderlyingContractCode	String(22)		Underlying contract code for margin calculation
11		ArrayCode	String(3)		Array code
12		FILLER	String(2)		Filler (contents not relevant)
13		FILLER	String(2)		Filler (contents not relevant)
14		ExpirySpan	char	Códigos:A..Z, 0..9	Expiry span used for margin calculation
15		MaturityMonthYear	String(8)	See NOTE on description	Identifier of maturity. NOTE: - YYYYMM: monthly and quarterly - YYYYMMDD: Not standard - YYYYMMwW: weekly Being: YYYY=year, MM=month, DD=day, w="w", W=week
16		ISINCode	String(12)		ISIN contract code for information purposes. Need not be provided.
17		StartMaturityMonthYear	LocalDate		Start delivery date for Energy segment contracts
18		EndMaturityMonthYear	LocalDate		End delivery date for Energy segment contracts
19		VersionNumber	Int		Version number (0 if no adjustments have taken place)
20		ForwardMaturityDate	LocalDate		For contracts with deferral feature, it is the theoretical maturity date of the forward. In general, D+3.
21		SpotMaturityDate	LocalDate		For contracts with deferral feature, it is the theoretical maturity date of the spot. In general, D+2.

3.1.5 Parameters for calculation of the deferral fee

CDEFERRALFEEDPAR.ch	
Group	General Data
Description	Parameters for calculation of the deferral fee

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract Group code
3	↔	ContractCode	String(22)		Contract code
4		FloorMarkUp	Amt		Mark-up floor
5		CapMarkUp	Amt		Mark-up cap
6N		NumberOfTranches	Int	<=15	Number of tranches that are defined as follows. Maximum 15
7R		TrancheThreshold	float		Tranche Threshold
8R		BuyMarkUp	float		Mark-up buy tranche
9R		SellMarkUp	float		Mark-up sell tranche

3.2 Public Daily Information

3.2.1 Contract daily data

CCONTRSTAT.ch	
Group	Clearing
Description	Contract daily data

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	ContractCode	String(22)		Contract code
4		HighPrice	Price		Highest session price
5		LowPrice	Price		Lowest session price
6		FirstPrice	Price		First session price
7		LastPrice	Price		Last session price
8		SettlPrice	Price		Settlement price in the session
9		SettlVolatility	float		Settlement volatility at the close of session. This field is not completed for Long term Options.
10		SettlDelta	float		Settlement delta at the close of the session. This field is not completed for long term options.
11		PreviousDaySettlPrice	Price		Previous day settlement price. It may not be provided in the event that it is the first day of settlement for the contract.
12		PreviousDaySettlVolatility	float		Previous day settlement volatility. This field is not completed for long term options. It may also not be provided in the event that it is the first day of settlement for the contract.
13		PreviousDaySettlDelta	float		Previous day settlement delta. This field is not completed for long term options. It may also not be provided in the event that it is the first day of settlement for the contract.
14		TotalRegVolume	Qty		Total registered volume
15		NumberOfTrades	int		Number of trades registered
16		OpenInterest	Qty		Open position
17		AccruedInterest	Price		Accrued interest included in the settlement price. Only for bonds
18		Yield	Price		
19		ForwardPrice	Price		Reference price (forward) for D+1 (only informed in currency derivative contracts)

#	*	Field	Type	Valid values	Description
20		PreviousDayForwardPrice	Price		Previous day reference price (forward) (only informed in contracts with deferral feature)
21		NextDaySwapPoints	Price		Next session expected Swap Points

3.2.2 Currencies

CCCURRENCY.ch	
Group	Public Daily Information
Description	Currencies used by the CCP. Exchange rates to settlement currency

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract Group code
3	↔	Currency	String(3)	see Table 1 in document 'Codification Tables'	Currency. For the FX Contracts, the quote currency or the second of the pair.
4		SettlCurrency	String(3)	see Table 1 in document 'Codification Tables'	Currency in which cash amounts are settled
5		ConversionRate	Price		Conversion rate to the settlement currency

3.3 Margin Calculation Data

3.3.1 Interest rate yield curve

CYIELDCURVE.ch	
Group	Clearing
Description	Information on interest rates used for theoretical price calculations, by ranges

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	CalcType	char	"2"=Margin "3"=Cash value calculation for buyer positions "4"=Cash value calculation for seller positions	Calculation type
4	↔	DayRangeStart	int	>=0 and <= 99999	Number of days from when specified interest rate is to be applied. Less than or equal to DayRangeEnd
5		DayRangeEnd	int	>=0 and <= 99999	Number of days that the specified interest rate is to be applied till. Greater than or equal to DayRangeStart
6		YieldCurveRate	float		Interest rate on the yield curve for the corresponding term. Expressed as percentage.

