London Stock Exchange

HISTORICAL DATA PRODUCTS: PARTICIPANT TRADING DATA

Technical Specifications

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Contents

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Introduction

PURPOSE

This document provides detailed information for the Participant Trading Data product including:

- Overview of the service
- Criteria for data inclusion in the service
- Format of the files
- Detailed description of service contents
- Availability of the service
- Other information

It will be updated and reissued when appropriate to do so.

READERSHIP

This document is relevant to both technical and non-technical teams within member firms, information vendors and other market participants who currently have access to, or are interested in accessing, historical data products from London Stock Exchange Group (LSEG).

It is intended to provide all required information to access and interpret Participant Trading Data files, one of our historical data product offerings.

DOCUMENT HISTORY

This document has been subject to the following iterations:

Issue	Date	Description
1.0	20 June 2022	Initial version

In subsequent issues of this document, where amendments have been made, these changes are indicated through the use of red text.

ENQUIRIES

For further information on London Stock Exchange Historical Data products, please contact the LSEG market data team at marketdata@lseg.com.

Further information on London Stock Exchange market data products can be found on our website:

https://www.lseg.com/markets-products-and-services/market-information/market-data

Service Overview

SERVICE DESCRIPTION

The Participant Trading Data service provides intraday, tick-by-tick trading data filtered specifically for that participant. The data, which is delivered at the end of each business day, will detail all the trades that have been executed (for instruments traded on the London Stock Exchange) by the market participant for that day. The data will only show trades involving that member firm (the service is effectively, therefore, a "personalized" tick data service showing all trades for a particular Member ID).

The key benefits of the Participant Trading Data service are:

- Aids member firms and market participants in their settlement and reconciliation activities
- Acts as a term of reference for all trades that have been executed during a given day involving that firm.

The service can be accessed either for:

- One-off historical data purchases, or;
- Ongoing daily subscriptions

CRITERIA FOR INCLUSION IN THE SERVICE

The Participant Trading Data product covers all instruments traded on the London Stock Exchange.

The data can be provided on a MEMBER ID basis or a TRADER GROUP ID basis – clients should specify which is required when requesting the product. If a customer subscribes to more than one MEMBERID or TRADERGROUPID then the data will be provided in separate files.

Additionally the client can choose to include or exclude internalised trades. This should be specified when requesting the product.

Note that the data will include trades reported against a participant by other member firms.

Separate files are available for LSE cash market venue and TRADEcho reported data.

FILE AVAILABILITY

File Publication

The Participant Trading Data file will be published on LSEG's Managed File Transfer (MFT) service.

Customers should refer to the separate Managed File Transfer Connectivity Customer Guide for instructions on how to get access to this service.

Note that the MFT service may not be available during weekend maintenance windows.

File Publication Time

The Participant Trading Data file will be made available around 5:30pm London time every business day for London Stock Exchange cash market data and around 6:30pm London time every business day for TRADEcho data.

The data will contain information relating to the current day's data.

The Exchange will take all reasonable steps to meet the above delivery times and dates, but such times and dates shall be estimates only and the Exchange shall not be liable for failure to meet them. In certain circumstances the publication of files will be delayed, for example on an extremely busy trading day. If a problem is encountered with the extraction process the Exchange will produce the files on a best endeavours basis.

OTHER NOTES

General

If a tradable instrument is dual listed in more than one of the specified segments, multiple occurrences of the same tradeable instrument can occur in the Participant Trading Data download file.

After obtaining the trade data for each participant, to preserve trading confidentiality, participant Counterparty details are removed and set to blank spaces if the trade is novated. In the case of non-novated trades the fields are populated.

Trade Cancellations

Where a trade (excluding automatic trades) has been cancelled the date and time at which this cancellation was executed will be contained in the Trade Cancellation Time Stamp field. The Trade Publication Time Stamp and Trade Time Stamp fields will refer to the publication date and time of the original trade that has been cancelled, and the execution date and time of the original trade respectively. The Trade Code will be the same for both the original trade and the cancelled trade.

For example, the Participant Trading Data download file will contain the following rows:

TICode	TT	PublTstmp	TradeTstmp	CancTstmp	Notes
abc1	O	09:12:00	09:10:00	(blank)	New trade
abc1	O	09:12:00	09:10:00	09:15:00	Cancelled trade

Note that it is possible to receive a trade cancellation message prior to the original trade report - in this case the trade reports are in the wrong order and the cancellation timestamp will be before the original trade report.

