Document title

# EURONEXT NEXTHISTORY® CASH CLIENT SPECIFICATION

Document type or subject

CLIENT SPECIFICATION

| Revision number | Date |
| --- | --- |
| Revision Number: 2.1.2 | 20 October 2020 |

# PREFACE

## DOCUMENT HISTORY

The following table provides a description of all changes to this document.

| VERSION NO. | DATE | CHANGE DESCRIPTION |
|---|---|---|
| **2.0.1a** | 04/06/2010 | Formatted into new template |
| **2.0.2** | 15/10/2012 | Removed Order Book data set<br>Rebranded with new NYSE Technologies template |
| **2.0.3** | 27/06/2014 | Rebranded with new Euronext Template<br>Inserted sections 4.3 and 4.4.<br>Clarified possible field formats in section 4.5. |
| **2.0.4** | 19/08/2014 | Clarification to <Best bid price>, <Best ask price>, <Size on best bid>, <Size on best ask> in Table 11 (BBO File) |
| **2.0.5** | 12/09/2014 | Updated Euronext Service Operations email address |
| **2.0.6** | 05/12/2014 | Changes resulting from migration to new Euronext data delivery infrastructure – Planned for Mon 16 March 2015<br>- Added section 1 – NEW DATA DELIVERY INFRASTRUCTURE<br>- Edited section 4 – DATA FILES |
| **2.0.7** | 16/03/2015 | Updated Euronext Service Operations telephone number<br>Updated dates in section 1.2 Transition Period |
| **2.0.8** | 14/05/2015 | Updated Euronext Service Operations email address |
| **2.0.9** | 09/11/2018 | Removed section 1 – NEW DATA DELIVERY INFRASTRUCTURE<br>Updated Table 5 (changed REFs 2.12, 2.13, 2.14, 2.15, 2.16, 2.17)<br>Updated Table 11 (added REFs 08.14 and 08.15) |
| **2.1.0** | 30/11/2018 | **(Effective 04 Nov 2018)**<br>- Euronext Dublin (former Irish Stock Exchange) Equity data will be included in the NextHistory Files<br>- Changes to the EOD File layout will be introduced (see Table 8) |
| **2.1.1** | 20/03/2020 | **(Effective 06 Apr 2020) – the following changes will be made**<br>- Dividend File (see Table 6)<br><Dividend payment indicator>: possible values<br>- IntradayTrades File (see Table 9)<br><Trade time> field : timestamp granularity<br>- Off-Market Intraday Trades File (see Table 10) |

 

| VERSION NO. | DATE | CHANGE DESCRIPTION |
|---|---|---|
| | | <Trade time> field: timestamp granularity<br><Trade type> field: possible values<br><br>- BBO File (see BBO file section)<br>File Name: sequence number added to file name<br><BBO time>: timestamp granularity |
| **2.1.2** | 20/10/2020 | **(Effective 09 November 2020)**<br>Data Coverage change (Equities on 09 Nov 2020; Fixed Income on 30 Nov 2020)<br>• Files for Oslo Børs markets are added to the product |

## CONTACT INFORMATION

For technical support, please contact the **Euronext Service Operations**:

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## FURTHER INFORMATION

For additional product information, please contact us at databyeuronext@euronext.com.

## CONTENTS

# 1. INTRODUCTION

NextHistory provides high-quality historical financial data that allows users to identify price trends and gain new insights into risk management and forecasting.

**Table 1 NextHistory Cash Data Products**

| | END OF DAY | TRADES (INCLUDES END OF DAY) | BBO (INCLUDES TRADES) |
|---|---|---|---|
| Euronext and Oslo Børs | √ | √ | √ |

The main features of NextHistory cash data are as follows:

- Official post-clearing data direct from the source
- End of Day file, including detailed dividend information and adjustment coefficients
- Trade file, including trade cancellations, trade IDs and off-market data (reported through TCS)
- BBO file, including best bid and offer

The table below shows the files supplied with each type of subscription.