3.3.2 Skew of volatilities

CVOLATILITYSKEW.ch	
Group	Clearing
Description	Volatility curve used for theoretical price calculations

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	Stock	String(22)		Stock code in cash market
4	↔	MaturityDate	LocalDate		Maturity date
5	↔	InstrumentType	char	"C"=Call "P"=Put "?"=All (Call and Put)	Indicator of whether the record refers to call options, put options, or both
6		VolatilityATM	float		Volatility At The Money. Expressed as percentage.

#	*	Field	Type	Valid values	Description
7		Divisor	int		Divisor of percentage points. Indicates at what percentage the increase of volatility is applied
8		MinimumVolatility	float		Minimum volatility. Expressed as percentage.
9		MaximumVolatility	float		Maximum volatility. Expressed as percentage.
10N		NumberOfRanges	int	<=8	Number of ranges that this record contains. It will be followed by four fields as described below for each range
11R		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.
12R		VariationPoints1	float		Percentage increase / decrease for the strike price >= underlying price
13R		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.
14R		VariationPoints2	float		Percentage increase / decrease for the strike price < underlying price

3.3.3 Valuation array parameters

CVALARRAYS.ch	
Group	Margin Calculation Data
Description	Parameters for each of the margin valuation arrays

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	ArrayCode	String(3)		Margin array code
4	↔	FILLER	String(2)		Filler (contents not relevant)
5	↔	ExpirySpan	char	Códigos:A..Z, 0..9	Expiry span type
6		NumberOfColumns	int	<=41	Number of columns absent large positions
7		PriceFluctuationType	char	"P"=Percentage "T"=By price	Price fluctuation type

#	*	Field	Type	Valid values	Description
8		PriceIncFluctuation	float		Increase fluctuation (left)
9		PriceDecFluctuation	float		Decrease fluctuation (right)
10		VolatilityVariationType	char	"P"=Percentage "T"=Total	Form of applying variation of volatility
11		VolatilityVariation	float		Volatility variation
12		ContractSubgroupCode	String(2)		Contract subgroup reference for off-setting between different underlyings
13		ContractTypeCode	String(4)		Reference contract type for off-setting between different underlyings
14		LargePosThreshold	Float		Delta from which guarantees for large positions are in use.
15		FILLER	Int		
16		NumberOfColumnsLPos	Int	<=16	Number of columns to account for large positions

3.3.4 Intra-commodity spreads

	CINTRASPR.ch
Group	Data for Margin Calculations
Description	Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with the same array code

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	ArrayCode	String(3)		Margin array code
4	↔	FILLER	String(2)		Filler (contents not relevant)
5		FILLER	String(2)		Filler (contents not relevant)
6		FILLER	String(4)		Filler (contents not relevant)
7		FILLER	String(2)		Filler (contents not relevant)
8		FILLER	String(2)		Filler (contents not relevant)
9		FILLER	String(4)		Filler (contents not relevant)
10		FILLER	String(2)		Filler (contents not relevant)
11		Factor	float		Factor
12		MinimumValue	float		Minimum value
13		Spread	float		Spread
14		FILLER	String(2)		Filler (contents not relevant)
15		DayCalc	char	"S"= Time between expiries is expressed in days "N"= Time between expiries is expressed in months	

3.3.5 Inter-commodity spreads

CINTERSPR.ch	
Group	Data for Margin Calculation
Description	Table of offsets to apply in the calculation of margins for positions of opposite sign on contracts with different array code

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	OffsetPriority	String(3)		Priority
4		ArrayCode1	String(3)		Array code 1
5		FILLER	String(2)		Filler (contents not relevant)
6		FILLER	String(4)		Filler (contents not relevant)
7		FILLER	String(2)		Filler (contents not relevant)
8		FILLER	String(2)		Filler (contents not relevant)
9		GroupOffsetDiscount1	Amt		Offset group 1 discount
10		OffsetMultiplier1	float		Offset multiplier 1
11		ArrayCode2	String(3)		Array code 2
12		FILLER	String(2)		Filler (contents not relevant)
13		FILLER	String(4)		Filler (contents not relevant)
14		FILLER	String(2)		Filler (contents not relevant)
15		FILLER	String(2)		Filler (contents not relevant)
16		GroupOffsetDiscount2	Amt		Offset group 2 discount
17		OffsetMultiplier2	float		Offset multiplier 2
18		FILLER	Amt		Filler (not relevant content)
19		DiscountType	char	"D"=Currency "P"=Percentage	Discount type that is applied

3.3.6 Resulting codes for the theoretical cascade

CCONTRREL.ch	
Group	General Data
Description	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.