Notes Regarding Gilts

It is worth noting that some gilts prices and trades refer to nominal values, where for example, a £105 trade can refer to a £100 stock.

Rebased Data

The data in the tick data service is not rebased and has not been adjusted for corporate actions. If you would like to subscribe to the London Stock Exchange’s SSN service which allows you to monitor corporate actions on an ongoing basis please contact Product Management.

Previous File Formats

This specification sets out the **current** file and field format for Participant Trading Data files. The file and field format for these files changed in Q2 2022. Please contact the LSEG market data team for the file and field formats for data prior to this date.

Technical Specification

FILE FORMAT

Files are created in accordance with the following specifications:

Attribute	Description
File format	csv
Fields delimiter	, (comma)
Field enclosing	Fields may optionally be enclosed by double quotes
Null fields	Will be empty (i.e. contain no data)
Decimal symbol	. (point)
Digit grouping symbol (thousands separator)	None
End of line	\n
Character encoding standard	UTF8

Files will be compressed using gzip and will be published with a .GZ extension. Clients should use widely available software such as 7-Zip or WinZip to access the file contents.

FILE NAME

The Tick Data files shall have the following format:

<Venue Name>_PTD_<Member ID>_<YYYYMMDD>.CSV

For example:

LSE_PTD_ABCD_20211026.CSV is the Tick Data file for 26 October 2021 for member ID ABCD for LSE

TE_PTD_ABCD_20211026.CSV is the Tick Data file for 26 October 2021 for member ID ABCD for TRADEcho

Note that if the customer has selected the date by Trader Group ID instead of Member ID, then the <Member ID> field above will contain the Trader Group ID instead.

TYPE DEFINITIONS

Definitions of the types of data fields are listed below:

Type Definition	Description
Integer	whole number
Float	real number field including a decimal point
Timestamp	format YYYY-MM-DD HH24:MI:SS.FF9
Date Only	format YYYY-MM-DD
Time Only	format HH24:MI:SS
Char(n)	indicates an alpha-numeric field of maximum length n

ISO Cross References

Country ISO3166

Currency	ISO4217 plus GBX (GB pence) and USX (US cents)
ISIN	ISO6166

FIELD FORMAT

Header Record

The header record contains the column headings (comma delimited).

Trailer Record

There is no trailer record.

Data Fields

The following data fields are included in the Participant Trading Data file.

Field	Type	Description
Tradable Instrument Code	Char(12)	Tradable Instrument Code. Together with the Country Of Register, Currency Code and Market Segment, this will uniquely identify a tradable instrument. This will be the International Security Identification Number (ISIN).
Tradable Instrument Display Mnemonic	Char(4)	Tradable Instrument Display Mnemonic. The mnemonic code is allocated by the Exchange and used to identify a tradable instrument.
Issuer Name	Char(35)	The full name of the issuer of a tradable instrument.
Country Of Register	Char(2)	This specifies the Country of Register for a specific tradable instrument. This is an ISO country code (ISO 3166).
Currency Code	Char(3)	The currency in which prices for a tradable instrument are most frequently expressed. This is an ISO currency code (ISO 4217 plus GBX and USX).
Market Segment Code	Char(4)	A code which uniquely identifies a specific trading area as defined by the London Stock Exchange.
Market Sector Code	Char(4	This code identifies a division of the market within Market Segment.
Reserved 1		Reserved for future use
Trade Publication Time Stamp	Timestamp	The date and time at which a trade was published to the market via LMIL.
Trade Cancellation Trade Stamp	Timestamp	The date and time at which a trade was cancelled. This field will be blank if a trade has not been cancelled. Note the PublTstmp and TradeTstmp fields will refer to the original trade that has been cancelled. The TradeCode will be the same for both the original trade and cancelled trade.
Trade Time Stamp	Timestamp	The date and time at which a trade was executed.
Trade Size	Integer	The quantity of tradable instrument which was bought or sold.
Trade Price	Float	The price at which a trade was executed.
Trade Type Indicator	Char(4)	This indicates the type of trade which has occurred. Possible values for this field are set out elsewhere in this document.
Trade Time Indicator	Char(1)	This field indicates whether a reported trade was made outside a normal reporting period, whether it was reported late or whether it was reported on time. Possible values for this field are set out elsewhere in this document.

