

END OF DAY APA SERVICES Technical Specifications

9000 Product

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EDITION CONTROL

Edition	Date	Author
1.00	18/04/2011	BME Market Data

DIFFUSION CONTROL

This Document is not distributed in paper format.

CONTROL OF MODIFICATIONS DUE TO EDITION CHANGE

- 1.00 18.04.2011 – New Document
- 1.01 02.08.2023 – Template updates

1 OBJECTIVE

Daily files with APA end of day information delivered at 20:30.

2 FORMAT AND DATA DELIVERY

2.1 FILE FORMAT

BME MARKET DATA provides the data for this product in files with the txt, json format ("," as field separator and "." as decimal separator). This format is compatible both with databases and spreadsheets. Each field in the file will be separated from the following field by "," and each line ends with the specific character of line end. The files will normally be available at 20:40 CET every trading day of the stock exchange calendar. The file contains Trade Reports (entry, cancellation and modification) and Quotes (entry and cancellation) published through APA BME on a given date. Messages included in this file are written in a JSON format. Messages are enclosed in curly brackets ({ }). The file contains multiple messages in a sequential way (one after another). Each message may represent a Trade Report or Quote message.

2.2 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.

2.3 DATA FORMAT

BME MARKET DATA provides the data for this product in files with the txt format ("," as field separator and "." or "," as decimal separator). This format is compatible both with databases and spreadsheets. Each field in the file will be separated from the following field by "," and each line ends with the specific character of line end.

2.3.1 Numeric Format

No thousand separations are included. The character "." or "," will be used as decimal separator.

2.3.2 Date and Time Conventions

Unless stated otherwise, the date fields are in the format YYYYMMDD being YYYY the year, MM the month and DD the day. Time fields are stated following the format HHMMSS or HHMMSSXX being HH the hour, MM the minute, SS the second and XX second hundredth. Dates and times refer to CET (Central European Time).

The data format are the following:

- DATE TIME: Timestamps expressed in nanoseconds since 1.1.1970.
- CHAR: One alphanumeric character.
- STRING(N): Up to n alphanumeric characters.
- DECIMAL: Decimal number expressed in exponent and mantissa format.
- INTEGER: Integer number.
- BOOLEAN: True or false indicator.

2.3.3 Data Delivery

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

2.3.4 File Names

Name of the files and type:

- BMEA_YYYYMMDD.json (daily file)
- BMEA_YYYYMM.json (monthly file)

The messages include in the files are:

1. Trade Report Message Full Details
2. Trade Report Message Limited Details
3. Trade Report Message Trade Aggregations
4. Systematic Internalisers Quotes

3 APA MESSAGES

The messages include in the files are:

1. Trade Report Message Full Details
2. Trade Report Message Limited Details
3. Trade Report Message Trade Aggregations
4. Systematic Internalisers Quotes

3.1 Trade Report Message (Full Details)

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	last_trade_time	M	DATE TIME	Date and Time when the trade was executed.
TODOS	instrument_id_code	M	CHAR	Instrument identification code type (I=ISIN, O=OTHR).

