LSE Equity Trade and Quote Data
File Format Document

Version 2.5

Overview

Tick Data provides three types of market data for issues traded on the London Stock Exchange:

(1) Trade data on all companies traded on all segments.
(2) Best Bid-Ask (BBA) Quote data without volume for all companies traded on all segments (including the quote driven SEAQ segment). NOTE: This product was decommissioned 04/20/2009*
(3) Enhanced Bests (EB) Quote data with volume.*

* Prior to 4/20/09 the EB product only contained data for the following segments: **AMSM, ETCS, ETF2, ETFS, INSD, LVSD, SET1, SET2, SET3, SSMM, SSMU, STMM**
Beginning 4/20/09 the EB product includes the following segments: **AIM, AIMI, AMSM, ASQ1, ASQ2, ASQN, ASX1, ASX2, ASXN, CNVE, EQS, ETC2, ETCS, ETCU, ETF2, ETFS, ETFU, GILT, INSD, IOB, IOBE, IOBU, IRSQ, IRSU, ITBB, ITBU, ITR, LVSD, MISL, NSTS, SET1, SET2, SET3, SFM1, SFM2, SFM3, SFM4, SSMM, SSMU, SSQ3, SSQ4, SSX3, SSX4, STBS, STMM**

A description of the fields for each data type is listed below. These descriptions are based on the following document available through the London Stock Exchange and referred to as “Issue #15” in this document. Specifically, section 6 "Field Definitions" of this document provides an alphabetical description of all fields associated with LSE market data. Most of these fields apply to real time data or messaging and are nor relevant to historical data. Please download this document from:

http://www.londonstockexchange.com/information-providers/technical-library/technical-specifications/tis-104-data-formats.pdf

Trades and Cancelled Trades

Sample

09/24/2007,07:15:01,09/21/2007,17:28:36,,,632.34,74100,O,O,A6001GIFK7,X,
09/24/2007,07:15:28,09/21/2007,17:24:51,,,633.5,950000,O,O,A6001GIFKH,X,
09/24/2007,07:15:46,09/21/2007,17:49:59,,,631.9886,200000,O,O,A6001GIFL4,X,
09/24/2007,07:15:46,09/21/2007,17:49:59,,,633.5,250000,O,O,A6001GIFL5,X,
09/24/2007,07:16:49,09/21/2007,17:20:37,,,634.96,90000,O,O,A6001GIFNO,X,

Trade files and Cancelled Trade Message files have identical formats. The cancelled trade messages are separated into separate files since we believe they do not necessarily represent the real time nature of trading as cancels are often posted several days after they Trade was published. The cancelled trade messages are provided in case you prefer to eliminate the Trade referenced by the cancelled trade message (NOTE: this is a practice that obviously cannot be replicated in real time).

Field	Type	Description
Publish Date	MM/DD/YYYY	
Publish Time	HH:MM:SS:mmm	
Trade Date	MM/DD/YYYY	
Trade Time	HH:MM:SS:mmm	
Cancelled Date	MM/DD/YYYY	Blank if not a cancelled trade
Cancelled Time	HH:MM:SS:mmm	Blank if not a cancelled trade
Price	Numeric decimal	
Volume	Numeric integer	
TT	Trade Type Indicator	This indicates the type of trade which has occurred for Off Exchange trading. ***See Appendix-A for more details.***
I	Trade Time Indicator	N=Normal, L=Late, O=Overnight
Trade Code	Alphanumeric	A code which is assigned by the Exchange to uniquely identify executed trades. This field is reserved in the trade report messages which are sent from the participant to the Exchange.
Exclude Record Flag	Character (1)	**X** if Tick Data believes this trade should be ignored due to characteristics of the data.
Filtered Price	Numeric decimal	
“X”	Character (1)	CFD Order Buy "Y" - Indicates that the trade executed was a CFD Buy. "N" - Indicates that the trade was not a CFD trade, and was a normal equity trade
“Z”	Character (1)	CFD Order Sell

		"Y" - Indicates that the trade executed was a CFD Sell. "N" - Indicates that the trade was not a CFD trade, and was a normal equity trade.

