



Cboe Europe CEDX Trade Data Specification

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1 Overview

This document describes the file format of the Cboe Europe trade data files for CEDX. These files contain details of each trade side matched or reported through CEDX, providing reconciliation of the day's activity. The files are formatted in simple comma-separated value (CSV) format, making them easy to parse or view in a spreadsheet program such as Microsoft Excel.

1.1 Availability

Files are available on demand (representing trading activity up to that point in time for same day data) and up until no later than 9:00pm London time on the day of trading. Separate reconciliation files are available the CEDX certification and production environments

It is also possible to access the trade data file for the last five trading days by providing a specified data as below, with the date supplied in YYYY-MM-DD ISO date format.

For example: www.batstrading.co.uk/cedx/account/trade_data/data/YYYY-MM-DD/ will return the file for YYYY-MM-DD.

Separate files are available for Certification and Production.

1.2 URLs

Files are available in the member section of the Cboe public website via HTTPS. Any automated processes will need to utilise HTTP Basic Authentication.

Whilst the URLs provided are correct at time of writing, the definitive reference is the trade data web page. Cboe reserves the right to change the URLs at any time, although we will endeavour to ensure backwards compatibility. Participants should ensure that any automated processes are configured to follow redirections.

1.2.1 Production

Same Day:

https://www.batstrading.co.uk/cedx/account/trade_data/data/

Historic:

https://www.batstrading.co.uk/cedx/account/trade_data/data/YYYY-MM-DD/

1.2.2 Certification

Same Day:

https://certification.batstrading.co.uk/cedx/account/trade_data/data/

Historic:

https://certification.batstrading.co.uk/cedx/account/trade_data/data/YYYY-MM-DD/

1.3 Programmatic Download

If you want to automate the download of this dynamic data file, there are several options. One method would be to use the `wget` command. Note that your version of `wget` may have slightly different options. For example, some versions of `wget` use the `-http-passwd` option instead of `-http-password`. The command below should all be on one line.

```
wget --tries=1 --http-user=myusername --http-password=mypassword --auth-no-challenge -O trade_data.csv  
"https://certification.batstrading.co.uk/cedx/account/trade_data/data/?clearing_symb=all"
```

The Trade Data Portal application allows the user to download trades for all clearing identifiers your organisation trades with that you have access to, or filter a specific clearing identifier. This is also possible via programmatic download with the `clearing_symb` param as illustrated above.

2 Trade Data File

2.1 MMT

In upcoming descriptions about the content of the trade data file, repeated reference will be made to the Market Model Typology standard ("MMT"). See <https://www.fixtrading.org/mmt> for more details.

All currently defined MMT v3 levels are supported in the file, with the exception of MMT Level 3.4 (Modification Indicator). Only the latest state of any trade is provided, so cancelled trades do not appear and for amended trades, only the most recent amended state will appear.

For MMT columns the values listed in this document show the corresponding four-character ESMA code in *italic*. These parenthesized codes are added here for clarity and are not output in the trade data file.

2.2 Representation of Simple and Complex Strategy Trades

Trades in simple futures and options contracts are represented by a single row in the trade data file with the *Symbol Type* column set to *option* or *future* accordingly. The *Complex Instrument Id* and *Complex Execution Id* columns will be blank for these trades.

Complex futures, complex options and volatility strategy trades each result in multiple simple futures and options trades. Each of the trades in simple futures and options result in an individual row in the Trade Data File with the *Symbol Type* column set to *option* or *future* accordingly. Each complex strategy trade is allocated a unique *Complex Execution ID* which will be populated in the *Complex Execution Id* column of each simple futures and options trade row. Similarly, the *Complex Symbol Id* will also be populated for each simple trade to allow the user to tie the trade back to the complex instrument.

2.3 Heading and Data

The heading line describes the format of the data rows which will follow. It is *highly* recommended that parsers be able to ignore new columns which are added over time. New columns may be added at any time. However, to aid in backward compatibility, columns will not be removed or reordered without an adequate notice period.