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	instrument_id	M	STRING(40)	ISIN (or other identifier) of the instrument.
TODOS	last_trade	O	DECIMAL	Price of the instrument within a reported trade. Up to 20 numerical digits with a decimal separator.
TODOS	pending_price_indicator	O	CHAR	Indicator showing that a price is pending.
TODOS	execution_venue_id	O	STRING(4)	Identification of the MIC for which the trade was reported (XOFF or SINT)
TODOS	quotation_type	M	INTEGER	Price Notation
TODOS	currency	O	STRING(3)	Identifies currency used for price (ISO 4217).
TODOS	last_qty	O	DECIMAL	Number of units of the financial instrument of the trade report. Up to 20 numerical digits with a decimal separator. No negative values.
TODOS	qty_unit	O	STRING(25)	Notation of the quantity in measurement unit
TODOS	quantity_in_measurement_unit	O	DECIMAL	Quantity in measurement units
TODOS	nominal_amount	O	DECIMAL	Notional amount
TODOS	settlement_currency	O	STRING(3)	Notional currency
TODOS	distribution_date_time	M	DATE TIME	Publication date and time.
TODOS	trans_id_code	O	STRING (52)	Unique ID (TIC) assigned by the MIFID II engine when a trade entry is reported.
TODOS	venue_id	O	STRING	Venue of publication
TODOS	clearing_flag	O	CHAR	Transaction to be cleared
TODOS	mifir_identifier	M	STRING(10)	ESMA reference: RTS 1 Annex III, RTS 2, Annex IV - Values Equity like: SHRS, ETFS, CRFT, DPRS, OTHR - Values Non-Equity: BOND, ETCS, ETNS, DERV, SDRV, EMAL, SFPS
TODOS	asset_class	O	STRING(4)	ESMA reference: RTS 2 Annex III Table 2.1 to 13.3
TODOS	cfi_code	O	STRING(6)	Unused.
TODOS	emal_type	O	STRING(7)	Type of Emission Allowance
TODOS	contract_size	O	DECIMAL	Unused.
TODOS	Actx	O	BOOLEAN	Agency Cross trade (ACTX)
TODOS	benc	O	BOOLEAN	Benchmark trade report (BENC)
TODOS	tpac	O	BOOLEAN	Package transaction flag
TODOS	sdiv	O	BOOLEAN	Special Dividend (SDIV)
TODOS	rpri	O	BOOLEAN	Transactions which received price improvement Input
TODOS	dupl	O	BOOLEAN	Duplicative trade reports
TODOS	xfph	O	BOOLEAN	Exchange for physicals transaction flag

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	tncp	O	BOOLEAN	Transactions not contributing to the price discovery process
TODOS	entr	O	BOOLEAN	New trade report submitted
TODOS	canc	O	BOOLEAN	Existing trade report cancelled
TODOS	amnd	O	BOOLEAN	Existing trade report amended
TODOS	lrgs	O	BOOLEAN	Trade is large in scale compared with normal market size
TODOS	size	O	BOOLEAN	Trade is large compared to standard market size
TODOS	llqd	O	BOOLEAN	Illiquidity Flag, true if market is not liquid
TODOS	pcom	O	BOOLEAN	Unused
TODOS	conf	O	BOOLEAN	Unused
TODOS	post_trade_deferral	O	CHAR	Trade flag indicating different possible post trade deferral scenarios. '1'=LMTF '2'=DATF '3'=VOLO '4'=FWAF '5'=IDAF '6'=VOLW '7'=FULF '8'=FULA '9'=FULV 'V'=FULJ 'W'=COAF
TODOS	trade_flags	O	STRING	String containing the post trade transparency flags according to MiFID II directive. Different flags separated by a comma.

M = Mandatory

O = Optional

3.2 Trade Report Message (Limited Details)

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	last_trade_time	M	DATE TIME	Date and Time when the trade was executed.
TODOS	instrument_id_code	M	CHAR	Instrument identification code type (I=ISIN, O=OTHR).
TODOS	instrument_id	M	STRING(40)	ISIN (or other identifier) of the instrument.
TODOS	last_trade	O	DECIMAL	Price of the instrument within a reported trade. Up to 20 numerical digits with a decimal separator.
TODOS	pending_price_indicator	O	CHAR	Indicator showing that a price is pending
TODOS	execution_venue_id	O	STRING(4)	Identification of the MIC for which the trade was reported (XOFF or SINT)
TODOS	quotation_type	M	INTEGER	Price notation

