Cboe Europe
MiFID2 RTS13 Live Trade Data Specification

Version 1.2
6th August, 2019

Contents

1 Introduction

1.1 Overview

Cboe Europe provides delayed trade data files as comma-separated values. This data is delayed by no more than 15 minutes. Data for the most recent 5 minutes can be downloaded per minute. Older data is provided in hourly files.

2 Data

The columns within the Public Trade Data CSV have a corresponding data type. The various data types are defined in the following table.

Data Type	Description
Alpha	A string of ASCII letters (A–Z), left justified and space padded on the right.
Alphanumeric	A string of ASCII numbers and letters (A–Z, 0–9), left justified and space padded on the right.
Numeric	A string of ASCII numbers (0–9), right justified and zero filled on the left.
Numeric Price	A string of ASCII numbers(0–9) consisting of 8 whole number digits, followed by an explicit decimal point, followed by 9 decimal digits. Please note this is different from normal PITCH Numeric from Cboe where the decimal point is implicit. MiFID II standard requires an explicit decimal point in the price.
ISO DateTime	A string of ASCII numbers and predefined letters, that represent the ISO 8601 Date and Time Format: YYYY-MM-DDThh:mm:ss.ddddddZ. For example, 2015-12-20T13:00:15.500000Z.
Alpha Flag	A string of exactly four ASCII letters with valid values indicated in each flag. Empty values allowed, in which case it's space filled.
Base 36 numeric	A string of ASCII numbers and letters (A–Z, 0–9), representing base 36 digits, right justified and zero filled on the left.
Timestamp	A string of ASCII numbers (0–9) representing the whole number of milliseconds past midnight London time, right justified and zero padded on the left, with no decimal point.

2.1 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 may be added over time.

Field Name	Value	Description
`Timestamp`	Timestamp	Timestamp
`Trading Date Time`	ISO DateTime	Date and time the trade occured
`Symbol`	Alphanumeric	ISIN Code that identifies the financial instrument
`Price`	Numeric Price	Price of the trade. This may be zero if the price is pending, as denoted by the "Price Discovery Process" field
`Price Currency`	Alpha	ISO 3-letter Currency code
`Executed Shares`	Numeric	Number of shares executed
`Execution Venue`	Alpha	ISO 10383 segment MIC, and SINT for Systematic internalisers, XOFF for OTC trades
`Publication Date Time`	ISO DateTime	Date and time the trade was published

`Trade ID`	Base 36 Numeric	Cboe generated day-unique execution/trade identifier. Left padded with zeroes.
`Transaction Category`	Alpha Flag	Corresponds to MMT v3 Level 3.1 "RPRI" = Trade that has Received Price Improvement "TPAC" = Package Trade "XFPH" = Exchange For Physical Trade
`Negotiation Flag`	Alpha Flag	Corresponds to MMT v3 Level 3.2 "NLIQ" = Negotiated Trade in Liquid Instruments "OILQ" = Negotiated Trade in Illiquid Instruments "PRIC" = Negotiated Trade Subject to Conditions Other Than The Current Market Price "ILQD" = Pre-Trade Transparency Waiver for Illiquid Instrument on an SI "SIZE" = Pre-Trade Transparency Waiver for Above Standard Size on an SI If the Pre-Trade Transparency Waivers of "ILQD" and "SIZE" both apply to the trade, "SIZE" will be published in this field
`Agency Cross Trade`	Alpha Flag	Corresponds to MMT v3 Level 3.3 "ACTX" = Agency Cross Trade
`Modification Indicator`	Alpha Flag	Corresponds to MMT v3 Level 3.4 "CANC" = Trade Cancellation "AMND" = Trade Amendment
`Benchmark/Reference Indicator`	Alpha Flag	Corresponds to MMT v3 Level 3.5 "BENC" = Benchmark Trade "RFPT" = Reference Price Trade
`Special Dividend`	Alpha Flag	Corresponds to MMT v3 Level 3.6 "SDIV" = Special Dividend Trade
`Price Discovery Process`	Alpha Flag	Corresponds to MMT v3 Level 3.8 "NPFT" = Non-Price Forming Trade "TNCP" = Trade not Contributing to the Price Discovery Process "PNDG" = Price is Pending
`Algorithmic Indicator`	Alpha Flag	Corresponds to MMT v3 Level 3.9 "ALGO" = Algorithmic Trade
`Post-Trade Deferral Reason`	Alpha Flag	Corresponds to MMT v3 Level 4.1 "LRGS" = Deferral for "Large in Scale" "ILQD" = Deferral for "Illiquid Instrument" "SIZE" = Deferral for "Size Specific" If the Post-Trade Deferral Reasons of "ILQD" and "SIZE" or "ILQD" and "LRGS" both apply to the trade, "ILQD" will be published in this field
`Duplicative Indicator`	Alpha Flag	Corresponds to MMT v3 Level 5 "DUPL" = Duplicative Trade Report