#	*	Campo	Tipo	Valores válidos	Descripción
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract Group code
3	↔	ContractCode	String(22)		Contract code

#	*	Campo	Tipo	Valores válidos	Descripción
4N		NumberOfRelatedContracts	Int		Number of related contracts that are defined as follows. Maximum 31.
5R		RelatedContractCode	String(22)		Code of resulting contract
6R		ContractInitialDate	LocalDate		Date of initial contract.. In Energy it is the initial date of the delivery period of the resulting contract.
7R		ContractFinalDate	LocalDate		Final date of contract. In Energy, it is the final date of the delivery period of the resulting contract..

3.3.7 Theoretical prices

CTHEORPRICES.ch	
Group	Clearing
Description	Theoretical prices of contracts used for initial margin calculations

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code
3	↔	ContractCode	String(22)		Contract code
4	↔	Side	char	"1"=Buy "2"=Sell	Indicates if the record contains theoretical prices for long or short positions
5N		NumberOfTheoreticalPrices	int		Number of theoretical prices contained in the record. It corresponds of NumberOfColumns from CVALARRAYS file. It is followed by as many fields as indicated here Note: The total number of fields displayed corresponds to the addition of numbers in fields NumberOfColumns and NumberOfColumnsLPos from CVALARRAYS file
6R		TheoreticalPrice	Price		Theoretical price

3.3.8 Deltas

CDELTA.ch	
Group	Clearing
Description	Deltas of contracts used for initial margin calculations

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)	See Table 18 in document 'Codification Tables'	Contract Group code

#	*	Field	Type	Valid values	Description
3	↔	ContractCode	String(22)		Contract code
4	↔	Side	char	"1"=Buy "2"=Sell	Indicates if the record contains deltas for long or short positions
5N		NumberOfDeltas	int		<p>Number of deltas contained in the record. It corresponds of NumberOfColumns from CVALARRAYS file. It is followed by as many fields as indicated here</p> <p>Note: The total number of fields displayed corresponds to the addition of numbers in fields NumberOfColumns and NumberOfColumnsLPos from CVALARRAYS file</p>
		Delta	float		Delta

3.4 Margin Calculation Data – scenario model

3.4.1 Parameters information corresponding to the IM calculation model – scenario model

CMARGINPARAMETERS.ch	
Group	Margin calculation data – scenario model
Description	Parameters information corresponding to the IM calculation model – scenario model

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract group code
3		MporHouse	Int		Number of days - Mpor House
4		MporClient	Int		Number of days - Mpor Client
5		HvarCl	float	Percentage, expressed in parts per one: 5% equals 0.05 (with 4 decimal places). Should correspond to the 25th worst-case scenario	Confidence level HVAR
6		EsCl	float	Percentage, expressed in parts per one: 5% equals 0.05 (with 4 decimal places). Should correspond to the average of the 18th worst scenarios.	Confidence level ES
7		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.
8		NonScaledScenariosNumberFV	Int		Number of non-scaled scenarios for a full valuation. (Do not apply for FX RSF)
9		ScaledScenariosNumberFV	Int		Number of scaled scenarios for a full valuation. (Do not apply for FX RSF)
10		IMbaseBuffer	float		Base IM multiplier factor
11		IMFloorFactor	Float	Percentage, expressed in parts per one: 20% equals 0.20 (with 4 decimal places)	Base IM multiplier factor to obtain the Initial Margin floor
12		Currency	Currency	See table 1 of the "Codification Tables" document.	Currency of following risk data or "Margin Calculation Currency"

