

BME Flow Analytics Hourly (BFAH) Technical Specifications

BFAH Product

February 2026



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1 PRODUCT DESCRIPTION

This document provides relevant information on the BME Flow Analytics product suite commercialized by BME Market Data, which consists on:

- a) BME Flow Analytics Hourly File: BME_FLOW_ANALYTICS_EQ_1HOUR_YYYYMMDD.txt

1.1 Service Schedule

The files will normally be available at 21:00 CET every trading of the TARGET calendar.

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 market data under the following formats:

- 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 is 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

Name of the files by product and year. A daily file will be generated.

PRODUCT	DAILY / MONTHLY
BME FLOW ANALYTICS HOURLY	BME_FLOW_ANALYTICS_EQ_1HOUR_YYYYMMDD.txt

2.4 File Download

The information is accessible through the Internet via a sFTP (ssh file transfer protocol).

3 CONTENTS

3.1 BME Flow Analytics

Descriptions of the fields to be included in the file BME_FLOW_ANALYTICS_EQ_1HOUR_YYYYMMDD.txt

FIELD CODE	LENGTH	DESCRIPTION
Date	Date	YYYYMMDD
isin	str	ISIN code
ticker	str	Ticker Symbol
nomcompleto	str	Equity full name
nomred	str	Equity short name
currency	str	Trading currency
Grupoval trading_segment_id	str	ID Security group ID for trading segment
Tipoproducto group	str	ID Product type ID for symbol grouping
Intraday_range	Time	090000-095959 100000-105959 110000-115959 120000-125959 130000-135959 140000-145959 150000-155959 160000-165959 170000-180000
trade_imbalance_customer	str	Buy minus sell number of shares executed of customers
aggressive_trade_imbalance_customer	int shares	Buy minus sell number of shares aggressively executed of customers during continuous trading

FIELD CODE	LENGTH	DESCRIPTION
passive_trade_imbalance_customer	int shares	Buy minus sell number of shares passively executed of customers during continuous trading
auction_trade_imbalance_customer	int shares	Buy minus sell number of shares executed of customers during the auctions and Trading-At-Last
trade_volume_customer	int shares	Total buy and sell number of shares executed of customers
aggressive_trade_volume_customer	int shares	Total buy and sell number of shares aggressively executed of customers during continuous trading
passive_trade_volume_customer	int shares	Total buy and sell number of shares passively executed of customers during continuous trading
auction_trade_volume_customer	int shares	Total buy and sell number of shares executed of customers during the auctions and Trading-At-Last
trade_imbalance_non_customer	str	Buy minus sell number of shares executed of non customers
aggressive_trade_imbalance_non_customer	int shares	Buy minus sell number of shares aggressively executed of non customers during continuous trading
passive_trade_imbalance_non_customer	int shares	Buy minus sell number of shares passively executed of non customers during continuous trading
auction_trade_imbalance_non_customer	int shares	Buy minus sell number of shares executed of non customers during the auctions and Trading-At-Last
trade_volume_non_customer	int shares	Total buy and sell number of shares executed of non customers
aggressive_trade_volume_non_customer	int shares	Total buy and sell number of shares aggressively executed of non customers during continuous trading
passive_trade_volume_non_customer	int shares	Total buy and sell number of shares passively executed of non customers during continuous trading
auction_trade_volume_non_customer	int shares	Total buy and sell number of shares executed of non customers during the auctions and Trading-At-Last
trade_volume	int shares	Total buy and sell number of shares executed

FIELD CODE	LENGTH	DESCRIPTION
aggressive_trade_volume	int shares	Total buy and sell number of shares aggressively executed during continuous trading
aggressive_trade_buy_volume	int shares	Total buy number of shares aggressively executed during continuous trading (buy orders directly executed)
aggressive_trade_sell_volume	int shares	Total sell number of shares aggressively executed during continuous trading (sell orders directly executed)
passive_trade_volume	int shares	Total buy and sell number of shares passively executed during continuous trading
passive_trade_buy_volume	int shares	Total buy number of shares passively executed during continuous trading (buy orders included in the order book)
passive_trade_sell_volume	Int shares	Total sell number of shares passively executed during continuous trading (sell orders included in the order book)
auction_trade_volume	int shares	Total buy and sell number of shares executed during the auctions and Trading-At-Last
auction_trade_open_volume	int shares	Total buy and sell number of shares executed during the open auction
auction_trade_close_volume	int shares	Total buy and sell number of shares executed during the close auction
auction_trade_volatility_volume	int shares	Total buy and sell number of shares executed during the volatility auctions
trade_value	int shares	Total buy and sell value executed denominated in trading currency
aggressive_trade_value	float64 eur	Total buy and sell value aggressively executed during continuous trading denominated in trading currency
aggressive_trade_buy_value	float64 eur	Total buy value aggressively executed during continuous trading denominated in trading currency (buy orders directly executed)
aggressive_trade_sell_value	float64	Total sell value aggressively executed during continuous trading denominated in trading currency (sell orders directly executed)

FIELD CODE	LENGTH	DESCRIPTION
	eur	
passive_trade_value	float64 eur	Total buy and sell value passively executed during continuous trading denominated in trading currency
passive_trade_buy_value	float64 eur	Total buy value passively executed during continuous trading denominated in trading currency (buy orders included in the order book)
passive_trade_sell_value	float64 eur	Total sell value passively executed during continuous trading denominated in trading currency (sell orders included in the order book)
auction_trade_value	float64 eur	Total buy and sell value executed during auctions and Trading-At-Last denominated in trading currency
auction_trade_open_value	float64 eur	Total buy and sell value executed during open auction denominated in trading currency
auction_trade_close_value	float64 eur	Total buy and sell value executed during closing auction and Trading-At-Last denominated in trading currency
auction_trade_volatility_value	float64 eur	Total buy and sell value executed during volatility auctions denominated in trading currency

3.1.1 Customer / Non-Customer Classification

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

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

3.1.2 ID Security Group (grupoval)

Possible values for the 'grupoval' field are the following:

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

Only consider regular market.

3.1.3 Member Organization

Market participants are identified by Member ID: A member organisation may have several member IDs through which orders are routed. One member per broker, the activity of a member is grouped in the 4 exchanges (Madrid, Barcelona, Bilbao, Valencia).

3.1.4 Flow Classification

Order flow is classified as follows (Classification, Definition):

- 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 Auction flow Shares traded during auctions and Trading-At-Last
- Customer flow: Trading under the risk-less principal capacity during continuous trading, auctions and Trading-At-Last and not originating from a Sponsored Access User
- Non-customer flow : Shares traded under the principal capacity or originating from a Sponsored Access User during continuous trading, auctions and Trading-At-Last