

BME Flow Analytics 2.0 (BFA2.0) Technical Specifications

BFA2.0 Product

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1 PRODUCT DESCRIPTION

BME Flow Analytics 2.0 provides insights into the order flow on Bolsa de Madrid by market participant group, per day and security.

1.1 Service Schedule

The file will normally be available T+1 before the market opens.

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

The clients will have at their disposal a support service from 09:00 to 18:30 CET from Monday to Friday. BME Market Data will keep the clients updated regarding any critical modification in the files, or any technical improvement that might take place.

2 FORMAT AND DATA DELIVERY

2.1 File Format

BME Market Data delivers this product under the following format:

- TXT format ("," as field separator and "." or "," as decimal separator). This format is compatible with databases as well as with spreadsheets. Each file field is separated from the following by ";" and each line ends with a specific end of line character.

2.2 Data Formats

2.2.1 Numerical formats

There are no thousands separator and depending on each file the “.” Or the “,” will be used as decimal separator.

2.2.2 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).

2.2.3 Headers of TXT files

The first line of ASCII files (extensions TXT or similar) contains the headings of the file; the rest of lines contain the data.

2.3 Name of Files

PRODUCT	FILE NAME
BME FLOW ANALYTICS 2.0	BME_FLOW_ANALYTICS_V2_EQ_YYYYMMDD.txt

2.4 File Download

The product will be available via SFTP (SSH File Transfer Protocol).

3 CONTENTS

3.1 Security Universe

BME Flow Analytics 2.0 considers the equity market segment and the following Grupo Val(s):

Segment	Grupo Val	Description	RTS 14
EQ	AC	Continuous market	Shares
EQ	CE	Floor Electronic Trading	Shares

3.2 Market Participants Groups and Origin of Flow

Flow metrics are computed for 6 market participant groups, classified based on these 2 fields:

FIELD	VALUES
Customer group	"Customer", "Non-customer"
Geographical origin of flow group	"Spain", "Continental European", "UK and Overseas"

Customer or non-customers are categories that are established depending on the Trading Capacity (field 29, Table 2. Annex I of the COMMISSION DELEGATED REGULATION (EU) 2017/590):

- Customer: trading under the risk-less principal capacity (Trading Capacity = 'AOTC' or 'MTCH')
- Non-Customer: Order flow not classified as «Customer» flow, trading under the principal capacity (Trading Capacity = 'DEAL').

CLASSIFICATION	GEOGRAPHICAL AREA OF LEGAL ENTITY
"Spain" flow	Spain (ES).
"Continental European" flow	Any European country other than Spain, e.g. Germany (DE), Switzerland (CH), Liechtenstein (LI). Ireland (IE) is included here.
"UK and Overseas" flow	The United Kingdom (GB), or any country outside Europe.

The resulting 6 Market Participant Groups are:

MARKET PARTICIPANT GROUP NAME	CUSTOMER GROUP	GEOGRAPHICAL ORIGIN OF FLOW GROUP
Market participant group mp1	Customer	Spain
Market participant group mp2	Customer	Continental European
Market participant group mp3	Customer	UK and overseas
Market participant group mp4	Non-customer	Spain
Market participant group mp5	Non-customer	Continental European
Market participant group mp6	Non-customer	UK and overseas

3.3 Execution Venues Covered and Flow Classification

BFA2.0's metrics are calculated on trades executed on the following order books:

- Central Limit Order Book (CLOB)
- SpainAtMid.

Order flow is classified as follows:

- Overall flow: All shares traded during continuous trading, auctions and Trading-At-Last
- Aggressive flow: Shares aggressively traded during continuous trading
- Passive flow: Shares passively traded during continuous trading

3.4 Data Field

FIELD	TYPE	DESCRIPTION
date	str	Date in YYYYMMDD format
isin	str	ISIN code
ticker	str	Ticker Symbol
nomcompleto	str	Security full name
nomred	str	Security short name
currency	str	Trading currency
grupoval	str	Security group identifier

tipoproducto str ID Product type

The following metrics are shown for all market participant groups with field suffix “_mpx”, where $1 \leq x \leq 6$:

trade_imbalance_mpx	int shares	Buy minus sell number of shares executed by market participant group #x
aggressive_trade_imbalance_mpx	int shares	Buy minus sell number of shares aggressively executed by market participant group #x during continuous trading
passive_trade_imbalance_mpx	int shares	Buy minus sell number of shares passively executed by market participant group #x during continuous trading
auction_trade_imbalance_mpx	int shares	Buy minus sell number of shares executed by market participant group #x during the auctions and Trading-At-Last
trade_volume_mpx	int shares	Total buy and sell number of shares executed by market participant group #x
aggressive_trade_volume_mpx	int shares	Total buy and sell number of shares aggressively executed by market participant group #x during continuous trading
aggressive_trade_buy_volume_mpx	int shares	Total buy number of shares aggressively executed by market participant group #x during continuous trading (buy orders directly executed)
aggressive_trade_sell_volume_mpx	int shares	Total sell number of shares aggressively executed by market participant group #x during continuous trading (sell orders directly executed)
passive_trade_volume_mpx	int shares	Total buy and sell number of shares passively executed by market participant group #x during continuous trading
passive_trade_buy_volume_mpx	int shares	Total buy number of shares passively executed by market participant group #x during continuous trading (buy orders included in the order book)
passive_trade_sell_volume_mpx	int shares	Total sell number of shares passively executed by market participant group #x during continuous trading (sell orders included in the order book)
auction_trade_volume_mpx	int shares	Total buy and sell number of shares executed by market participant group #x during the auctions and Trading-At-Last
auction_trade_open_volume_mpx	int shares	Total buy and sell number of shares executed by market participant group #x during the open auction
auction_trade_close_volume_mpx	int shares	Total buy and sell number of shares executed by market participant group #x during the close auction

auction_trade_volatility_volume_mpx	int shares	Total buy and sell number of shares executed by market participant group #x during the volatility auctions
trade_value_mpx	float eur	Total buy and sell value executed by market participant group #x denominated in trading currency
aggressive_trade_value_mpx	float eur	Total buy and sell value aggressively executed by market participant group #x during continuous trading denominated in trading currency
aggressive_trade_buy_value_mpx	float eur	Total buy value aggressively executed by market participant group #x during continuous trading denominated in trading currency (buy orders directly executed)
aggressive_trade_sell_value_mpx	float eur	Total sell value aggressively executed by market participant group #x during continuous trading denominated in trading currency (sell orders directly executed)
passive_trade_value_mpx	float eur	Total buy and sell value passively executed by market participant group #x during continuous trading denominated in trading currency
passive_trade_buy_value_mpx	float eur	Total buy value passively executed by market participant group #x during continuous trading denominated in trading currency (buy orders included in the order book)
passive_trade_sell_value_mpx	float eur	Total sell value passively executed by market participant group #x during continuous trading denominated in trading currency (sell orders included in the order book)
auction_trade_value_mpx	float eur	Total buy and sell value executed by market participant group #x during auctions and Trading-At-Last denominated in trading currency
auction_trade_open_value_mpx	float eur	Total buy and sell value executed by market participant group #x during open auction denominated in trading currency
auction_trade_close_value_mpx	float eur	Total buy and sell value executed by market participant group #x during closing auction denominated in trading currency
auction_trade_volatility_value_mpx	float eur	Total buy and sell value executed by market participant group #x during volatility auctions denominated in trading currency

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