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	Currency	O	STRING(3)	Identifies currency used for price (ISO 4217).
TODOS	settlement_currency	O	STRING(3)	Notional currency
TODOS	distribution_date_time	M	DATE TIME	Publication date and time.
TODOS	trans_id_code	O	STRING (52)	Unique ID (TIC) assigned by the MIFID II engine when a trade entry is reported.
TODOS	venue_id	O	STRING	Venue of publication
TODOS	clearing_flag	O	CHAR	Transaction to be cleared
TODOS	mifir_identifier	M	STRING(10)	ESMA reference: RTS 1 Annex III, RTS 2, Annex IV - Values Equity like: SHRS, ETFS, CRFT, DPRS, OTHR - Values Non-Equity: BOND, ETCS, ETNS, DERV, SDRV, EMAL, SFPS
TODOS	asset_class	O	STRING(4)	ESMA reference: RTS 2 Annex III Table 2.1 to 13.3
TODOS	emal_type	O	STRING(7)	Type of Emission Allowance
TODOS	cfi_code	O	STRING(6)	Unused.
TODOS	Actx	O	BOOLEAN	Agency Cross trade (ACTX)
TODOS	Benc	O	BOOLEAN	Benchmark trade report (BENC)
TODOS	Tpac	O	BOOLEAN	Package transaction flag
TODOS	Sdiv	O	BOOLEAN	Special Dividend (SDIV)
TODOS	Rpri	O	BOOLEAN	Transactions which received price improvement Input
TODOS	dupl	O	BOOLEAN	Duplicative trade reports
TODOS	Xfph	O	BOOLEAN	Exchange for physicals transaction flag
TODOS	Tncp	O	BOOLEAN	Transactions not contributing to the price discovery process
TODOS	Entr	O	BOOLEAN	New trade report submitted
TODOS	Canc	O	BOOLEAN	Existing trade report cancelled
TODOS	amnd	O	BOOLEAN	Existing trade report amended
TODOS	Lrgs	O	BOOLEAN	Trade is large in scale compared with normal market size
TODOS	Size	O	BOOLEAN	Trade is large compared to standard market size
TODOS	Ilqd	O	BOOLEAN	Illiquidity Flag, true if market is not liquid
TODOS	conf	O	BOOLEAN	Unused
TODOS	post_trade_deferral	O	CHAR	Trade flag indicating different possible post trade deferral scenarios. '1'=LMTF '2'=DATF '3'=VOLO '4'=FWAF '5'=IDAF '6'=VOLW '7'=FULF '8'=FULA '9'=FULV 'V'=FULJ 'W'=COAF
TODOS	trade_flags	O	STRING	String containing the post trade transparency flags according to MiFID II directive. Different flags separated by a comma.

M = Mandatory

O = Optional

3.3 Trade Report Message (Trade Aggregations)

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	instrument_id_code	M	CHAR	Instrument identification code type (I=ISIN, O=OTHR).
TODOS	instrument_id	M	STRING(40)	ISIN (or other identifier) of the instrument.
TODOS	execution_venue_id	O	STRING(4)	Identification of the MIC for which the trade was reported (XOFF or SINT)
TODOS	quotation_type	M	INTEGER	Price notation
TODOS	Currency	O	STRING(3)	Identifies currency used for price (ISO 4217).
TODOS	qty_unit	O	STRING(25)	Quantity notation in measurement unit
TODOS	settlement_currency	O	STRING(3)	Notional currency
TODOS	distribution_date_time	M	DATE TIME	Publication date and time.
TODOS	venue_id	O	STRING	Venue of publication
TODOS	clearing_flag	O	CHAR	Transaction to be cleared
TODOS	mifir_identifier	M	STRING(10)	ESMA reference: RTS 1 Annex III, RTS 2, Annex IV - Values Equity like: SHRS, ETFS, CRFT, DPRS, OTHR - Values Non-Equity: BOND, ETCS, ETNS, DERV, SDRV, EMAL, SFPS
TODOS	asset_class	O	STRING(4)	ESMA reference: RTS 2 Annex III Table 2.1 to 13.3
TODOS	emal_type	O	STRING(7)	Type of Emission Allowance
TODOS	cfi_code	O	STRING(6)	Unused.
TODOS	total_trade_count	O	INTEGER	For aggregated trades: Total number of trades
TODOS	aggr_group_id	O	STRING(n * 52)	Repeating group of TICs referring to Aggregation (n=TOTAL_TRADE_COUNT)
TODOS	sliding_vwap	O	DECIMAL	For aggregated trades: Volume weighted average price
TODOS	total_volume	O	DECIMAL	For aggregated trades: Total traded volume
TODOS	post_trade_deferral	O	CHAR	Trade flag indicating different possible post trade deferral scenarios. '1'=LMTF '2'=DATF '3'=VOLO '4'=FWAF '5'=IDAF '6'=VOLW '7'=FULF '8'=FULA '9'=FULV 'V'=FULJ 'W' =COAF

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	trade_flags	O	STRING	String containing the post trade transparency flags according to MiFID II directive. Different flags separated by a comma.