`Jurisdiction`	Alpha	Corresponds to venue where the trade was executed “EU” = Trade executed on an EU regulated venue ” “UK” = Trade executed on a non-EU regulated venue ”

2.2 Sample

Example record (line broken for readability):

```
12:37:58,2019-01-25T12:37:58.051742Z,GB0006776081,00000009.131400000,
GBP,000000001135,BATF,2019-01-25T12:37:58.052610Z,000928U00PB0, ,
PRIC, ,CANC, ,SDIV,NPFT, , ,
```

2.3 Manual Download

To download Public Trade Data manually, click any of the listed URLs on the MiFID trade data page on the Cboe site.

2.4 Programmatic Download

If you want to automate the download of these files, there are several options. One method would be to use the wget command. Note that your version of wget may have slightly different options. Each command below should be on its own line.

Downloading a file programmatically requires basic http authentication on each request. Credentials can be obtained on:

- `https://markets.cboe.com/europe/equities/trade_data/` for production and
- `https://certification.bats.com/europe/equities/trade_data/` for certification

```
wget --auth-no-challenge --tries=1 --http-user=<your email address>
--http-password=<your password> -O rts13_public_trade_data_bxe_2019-01-30_0952.csv
"https://certification.bats.com/europe/equities/trade_data/bxe/
minute/rts13_public_trade_data_bxe_2019-02-01_0952.csv"

wget --auth-no-challenge --tries=1 --http-user=<your email address>
--http-password=<your password> -O rts13_public_trade_data_cxe_2019-01-30_0952.csv
"https://certification.bats.com/europe/equities/trade_data/cxe/
minute/rts13_public_trade_data_cxe_2019-02-01_0952.csv"

wget --auth-no-challenge --tries=1 --http-user=<your email address>
--http-password=<your password> -O rts13_public_trade_data_dxe_2019-01-30_0952.csv
"https://certification.bats.com/europe/equities/trade_data/dxe/
minute/rts13_public_trade_data_dxe_2019-02-01_0952.csv"

wget --auth-no-challenge --tries=1 --http-user=<your email address>
--http-password=<your password> -O rts13_public_trade_data_apa_2019-01-30_0952.csv
"https://certification.bats.com/europe/equities/trade_data/apa/
minute/rts13_public_trade_data_apa_2019-02-01_0952.csv"
```


2.5 Public Website URLs

2.5.1 CXE Production:

https://markets.cboe.com/europe/equities/trade_data/cxe/minute/rts13_public_trade_data_cxe_YYYY-MM-DD_HHMM.csv

2.5.2 BXE Production:

https://markets.cboe.com/europe/equities/trade_data/bxe/minute/rts13_public_trade_data_bxe_YYYY-MM-DD_HHMM.csv

2.5.3 DXE Production:

https://markets.cboe.com/europe/equities/trade_data/dxe/minute/rts13_public_trade_data_dxe_YYYY-MM-DD_HHMM.csv

2.5.4 APA Production:

https://markets.cboe.com/europe/equities/trade_data/apa/minute/rts13_public_trade_data_apa_YYYY-MM-DD_HHMM.csv

2.6 Certification Environment URLs

2.6.1 CXE Certification:

https://certification.bats.com/europe/equities/trade_data/cxe/minute/rts13_public_trade_data_cxe_YYYY-MM-DD_HHMM.csv

2.6.2 BXE Certification:

https://certification.bats.com/europe/equities/trade_data/bxe/minute/rts13_public_trade_data_bxe_YYYY-MM-DD_HHMM.csv

2.6.3 DXE Certification:

https://certification.bats.com/europe/equities/trade_data/dxe/minute/rts13_public_trade_data_dxe_YYYY-MM-DD_HHMM.csv

2.6.4 APA Certification:

https://certification.bats.com/europe/equities/trade_data/apa/minute/rts13_public_trade_data_apa_YYYY-MM-DD_HHMM.csv

3 Support

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

Revision History

1st February 2019	Version 1.0 Initial version.
25th April 2019	Version 1.1 Added the jurisdiction field.
6th August 2019	Version 1.2 Added DXE environment.