**Table 2 Subscriptions**

| FILES AVAILABLE | SUBSCRIPTION TYPE | | | NUMBER OF FILES PROVIDED |
|---|---|---|---|---|
| | END OF DAY | TRADES | BBO | |
| Calendar | X | X | X | One covering all locations |
| Instrument characteristics | X | X | X | One per location |
| Dividend | X | X | X | One per location |
| Adjustments | X | X | X | One per location |
| End of Day | X | X | X | One per location |
| IntradayTrades | | X | X | One per location |
| Off-market trades | | X | X | One per location |
| BBO | | | X | One per location |

**Location/Markets Covered**

- Euronext Amsterdam
- Euronext Brussels
- Euronext Dublin (as from 04 February 2019)
- Euronext Lisbon
- Euronext Paris

- Oslo Børs (to be available as of 09 November 2020)

### 1.1 SOFTWARE REQUIREMENTS

Software for reading and processing data files should be purchased from a third-party supplier. Clients need to make sure that this software is capable of handling very large data files (all files are CSV files compressed in ZIP format).

## 2. DATA OVERVIEW

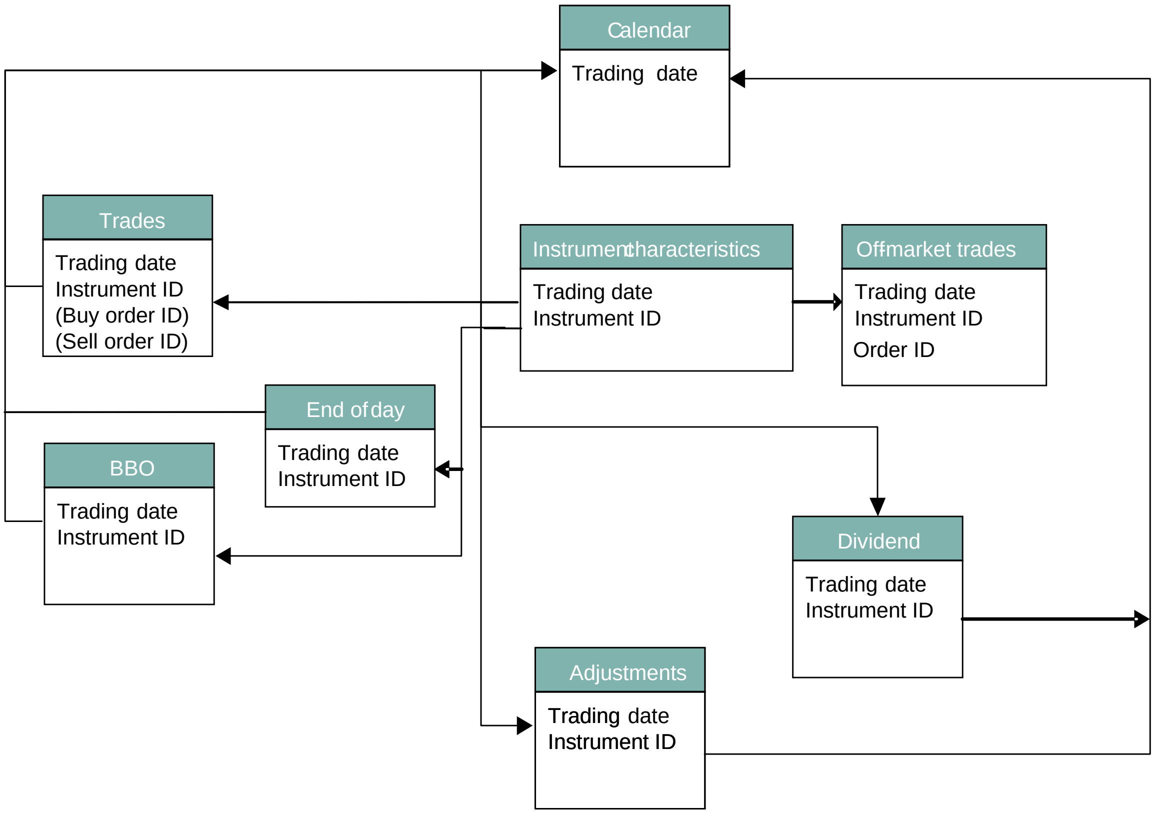
NextHistory cash data is stored in the following files.