Quotes – Level 1 Enhanced

Sample

09/24/2007,08:00:01.000,646.0,621.0,633.5,206382,59657,9,8,Y,Y,F
09/24/2007,08:00:04.000,646.0,621.0,633.5,206382,66657,9,9,Y,Y,F
09/24/2007,08:00:22.000,636.5,639.0,638.0,88416,11870,1,1,N,N,F
09/24/2007,08:00:24.000,637.0,639.0,638.0,5000,11870,1,1,N,N,F
09/24/2007,08:00:27.000,636.5,639.0,638.0,38416,11870,1,1,N,N,F
09/24/2007,08:00:31.000,636.5,639.0,638.0,38395,11870,1,1,N,N,F
09/24/2007,08:00:35.000,636.5,639.0,638.0,33395,11870,1,1,N,N,F

Field	Type	Description
Date	MM/DD/YYYY	
Time Stamp	HH:MM:SS:mmm	
Bid Price	Numeric decimal	
Ask Price	Numeric decimal	
Mid Price	Numeric decimal	
Bid Size	Numeric integer	
Ask Size	Numeric integer	
Number of Orders at Best Price	Numeric integer	
Number of Orders at Best Ask	Numeric integer	
Bid Market Orders Indicator	Alphanumeric	‘Y’ - Market orders exist on the buy side of the book ‘N’ - Market orders do not exist on the buy side of the book
Offer Market Orders Indicator	Alphanumeric	‘Y’ - Market orders exist on the sell side of the book ‘N’ - Market orders do not exist on the sell side of the book
Best Price Status Indicator	Alphanumeric	Indicates the status of the order book best price for an instrument. ***See Appendix-B for more details.***

Quotes - Best Bid/Ask (bba)

Sample

09/24/2007,08:00:22.000,636.5,639.0,638.0,F
09/24/2007,08:00:24.000,637.0,639.0,638.0,F
09/24/2007,08:00:27.000,636.5,639.0,638.0,F
09/24/2007,08:00:37.000,637.0,639.0,638.0,F
09/24/2007,08:00:37.000,637.0,641.0,639.0,F
09/24/2007,08:00:37.000,637.0,641.0,639.0,F
09/24/2007,08:00:37.000,639.5,641.0,640.5,F
09/24/2007,08:00:37.000,638.0,641.0,639.5,F

Field	Type	Description
Date	MM/DD/YYYY	
Time Stamp	HH:MM:SS:mmm	
Bid Price	Numeric decimal	
Ask Price	Numeric decimal	
Mid Price	Numeric decimal	
BBA Indicator	Alphanumeric	Indicates the status of the order book best price for an instrument. ***See Appendix-B for more details.***

Corporate Actions

All fields in the following files are comma separated.

Company Information

Field
symbol
file name
company name
TI code
country
currency
LSE segment
sector
start date
end date
company id

Splits

Field
Company ID#
Effective date
Ratio

Dividends

Field
Company ID#
Declared Date
Ex-Date
Record Date
Pay Date
Net Amount
Gross Amount
Currency Type

Appendix A - Trade Type Indicator

From Data Formats - Issue 15 / May 2008

Trade Type	**Description**	**Venue ID**
AT	Automatic Trade	XLON
UT	Uncrossing Trade	XLON
CT	Contra Trade	XLON
O	Ordinary trade immediate publication	XLON
OK	Ordinary trade delayed publication	XLON
NT	Negotiated trade immediate publication	XLON
NK	Negotiated trade delayed publication	XLON
PC	Previous day contra trade	XLON
LC	Late correction	XLON
NM	Not to mark	XLON

***Legacy Trade Type Indicator Values**
From Data Formats – Issue 13 / September 2005

Trade Type	**Trade Item**	**Description**
O	Ordinary Trade	If reporting a transaction that is not covered by any of the trade types listed below.
B	Broker to Broker	If reporting a transaction between two member firms where neither firm is registered as a market maker in the security in question and neither is a designated fund manager. This indicator shall also be applied by the broker when buying or selling domestic equity market securities through a broker that is not a member firm.
EU	Euro Automated Trades	
ER	Euro Trades	
DC	Dual Sided trade report Contra	
K	Block Trade	If reporting a transaction using the block trade facility.
LC	Late Trade Correction	If reporting a correction submitted more than three days after the trade date or where deferred publication is permitted at any time after the trade report was submitted to the Exchange reporting system.
M	Market Maker to Market	If reporting a transaction between two market makers registered in the security in question including those