	Column Name	Type	Value Interpretation
1	Trade Day	ISO Date	The date the trade was matched by Cboe, or for trade reports, the date of the underlying trade.
2	Trade Time	Time	The time the trade was matched by Cboe, or for trade reports, the time of the underlying trade (London time).
3	Sending Firm	String	The four character firm identifier of the firm owning the port that originated the trade.
4	PSID	String	The bank code of the trading firm responsible for the trade.
5	Subscriber Id	String	The four character identifier for the firm responsible for the trade.
6	Session Id	String	The port session id over which the trade was originated.
7	Clearing BIC	String	The Broker Identification Code (BIC) that was sent to EuroCCP identifying the clearing firm responsible for the trade.
8	Trading BIC	String	The BIC that was sent to EuroCCP identifying the trading firm responsible for the trade.
9	Clearing Account	String	If specified on order entry, a four character clearing account.
10	Client Order Id	String	The client's reference for either the original order or the trade report.
11	Cboe Order Id	String	The Cboe allocated reference for the original order or side of the trade report.
12	Execution Id	String	The Cboe allocated reference for the trade.
13	Complex Execution Id	String	Blank for trades in simple futures and simple options. The Cboe allocated reference for the trade.
14	Symbol	String	The symbol (in Cboe symbology) in which the trade occurred.
15	ISIN	String	The ISIN for the symbol on the relevant day of the trade.

	Column Name	Type	Value Interpretation
16	Complex Instrument Id	String	Blank for trades in simple futures and simple options otherwise the Cboe allocated reference for the complex instrument.
17	Expiry Date	Date	Date the contract expires expressed in YYYY-MM-DD ISO date format.
18	Call Put Flag	String	Blank for futures. Takes the value C for Call or P for Put options.
19	Strike Price	Numeric	Blank for futures. The strike price for options (in the currency of the product).
20	Symbol Type	String	Type of contract represented by the symbol. Allowed values are: option or future
21	Product Code	String	A 6 character code representing the product for the contract. Further details on individual products can be found in the Product file.
22	Side	Character	The side of the trade, being a 'B' for a Buy, 'S' for a Sell.
23	Price	Numeric	The price (in traded currency) at which the trade was executed.
24	Size	Integer	The number of contracts involved in the trade.
25	Currency	String	The (traded) currency of the symbol involved in the trade.
26	Capacity	String	The capacity in which the originating order/trade report was entered.
27	Liquidity	String	Indicates whether the trade added or removed liquidity, participated in an auction or was routed to another market.
28	Contra	String	The contra participant for the other side of the trade. For order book executions this will be CEDX. For trade reports, it will indicate the other party (if there was one) involved in the trade.
29	ExecInst	String	Any specific execution instruction used for the trade.
30	Routing Instruction	String	Any specific routing instruction used for the trade.
31	Route Strategy	String	Any specific routing strategy used for the trade.
32	Subliquidity	String	Any additional granularity available on the specific type of liquidity involved in the trade.
33	Publication Time	Time	The time the trade was published to the market (London time) (or for trades currently subject to deferral, the scheduled time of publication).
34	Timing Indicator	String	Any timing information relevant to the trade (eg. late report).
35	Trading Mode	String	Equivalent to MMT Level 2. The trading mode under which the trade was conducted. Possible values: <ul style="list-style-type: none"> • ContinuousTrading (CT) • OnExchangeReport (ON) • ScheduledOpeningAuction (OA)
36	Transaction Category	String	Equivalent to MMT Level 3.1. A categorisation of the type of trade performed. Possible values: <ul style="list-style-type: none"> • Unspecified • PackageTrade • ExchangeForPhysicals

	Column Name	Type	Value Interpretation
37	Publication Mode	String	Equivalent to MMT Level 4.1. An indication as to whether the trade was published immediately or the deferral reason. Possible values: <ul style="list-style-type: none"> • Immediate • Late • Deferred (Large In Scale) (<i>LRGS</i>) • Deferred (Unspecified) (<i>NI</i>)
38	Market Mechanism	String	Equivalent to MMT Level 1. The type of market mechanism involved in conducting the trade. Possible values: <ul style="list-style-type: none"> • CentralLimitOrderBook (<i>LB</i>) • OffBook (<i>OB</i>) • RequestForQuotes (<i>RQ</i>)
39	Crossing Trade	String	Equivalent to MMT Level 3.3. An indication as to whether the underlying trade was an agency cross. Possible values: <ul style="list-style-type: none"> • AgencyCross (<i>ACTX</i>) • Unspecified
40	Account	String	The CCP Account as reported on the original order/trade report.
41	Account Type	String	The Account Type as reported on the original order/trade report. Possible values: <ul style="list-style-type: none"> • Customer • House
42	Trade Handling Instruction	String	The trade handling instruction submitted on the original trade report.
43	Third Party	String	A third party involved in the trade.
44	LastMkt	String	The segment MIC of the trade.
45	Fee Code	String	Category of fee applicable to the trade.
46	Price Formation	String	Equivalent to MMT Level 3.8. An indication if the trade was contributing to Price Formation or Price Discovery Process. Possible values: <ul style="list-style-type: none"> • NPFT • Plain-Vanilla (<i>P</i>)
47	Algorithmic Trade	String	Equivalent to MMT Level 3.9. An indication if the trade was executed as a result of an investment firm engaging in algorithmic trading. Possible values: <ul style="list-style-type: none"> • None • No • Yes (<i>ALGO</i>)
48	Open Close Indicator	String	Blank for futures trades. Populated with 'O' or 'C' where applicable for options trades.