**Table 3 NextHistory Cash Data Files**

| FILE NAME | CONTENTS |
|---|---|
| Calendar | Overview of trading days for the corresponding calendar month |
| Instrument characteristics | All the characteristics of a particular instrument on a given date |
| Dividend | Dividend payments |
| Adjustments | Adjustment coefficients |
| End of day | Daily market summary: first, last, highest and lowest prices, volumes and turnover |
| IntradayTrades | Trades data file excluding Order IDs. Only available in the products Trade file and BBO file. Transactions and cancellations on the central market |
| Off-market trades | Trades reported via the TCS system |
| BBO | Best bid and offer available in the central order book |

The following flow chart shows how these files are linked.

**Figure 1 File Links**




* Instrument ID: also referred to as ISIN code and internal code

# 3. DATA FILES

## 3.1 FORMAT

- All files are in CSV format. The delimiter is a semicolon, so this character is never used in the fields.
- The first record of each file contains a header, which contains the name of each field.
- All dates have the same format: YYYY-MM-DD (YYYY = year, MM = month, DD = day).
- All file names have the same format (market = EuronextAmsterdam, EuronextBrussels, EuronextDublin, EuronextLisbon, EuronextParis, EuronextOslo; YYYY = year, MM = month).
- All numerical values follow standard international practice (decimal separator is a point).

## 3.2 FILE AVAILABILITY

There is no fixed availability time for NextHistory Cash files. The files are made available on the ftp servers as soon as they are ready and the availability of the files varies per day depending on previous day's trading activity.

## 3.3 FILE LOCATION

The files are available on our ftp servers as follows:

- Production: [ftp.data.euronext.com](ftp.data.euronext.com)
- EUA: [ftp.eua-data.euronext.com](ftp.eua-data.euronext.com)

<u>Most Recent Files</u>

Directories

| FILES AVAILABLE | DIRECTORIES |
|---|---|
| Calendar | /CSH_EU_ENXT_CAL |
| Instrument characteristics | /CSH_EU_ENXT_REF |
| Dividend | /CSH_EU_ENXT_DIV |
| Adjustments | /CSH_EU_ENXT_ADJ |
| End of Day | /CSH_EU_ENXT_SUM |
| IntradayTrades | /CSH_EU_ENXT_TRADE_ONEXCH |
| Off-market trades | /CSH_EU_ENXT_TRADE_TCS |
| BBO | /CSH_EU_ENXT_BBO |

Historical Files

| FILES AVAILABLE | DIRECTORIES |
|---|---|
| Calendar | /CSH_EU_ENXT_CAL<br>/CSH_EU_ENXT_CAL_YYYY<br>/CSH_EU_ENXT_CAL_YYYYMM |
| Instrument characteristics | /CSH_EU_ENXT_REF<br>/CSH_EU_ENXT_REF_YYYY<br>/CSH_EU_ENXT_REF_YYYYMM |
| Dividend | /CSH_EU_ENXT_DIV<br>/CSH_EU_ENXT_DIV_YYYY<br>/CSH_EU_ENXT_DIV_YYYYMM |
| Adjustments | /CSH_EU_ENXT_ADJ<br>/CSH_EU_ENXT_ADJ_YYYY<br>/CSH_EU_ENXT_ADJ_YYYYMM |
| End of Day | /CSH_EU_ENXT_SUM<br>/CSH_EU_ENXT_SUM_YYYY<br>/CSH_EU_ENXT_SUM_YYYYMM |
| IntradayTrades | /CSH_EU_ENXT_TRADE_ONEXCH<br>/CSH_EU_ENXT_TRADE_ONEXCH_YYYY<br>/CSH_EU_ENXT_TRADE_ONEXCH_YYYYMM |
| Off-market trades | /CSH_EU_ENXT_TRADE_TCS<br>/CSH_EU_ENXT_TRADE_TCS_YYYY<br>/CSH_EU_ENXT_TRADE_TCS_YYYYMM |
| BBO | /CSH_EU_ENXT_BBO<br>/CSH_EU_ENXT_BBO_YYYY<br>/CSH_EU_ENXT_BBO_YYYYMM |

## 3.4 FILE CONTENT

Possible Field Format:

“X”: Alphanumeric

“D”: Decimal/Floating Point

“N”: Numeric/Integer

Some fields in the 'Instrument characteristics' file are also part of the other files. The data provided in these fields for a particular instrument is the same, irrespective of which file they appear in.