Trade Code	Char(10)	A code assigned by the Exchange to uniquely identify executed trades. Note a cancelled trade will be assigned the same Trade Code as the original trade that occurred.
Tradeable Instrument Short Name	Char(15)	This field is used to specify the abbreviated name of a tradable instrument.
Trade Report Time	Time Only	The time the trade was reported to the Exchange.
Dealing Capacity Buy	Char(1)	This is used to indicate whether a participant has acted in an agency or a principle capacity. Depending on the message type, there are restrictions on which value can be used. Possible values for this field are set out elsewhere in this document.
Dealing Capacity Sell	Char(1)	This is used to indicate whether a participant has acted in an agency or a principle capacity. Depending on the message type, there are restrictions on which value can be used. Possible values for this field are set out elsewhere in this document.
Buy/Sell Indicator	Char(1)	Identifies whether the participant wishes to buy or sell a quantity of a tradable instrument/currency. Can be either 'B' (Buy) or 'S' (Sell).
Participant Code Buy	Char(11)	TRADER GROUP ID Buy. A code which uniquely identifies an investor, an intermediary or a subscriber
Participant Code Sell	Char(11)	TRADER GROUP ID Sell. A code which uniquely identifies an investor, an intermediary or a subscriber
Client Reference	Char(30)	For Automatic Executions this is the ACCOUNT field from the Order.
Bargain Conditions	Char(16)	A code indicating the conditions agreed between two participants at the time of trading. A maximum of eight codes can be specified. Possible values for this field are set out elsewhere in this document.
Settlement Due Date	Date Only	A date on which a transaction is due to settle.
Contra Status Indicator	Char(1)	If the Trade has been contra'd the flag will be set.
Converted Price Indicator	Char(1)	This field indicates whether the price and currency entered on a trade report is the price and currency in which the transaction was dealt, or whether conversion into the valid currency for the tradable instrument has occurred.
Reserved 2		Reserved for future use
Reserved 3		Reserved for future use

TRADE TYPE INDICATOR

For On Book trades, the trade type indicator will take one of the following values:

Trade Type Indicator	Description
'AT'	Automatic Trade
'CT'	Contra Trade
'UT'	Uncrossing Trade
'PT'	Closing Price Crossing Session Trade
'PC'	Previous Day Contra Trade

'RF'	Request for Quote Trade
'IX'	Internal Cross Trade
'IB'	Internal Block Trade Facility
'CX'	Committed Cross
'CB'	Committed Block Trade Facility

For Off Book trades, the trade type indicator will take one of the following values:

Trade Type Indicator	Description
XLON	Off Book – Executed on London Stock Exchange UK regulated market
XLOM	Off Book – Executed on London Stock Exchange multilateral trading facility (MTF), but not including AIM
AIMX	Off Book – AIM security executed on London Stock Exchange MTF
XOFF	OTC Trade (Not subject to Rules of London Stock Exchange)
SINT	SI Trade (Not subject to Rules of London Stock Exchange)
MIC of MTF	MTF trade (Not subject to Rules of London Stock Exchange) The trade type indicator will be set to the MIC code of the relevant Multilateral Trading Facility (MTF)
MIC of OTF	OTF trade (Not subject to Rules of London Stock Exchange) The trade type indicator will be set to the MIC code of the relevant Organised Trading Facility (OTF)

Please note these are subject to change – customers should refer to the 'Business and technical parameters' document in the Technical Library section of the London Stock Exchange website:

https://www.londonstockexchange.com/resources/trade-resources?tab=technical-library

TRADE TIME INDICATOR

The following order trade time indicators are used in the Trade Time Indicator field:

Trade Time Indicator	Description
'N'	Normal
'L'	Late
'O'	Overnight

DEALING CAPACITY

The following dealing capacity values are used in Dealing Capacity Buy and Dealing Capacity Sell fields:

Dealing Capacity Value	Description
'S'	Riskless Principal
'P'	Principal
'A'	Agency

BARGAIN CONDITIONS

The following bargain condition indicators are used in the field Bargain Condition fields:

Bargain Condition Indicator	Description
‘CD’	Special cum Dividend
‘XD’	Special ex Dividend
‘CC’	Special cum Coupon
‘XC’	Special ex Coupon
‘CB’	Special cum Bonus
‘XB’	Special ex Bonus
‘CR’	Special cum Rights
‘XR’	Special ex Rights
‘CP’	Special cum Capital Repayments
‘CS’	Cash Settlement
‘SP’	Special Price
‘TR’	Report with European Equity Market Securities in accordance with Chapter 8 of the Rules
‘GD’	Guaranteed Delivery
‘XP’	Special ex Capital Repayments