M = Mandatory

O = Optional

3.4 SYSTEMATIC INTERNALISERS QUOTES

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	validity_date_time	O	DATE TIME	Quote validity date and time
TODOS	quotation_time	M	DATE TIME	Quote creation date and time
TODOS	instrument_id_code	M	CHAR	Instrument identification code type (I=ISIN, O=OTHR)
TODOS	instrument_id	M	STRING	ISIN (or other identifier) of the instrument.
TODOS	executing_lei	M	String (20)	LEI of the Executing Firm (SI)
TODOS	execution_unit	O	String (20)	Name of the Executing Unit (SI)
TODOS	acceptable_counterparty	O	String (10)	Not used
TODOS	client_reference	O	String (52)	Quote identifier assigned by the client
TODOS	best_bid	O	DECIMAL	Buy price of the quote
TODOS	best_ask	O	DECIMAL	Sell price of the quote
TODOS	execution_venue_id	O	STRING	Identification of the MIC / SI of the quote "SINT"
TODOS	quotation_type	M	INTEGER	Price notation
TODOS	currency	M	STRING(3)	Identifies currency used for price (ISO 4217).
TODOS	best_bid_qty	O	DECIMAL	Quantity on Buy Side of a quote.
TODOS	best_ask_qty	O	DECIMAL	Quantity on Sell Side of a quote.
TODOS	qty_unit	O	STRING	Notation of the quantity in measurement unit
TODOS	contract_size	O	DECIMAL	Unused.
TODOS	quantity_in_measurement_unit	O	DECIMAL	Not used
TODOS	client_full_name	O	STRING	Not used

ASSET TYPE	FILE NAME	REQUIRED	FORMAT	DESCRIPTION
TODOS	client_services	O	STRING	Not used
TODOS	routing_info	O	STRING	Not used
TODOS	nominal_amount	O	DECIMAL	Not used
TODOS	settlement_currency	O	STRING(3)	Notional currency
TODOS	quote_id	M	String (52)	Quote Identifier
TODOS	venue_id	O	String (11)	Venue of publication
TODOS	mifir_identifier	M	STRING	ESMA reference: RTS 1 Annex III, RTS 2, Annex IV - Values Equity like: SHRS, ETFS, CRFT, DPRS, OTHR - Values Non-Equity: BOND, ETCS, ETNS, DERV, SDRV, EMAL, SFPS
TODOS	asset_class	O	STRING	ESMA reference: RTS 2 Annex III Table 2.1 to 13.3
TODOS	emal_type	O	STRING	Type of Emission Allowance
TODOS	cfi_code	O	STRING(6)	Unused.
TODOS	liquidity_class	O	CHAR	ESMA reference: RTS 2 Annex III Table 2.1 to 13.3 0 - Liquid 1 – Illiquid
TODOS	distribution_date_time	M	DATE TIME	Publication date and time
TODOS	qty_in_measurement_unit_bid	O	DECIMAL	Bid quantity in measurement unit.
TODOS	qty_in_measurement_unit_ask	O	DECIMAL	Ask quantity in measurement unit.
TODOS	nominal_amount_bid	O	DECIMAL	Bid nominal amount
TODOS	nominal_amount_ask	O	DECIMAL	Ask nominal amount
TODOS	entr	O	BOOLEAN	New quote submitted
TODOS	canc	O	BOOLEAN	Existing quote cancelled
TODOS	amnd	O	BOOLEAN	Existing quote amended

M = Mandatory

O = Optional

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