### 3.4.1 Calendar

File name: Euronext-CAL-YYYYMMDD.csv.zip (compressed)

Euronext-CAL-YYYYMMDD.csv (uncompressed)

The file contains one record per day for the relevant period.

**Table 4 Calendar File**

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 1.01 | <Calendar date> | YYYY-MM-DD | |
| 1.02 | <Trading day indicator> | X | Indicates if the calendar date is a trading day or not.<br>Possible values:<br>■ '0' - Not a trading day<br>■ '1' - Trading day |

### 3.4.2 Instrument Characteristics

File name: Euronext location-CHR-YYYYMMDD.csv.zip (compressed)

Euronext location-CHR-YYYYMMDD.csv (uncompressed)

The file contains one record per day and per instrument.

**Table 5 Instrument Characteristic File**

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 2.01 | <Effective date> | YYYY-MM-DD | Trading day to which the provided data relates. |
| 2.02 | <Internal code> | X | Internal code for the instrument also referred to as instrument ID. If the ISIN is changed, this code is not modified as a result, trading prices can be compared using an adjustment coefficient before and after the change takes place. The code enables the old ISINs to be linked to the new ones. |
| 2.03 | <ISIN code> | X | International Securities Identification Number (ISIN) which identifies the instrument in accordance with the ISO 6166 standard. Also referred to as instrument ID. |
| 2.04 | <Instrument name> | X | Brief description of a security. |
| 2.05 | <Trading place> | X | The market at which the instrument is traded (place of the Market of Reference, MoR).<br>Possible values:<br>■ Amsterdam<br>■ Brussels<br>■ Dublin<br>■ Lisbon<br>■ Oslo<br>■ Paris |
| 2.06 | <Category> | X | Type of instrument.<br>Possible values:<br>■ Government bond<br>■ Other bond<br>■ Certificate<br>■ Investment fund<br>■ Repo<br>■ Share<br>■ Tracker |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| | | | ▪ Warrant |
| 2.07 | <Instrument group code> | X | Designates the group of instruments to which an instrument belongs.<br>All the instruments of a same instrument group are governed by the same rules such as the trading timetable and authorized price fluctuation.<br>Possible values:<br>See the Appendix to the Euronext Cash market trading manual |
| 2.08 | <Issuing country code> | X | This code is designated in accordance with the ISO 3166-1 alpha 3 coding system and represents the country in which the corporate headquarters of the issuing company are located. |
| 2.09 | <Segment> | X | This field is no longer used. |
| 2.10 | <Trading currency code> | X | Code for the currency in which an instrument is traded as defined in ISO 4217alpha 3. When the price of a cash instrument is expressed as a percentage of the nominal value, the currency in which the nominal value is expressed must be placed in this field. |
| 2.11 | <Trading unit type> | X | Unit used to express the price and quantity of an instrument for orders and trades.<br>Possible values:<br>▪ '1' - Price per share expressed as a currency<br>▪ '2' - Price expressed as a percentage of the nominal value, excluding accrued interest (Clean)<br>▪ '5' = Price expressed as a percentage of the nominal value with accrued coupon included (Dirty) |
| 2.12 | MIC of listing place 1<br>(Field added on 14 Jan 2009) | X | Identifies the market to which the instrument is listed and traded (= the Market of Reference; MoR), according to ISO norm 10383. |
| 2.13 | MIC of listing place 2<br>(Field added on 14 Jan 2009) | X | In case of Euronext multi listed instrument the MIC code of one of the Markets where the instrument is listed (other than the MoR), according to ISO norm 10383. |
| 2.14 | MIC of listing place 3<br>(Field added on 14 Jan 2009) | X | In case of Euronext multi listed instrument the MIC code of one of the Markets where the instrument is listed (other than the MoR), according to ISO norm 10383. |
| 2.15 | MIC of listing place 4<br>(Field added on 14 Jan 2009) | X | In case of Euronext multi listed instrument the MIC code of one of the Markets where the instrument is listed (other than the MoR), according to ISO norm 10383. |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 2.16 | MIC of listing place 5<br>(Field added on 14 Jan 2009) | X | In case of Euronext multi listed instrument the MIC code of one of the Markets where the instrument is listed (other than the MoR), according to ISO norm 10383. |
| 2.17 | MIC of listing place 6<br>(Field added on 14 Jan 2009) | X | In case of Euronext multi listed instrument the MIC code of one of the Markets where the instrument is listed (other than the MoR), according to ISO norm 10383. |

