



**Pan-Europe MTF Equity Trade and Quote Data
File Format Document**

Version 1.2

1.0 Trade Data

Sample

01/02/2015,08:00:18.373,62.14,103,0,XFRA,,,T
01/02/2015,08:00:18.373,62.14,99,1,XFRA,,,C
01/02/2015,08:00:18.375,62.14,105,,XFRA,,,B
01/02/2015,08:00:18.925,62.05,54,0,XFRA,,,T
01/02/2015,08:00:18.925,62.05,24,0,XFRA,,,T
01/02/2015,08:00:18.925,62.02,24,0,XFRA,,,T
01/02/2015,08:00:18.929,62.05,64,1,XFRA,,,C
01/02/2015,08:00:18.929,62.05,37,1,XFRA,,,C
01/02/2015,08:00:18.936,62.16,29,1,XFRA,,,C
01/02/2015,08:00:20.466,62.14,54,1,XFRA,,,C
01/02/2015,08:00:21.501,62.18,63,0,XFRA,,,T
01/02/2015,08:00:21.501,62.18,29,0,XFRA,,,T
01/02/2015,08:00:21.503,62.18,73,1,XFRA,,,C
01/02/2015,08:00:21.503,62.18,34,1,XFRA,,,C
01/02/2015,08:00:21.545,62.205,272,2,XFRA,,,C
01/02/2015,08:00:21.559,62.25,134,1,XFRA,,,C
01/02/2015,08:00:21.571,62.24,304,2,XFRA,,,C

File Layout

Each tick contains 9 fields of data in all ASC files. These fields are comma-separated and are laid out as follows:

<u>Data Field</u>	<u>Characteristics</u>
Trade Date	MM/DD/YYYY
Trade Time	HH:MM:SS.000 – milliseconds (use this custom format in Excel)
Price	Numeric
Volume	Numeric
Sales Condition	Numeric (<i>See Appendix A – Sales Condition Codes</i>)
Exchange Code	Exchange MIC Code (<i>See Appendix C – Exchange Codes</i>)
Exclude Record Flag ¹	Filtered trade indicator. “X” is present if Tick Data recommends exclusion of trade from time series due to condition code(s).
Filtered Price	A suggested replacement trade price if Tick Data’s proprietary algorithms suspect the report trade price is in error.
MTF Feed	MTF feed source (<i>See Appendix B – MTF Feeds</i>)

¹ All trades with Sales Condition Codes 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 22 are excluded. These trades can be included by checking the box for ‘Use Excluded Records in Output’ under the *Formatting/Filtering* tab.

2.0 Quote Data

Sample

01/05/2015,08:00:17.022,60.52,0.00,107,0,XFRA,B
01/05/2015,08:00:17.022,60.52,60.82,107,107,XFRA,B
01/05/2015,08:00:17.022,60.52,0.00,109,0,XFRA,C
01/05/2015,08:00:17.024,60.52,0.00,107,0,XFRA,T
01/05/2015,08:00:17.024,60.52,60.82,107,107,XFRA,T
01/05/2015,08:00:17.028,60.52,60.82,109,109,XFRA,C
01/05/2015,08:00:17.038,60.59,60.82,40,107,XFRA,T
01/05/2015,08:00:17.038,60.59,60.82,76,107,XFRA,T
01/05/2015,08:00:17.044,60.64,60.82,100,107,XFRA,T
01/05/2015,08:00:17.044,60.64,60.77,100,100,XFRA,T
01/05/2015,08:00:17.044,60.64,60.77,100,136,XFRA,T
01/05/2015,08:00:17.046,60.57,60.82,100,109,XFRA,C
01/05/2015,08:00:17.046,60.57,60.77,100,100,XFRA,C
01/05/2015,08:00:17.046,60.57,60.77,136,100,XFRA,C
01/05/2015,08:00:17.046,60.57,60.77,136,136,XFRA,C
01/05/2015,08:00:17.047,60.57,60.82,100,107,XFRA,B

File Layout

Each tick contains 8 fields of data in all ASC files. These fields are comma-separated and are laid out as follows:

<u>Data Field</u>	<u>Characteristics</u>
Quote Date	MM/DD/YYYY
Quote Time	HH:MM:SS.000 – milliseconds (use this custom format in Excel)
Bid Price	Numeric
Ask Price	Numeric
Bid Size	Numeric
Ask Size	Numeric
Exchange Code	Exchange MIC Code (<i>See Appendix C – Exchange Codes</i>)
MTF Feed	MTF feed source (<i>See Appendix B – MTF Feeds</i>)

Appendix A – Sales Condition Codes

MTF Feed	Sales Condition	Description	Excluded (X)*
Turquoise	0	Lit execution	
	1	Dark execution - Integrated book	
	2	Dark execution - Dark Midpoint book	
	3	Off-book trade	X
BATS/Chi-X	0	Hidden order execution	
	1	Visible order execution	
	2	Bats/Chi-X Delta Dark Pool	
	3	Negotiated Plain-vanilla Trade	X
	4	Negotiated Trade with Conditions	X
	5	Negotiated Give-up/Give-in Trade	X
	6	Negotiated Technical Trade	X
	7	Crossed Plain-vanilla Trade	X
	8	Crossed Technical Trade	X
	9	Crossed Give-up/Give-in Trade	X
	10	Crossed Trade with Conditions	X
	11	Amended Plain-vanilla Trade	X
	12	Amended Technical Trade	X
	13	Amended Give-up/Give-in Trade	X
	14	Amended Trade with Conditions	X
	15	Benchmark Plain-vanilla Trade	X
	16	Benchmark Technical Trade	X
	17	Benchmark Give-up/Give-in Trade	X
	18	Benchmark Trade with Conditions	X
	19	Ex/Cum dividend Plain-vanilla Trade	X
	20	Ex/Cum dividend Technical Trade	X
	21	Ex/Cum dividend Give-up/Give-in Trade	X
22	Ex/Cum dividend Trade with Conditions	X	

* All trades with Sales Condition Codes 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 22 are excluded. These trades can be included by checking the box for 'Use Excluded Records in Output' under the *Formatting/Filtering* tab.

Appendix B – MTF Feeds

MTF Feed	Description
B	BATS
C	Chi-X
T	Turquoise

Appendix C – Exchange Codes

Exchange Code	Description
XPAR	Euronext - Euronext Paris
XBRU	Euronext - Euronext Brussels
XLIS	Euronext - Euronext Lisbon
XAMS	Euronext - Euronext Amsterdam
XFRA	Germany - Deutsche Boerse AG
XETR	Germany - XETRA
XMIL	Italy - Borsa Italiana S.P.A.
MTAA	Italy - Electronic Share Market
ETFP	Italy - Electronic Open-End Funds and ETC Market
EXPA	Italy - Expandi Market
XLON	U.K. - London Stock Exchange
CHIX	U.K. - Bats Chi-X Europe - CXE Order Books
XOSL	Norway - Oslo Børs ASA
XCSE	NASDAQ OMX Nordic - Copenhagen A/S
XHEL	NASDAQ OMX Nordic - Helsinki Ltd.
XICE	NASDAQ OMX Nordic - Iceland Hf.
XSTO	NASDAQ OMX Nordic - Stockholm AB
XMAD	Spain - Bolsa De Madrid
XBAR	Spain - Barcelona Stock Exchange
XMCE	Spain - Mercado Continuo Espanol
XCAS	Spain - Casablanca Stock Exchange
XSWX	Switzerland - Six Swiss Exchange
XVTX	Switzerland - Virt-X
XQMH	Switzerland - Scoach Switzerland