	Maker including through IDB	executed through an inter dealer broker or a public display system.
N	Non Protected Portfolio	If reporting a non-protected portfolio transaction or a fully disclosed portfolio transaction.
NM	Not to Mark	If reporting a transaction where the Exchange has granted permission for non-publication.
NR	Non Risk (SEATS Based Segments only)	If reporting a non-risk transaction.
P	Protected Portfolio	If reporting a protected portfolio transaction or, if reporting a trade resulting from a worked principal agreement for a portfolio transaction.
R	Riskless Principal transaction at different Price	If reporting a riskless principal transaction with two non members, where the two transactions are executed at different prices or on different terms (this requires two separate trade reports).
RO	Result of Option	If reporting a transaction which resulted from the exercise of an option.
RT	Risk Trade (SEATS Based Segments only)	If reporting a risk transaction.
ST	SEAQ Trade	This is used for the single uncrossing trade, detailing the total executed volume and uncrossing price as a result of a SEAQ auction.
SW	Stock Swap	If reporting transactions comprised in a stock swap or stock switch (one report is required for each line of stock swapped or switched).
UT	Uncrossing Trade	This is used for the single uncrossing trade, detailing the total executed volume and uncrossing price as a result of a SETS auction.
X	Cross at the Same Price	Where the transaction was effected as an agency cross or a riskless principal transaction at the same price and on the same terms (this requires one trade report).
AT		An automatic trade generated by the system through automatic execution. This trade type should not be input by participants into the system.
PA		If reporting a protected transaction at the time that protection is applied.
PC	Previous Day Contra	Used when reporting a Contra Trade when the contra date is not the trade date.
T		If reporting a single protected transaction.
WN	Worked Principal Notification	If notifying the Exchange that a member firm has entered into a worked principal agreement for a single security.
WT	Worked Principal Trade	If reporting the trade resulting from a worked principal agreement for a single security.

CT	Contra Trade	Used to publish a contra trade in a previously automatically executed trade through the order book.
AI	Automated Input facility	If reporting that a member firm has disabled its automated input facility in response to a request from the Exchange.
PN	Worked Principal Portfolio Notification	If reporting that a Member firm has agreed to take on a worked principal agreement for a portfolio transaction.
VW	Volume Weighted Average Price	When reporting a transaction that was effected at a price based on a volume weighted average price over a given period.

Appendix- B – Best Price Status Indicator

It is populated as follows, rules in order of precedence:

Best Price Status Indicator	Description
M	Only market orders exist on the book
F	Firm best bid and offer price
N	One or both sides of the book empty
S	At least one Firm bid or offer price on one side of the book and only market orders on the other side of the book.

The following tables show how this value is derived in all possible order book situations, for both auction call and continuous trading periods.
"Last Trade" refers to the last automatic trade price.

Table 1: Best Price Message fields for Automatic Execution Periods:

Order Book		Best Price Message Fields			
Buy Side	**Sell Side**	**Best Bid Price**	**Best Ask Price**	**Mid Price**	**Best Price Status Indicator**
Firm	Firm	Best Bid	Best Ask	Mid	F
Firm	Empty	Best Bid	Zero	Best Bid	N
Empty	Firm	Zero	Best Ask	Best Ask	N
Empty	Empty	Zero	Zero	Zero	N

Table 2: Best Price Message fields for Auction Call periods (no Automatic execution):

Order Book		Best Price Message Fields			
Buy Side	**Sell Side**	**Best Bid Price**	**Best Ask Price**	**Mid Price**	**Best Price Status Indicator**
Firm	Firm	Best Bid	Best Ask	Mid	F
Firm	Market	Best Bid	Zero	Best Bid	S
Market	Firm	Zero	Best Ask	Best Ask	S
Firm	Empty	Best Bid	Zero	Best Bid	N

Empty	Firm	Zero	Best Ask	Best Ask	N
Market	Market	Zero	Zero	Zero	M
Market	Indicative	Zero	Best Ask	Best Ask	I
Market	Empty	Zero	Zero	Zero	M
Empty	Market	Zero	Zero	Zero	M
Empty	Indicative	Zero	Best Ask	Best Ask	N
Empty	Empty	Zero	Zero	Zero	N