### 3.4.3 Dividend

File name: Euronext location-DIV-YYYYMMDD.csv.zip (compressed)

Euronext location-DIV-YYYYMMDD.csv (uncompressed)

The file contains one or several record per dividend detached during the relevant period.

**Table 6 Dividend File**

| REF. | EXTERNAL FILE NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 3.01 | <Effective date> | YYYY-MM-DD | Trading day to which the provided data relates. |
| 3.02 | <Internal code> | X | Internal code for the instrument also referred to as instrument ID. If the ISIN is changed, this code is not modified as a result, trading prices can be compared using an adjustment coefficient before and after the change takes place. The code enables the old ISINs to be linked to the new ones. |
| 3.03 | <ISIN code> | X | International Securities Identification Number (ISIN) which identifies the instrument in accordance with the ISO 6166 standard. Also referred to as instrument ID. |
| 3.04 | <Instrument name> | X | Brief description of a security. |
| 3.05 | <Trading place> | X | The market at which the instrument is traded (place of the Market of Reference, MoR).<br>Possible values:<br>■ Amsterdam<br>■ Brussels<br>■ Dublin<br>■ Lisbon<br>■ Oslo<br>■ Paris |
| 3.06 | <Category> | X | Type of instrument<br>Possible values: |

| REF. | EXTERNAL FILE NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| | | | ■ Government bond<br>■ Other bond<br>■ Certificate<br>■ Investment fund<br>■ Repo<br>■ Share<br>■ Tracker<br>■ Warrant |
| 3.07 | <Segment> | X | This field is no longer used. |
| 3.08 | <Net dividend> | D | Net amount of dividend, expressed in Euros. |
| 3.09 | <Gross dividend> | D | Gross amount of dividend, expressed in Euros. |
| 3.10 | <Type of dividend payment> | X | Indicates the type of dividend distributed.<br>Possible values:<br>■ '0' - Share payback<br>■ '1' - Ordinary<br>■ '2' - Extraordinary<br>■ '3' - Bonus<br>■ '4' - Capital gain<br>■ '5' - Liquidation distribution<br>■ '6' - Indemnity<br>■ '7' - Sale of equities<br>■ '8' - Interest proportion<br>■ '9' - Loyalty bonus<br>■ Space Not available |
| 3.11 | <Dividend payment indicator><br>(Possible values changed on 06 April 2020) | X | Indicator providing further information on dividend<br>**As of 06 April 2020**<br>Possible values:<br>■ 'A' – Advance<br>■ 'T' – Final<br>■ 'S' – Balance<br>■ 'E' - Estimate<br>**Prior to 06 April 2020** |

| REF. | EXTERNAL FILE NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| | | | Possible values:<br>■ 'A' - Interim dividend<br>■ 'D' - Miscellaneous<br>■ 'E' - Estimated interim dividend<br>■ 'F' - Estimated balance<br>■ 'G' - Estimated global dividend<br>■ 'S' - Balance of global dividend<br>■ 'T' - Global dividend<br>■ Space Not available |

### 3.4.4 Adjustments

File name: Euronext location-ADJ-YYYYMMDD.csv.zip (compressed)

Euronext location-ADJ-YYYYMMDD.csv (uncompressed)

The file contains one record per adjustment and per traded instrument during the relevant period.