#	*	Field	Type	Valid values	Description
13		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.

3.4.2 Parameters information corresponding to the adjustment of the position size

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

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract group code
3	↔	ContractSubgroupCode	String(2)	see table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.	Contract subgroup code
4		ContractSubgroupDescription	String(20)	see table 21 of the "Codification Tables" document	Description of the contract subgroup
5		QuantityMax	Int		Maximum market volume
6N		NumberOfIntervals	Int		Number of intervals that are defined as follows. Maximum 10.
7R		QuantityInterval	Int		The value of this field by QuantityMax marks the border with the following maximum market volume tranche (usually 5 intervals)
8R		Surcharge	float		Illiquidity surcharge expressed in quote Currency

3.4.3 Sovereign Risk factor buffer and decay factor

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

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract group code

#	*	Field	Type	Valid values	Description
3	↔	ContractSubgroupCode	String(2)	see table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.	Contract subgroup code
4		ContractSubgroupDescription	String(20)	see table 21 of the "Codification Tables" document	Description of the contract subgroup
5		RiskFactorBuffer	float		Multiplier factor used to calculate returns.
6		DecayFactorSpot	float		Value of between 0 and 1 used in the EWMA method.
7		DecayFactorSwapPoints	float		Value of between 0 and 1 used in the EWMA method.

3.4.4 Parameters corresponding to the Stress Test calculation model

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

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract group code
3		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
4		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
5		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)
6		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)
7		StressNumScenariosDDBB	Int		Number of worst-case scenarios to be recorded in the database as a result of the Stress Test

#	*	Field	Type	Valid values	Description
8		StressAvgHist	Char	"N"= No, "Y"= Yes	Averages the losses and gains generated in historical scenarios that correspond to the established confidence level. "N"= No, "Y"= Yes
9		StressAvgHypo	char	"N"= No, "Y"= Yes	Averages the losses and gains generated in hypothetical scenarios that correspond to the established confidence level. "N"= No, "Y"= Yes
10		Currency	Currency	see table 1 of the "Codification Tables" document.	Currency of following risk data or "Stress Test Calculation Currency"

3.4.5 Scenarios used by the IM and Stress Test calculation

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

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract group code
4	↔	ContractSubgroupCode	String(2)	see table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.	Contract subgroup code
3	↔	ContractTypeCode	String(4)		Contract type
5	↔	ScenarioType	String(4)		Historical (HIST) or hypothetical (HYPO) scenario
6	↔	ScenarioID	String(18)		Date for historical scenarios Name for hypothetical scenarios
7		Currency	Currency	see table 1 of the "Codification Tables" document.	Currency in which returns are expressed
8		ReturnShiftNonScaled	float	Percentage, expressed in parts per one: 5% equals 0.05 (with a maximum of 15 decimal places)	Return not scaled

#	*	Field	Type	Valid values	Description
9		ReturnShiftScalated	float	Percentage, expressed in parts per one: 5% equals 0.05 (with a maximum of 15 decimal places)	Return scaled

3.4.6 Session's calendar in which technical trade does not apply

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

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract group code
3	↔	ContractSubgroupCode	String(2)	see table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.	Contract subgroup code
4		ContractSubgroupDescription	String(20)	see table 21 of the "Codification Tables" document	Description of the contract subgroup
5N		NumberOfHolidays	Int	<=40	Number of holidays that are defined as follows. Maximum 40.
5R		HolidayDate	LocalDate		Session date in which technical trade does not apply to the contracts related to these subgroup of contracts.

3.4.7 Initial Margin for one-contract position

CIMSINGLEPOSITION.ch	
Group	Margin calculation data – scenario model
Description	Required Initial Margin for a one-contract position

#	*	Field	Type	Valid values	Description
1	↔	SessionDate	LocalDate		Session date
2	↔	ContractGroup	String(2)		Contract group code

#	*	Field	Type	Valid values	Description
3	↔	ContractSubgroupCode	String(2)	see table 20 of the "Codification Tables" document or content of CCONTRGRP.ch file.	Contract subgroup code
4		ContractSubgroupDescription	String(20)	see table 21 of the "Codification Tables" document	Description of the contract subgroup
5		Currency	Currency	see table 1 of the "Codification Tables" document.	Currency of following risk data or "Margin Calculation Currency"
6		InitialMarginLongOnecontract	Amt		Required Initial Margin for a long one-contract position
7		InitialMarginShortOnecontract	Amt		Required Initial Margin for a short one-contract position
8	↔	ContractTypeCode	String(4)		Contract type