2.4 Samples

Example record for a simple futures trade (line broken for readability):

```
2021-05-17,09:30:00.000,OGEU,OGEE,OGEU,0007,ABCDHSED,ABCDCLNU,,OGEU0007H85100000114,
16R5V51EL9RI,018Z0000L,,a0000V,NL0000000959,,2021-06-18,,future,CH20F,B,125.0000,26,
CHF,Principal,Auction,CEDX,, , ,09:30:00.000,NotLate,ContinuousTrading,Unspecified,
Immediate,CentralLimitOrderBook,Unspecified,,Customer, , ,CEDX,SE,Plain-Vanilla,No,0
```

Example record for a complex futures trade (line broken for readability):

```
2021-05-17,08:01:01.603,OGEU,OFOU,OGEU,0013,ABCDHSED,ABCDCLNB,,OGEU0013H8U000000619,
26R5V51EMF9S,028Z004Y0,028Z004XZ,a00032,NL0000018759,c00067,2021-07-16,,future,NL25F,S,124.9300,29,
EUR,Principal,Removed,CEDX,, , ,08:01:01.603,NotLate,ContinuousTrading,Unspecified,
Immediate,CentralLimitOrderBook,Unspecified,,Customer, , ,CEDX,SG,Plain-Vanilla,No,
```

Example record for a simple options trade (line broken for readability):

```
2021-05-17,09:01:03.321,OGEU,OFIV,OGEU,0033,ABCDHSED,ABCDCLNU,,56R5V51FTTS8,
56R5V51FTTS8,058Z00004,,b00HHT,NL0000018556,,2021-09-17,P,1145.000,option,CH200,B,125.3000,34,
CHF,Agency,Auction,CEDX,,Post Only,Default,,09:01:03.321,NotLate,ContinuousTrading,Unspecified,
Immediate,CentralLimitOrderBook,Unspecified,,House, , ,CEDX,SF,Plain-Vanilla,No,C
```

Example record for a complex options trade (line broken for readability):

```
2021-05-11,12:19:46.770,BATS,BATS,BATS,0004,F00CLEAR,ABCDDK22,,1620714603517072,
46QWIEFJ5H3Z,048Z0010V,048Z0010W,a0000W,,g0000i,2021-06-18,,future,DE30F,B,125.5000,100,
EUR,Principal,Added,CEDX,,Book Only, , ,12:19:46.770,NotLate,ContinuousTrading,Plain-Vanilla,
Immediate,RequestForQuotes,Unspecified,,Customer, , ,CEDX,SD,Plain-Vanilla,No,
```

Example record for a block trade (line broken for readability):

```
2021-05-19,09:44:51.639,BATS,BATS,BATS,0006,F00CLEAR,ESSEDK22,,1621413500409731,
66R8ZDWQEI33,00P568Z00001,,b004KG,NL0000006038,,2021-06-18,C,560.00000000,option,FR400,B,178.9000,70,
EUR,Principal,Added,CEDX,,Book Only, , ,09:44:51.639,NotLate,OnExchangeReport,Plain-Vanilla,
Immediate,OffBook,Unspecified,,Customer,TwoPartyReport, ,CEDX,BJ,Plain-Vanilla,No,0
```


3 Support

Please email questions or comments regarding this specification to tradedeskeurope@cboe.com.

4 Revision History

20 May 2021	Version 1.0.
	Initial Version