**Table 7 Adjustments File**

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 4.01 | <Effective date> | YYYY-MM-DD | Trading day to which the provided data relates. |
| 4.02 | <Internal code> | X | Internal code for the instrument also referred to as instrument ID. If the ISIN is changed, this code is not modified as a result, trading prices can be compared using an adjustment coefficient before and after the change takes place. The code enables the old ISINs to be linked to the new ones. |
| 4.03 | <ISIN code> | X | International Securities Identification Number (ISIN) which identifies the instrument in accordance with the ISO 6166 standard. Also referred to as instrument ID. |
| 4.04 | <Instrument name> | X | Brief description of a security. |
| 4.05 | <Trading place> | X | The market at which the instrument is traded (place of the Market of Reference, MoR).<br>Possible values:<br>■ Amsterdam<br>■ Brussels<br>■ Dublin |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| | | | ■ Lisbon<br>■ Oslo<br>■ Paris |
| 4.06 | <Category> | X | Type of instrument.<br>Possible values:<br>■ Government bond<br>■ Other bond<br>■ Certificate<br>■ Investment fund<br>■ Repo<br>■ Share<br>■ Tracker<br>■ Warrant |
| 4.07 | <Segment> | X | This field is no longer used. |
| 4.08 | <Adjustment coefficient> | D | Coefficient used to calculate the theoretical price of an instrument which was the subject, on a particular date, of a simple or complex corporate event that led to a modification of the price of the instrument or the number of shares issued. The method of calculation depends on the type of corporate event.<br>Example:<br>A 10:1 split occurred on 10 October 2002 in an instrument which last traded price on 9 October 2002 was €550. Based on a price adjustment coefficient of k = 0.1, the adjusted price on 9 October 2002 was 55 (550 x k). |

### 3.4.5 End of Day

File name: Euronext location-EOD-YYYYMM.csv.zip (compressed)

Euronext location-EOD-YYYYMM.csv (uncompressed)

The file contains one record per instrument (including untraded instruments) and per day

**Table 8 End of Day File**

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 5.01 | <Effective date> | YYYY-MM-DD | Trading day to which the provided data relates. |
| 5.02 | <Internal code> | X | Internal code for the instrument also referred to as instrument ID. If the ISIN is changed, this code is not modified |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| | | | as a result, trading prices can be compared using an adjustment coefficient before and after the change takes place. The code enables the old ISINs to be linked to the new ones. |
| 5.03 | <ISIN code> | X | International Securities Identification Number (ISIN) which identifies the instrument in accordance with the ISO 6166 standard. Also referred to as instrument ID. |
| 5.04 | <Instrument name> | X | Brief description of a security. |
| 5.05 | <Trading place> | X | The market at which the instrument is traded (place of the Market of Reference, MoR).<br>Possible values:<br>■ Amsterdam<br>■ Brussels<br>■ Dublin<br>■ Lisbon<br>■ Oslo<br>■ Paris |
| 5.06 | <Issuing country code> | X | This code is designated in accordance with the ISO 3166-1 alpha 3 coding system and represents the country in which the corporate headquarters of the issuing company are located. |
| 5.07 | <Category> | X | Type of instrument.<br>Possible values:<br>■ Government bond<br>■ Other bond<br>■ Certificate<br>■ Investment fund<br>■ Repo<br>■ Share<br>■ Tracker<br>■ Warrant |
| 5.08 | <Trading currency code> | X | Code for the currency in which an instrument is traded as defined in ISO 4217alpha 3. When the price of a cash instrument is expressed as a percentage of the nominal value, |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| | | | the currency in which the nominal value is expressed must be placed in this field. |
| 5.09 | <Segment> | X | This field is no longer used. |
| 5.10 | <First price> | D | Price at which the first trade of the day was executed, expressed in the trading currency. |
| 5.11 | <Highest price> | D | Highest traded price of the day, expressed in the trading currency. |
| 5.12 | <Lowest price> | D | Lowest traded price of the day, expressed in the trading currency. |
| 5.13 | <Last price> | D | Last traded price of the day, expressed in the trading currency. |
| 5.14 | <Turnover in Euros> | D | Cumulative turnover for the day. |
| 5.15 | <Volume> | N | Total number of units traded during the day. |
| 5.16 | <Number of trades> | N | Total number of trades for the day. |
| 5.17 | <Best bid price> (Field added on 04 Feb 2019) | D | ATTENTION - All data presented in this column refers to <Best ask price>. |
| 5.18 | <Size on best bid> (Field added on 04 Feb 2019) | N | ATTENTION - All data presented in this column refers to <Size on best ask> |
| 5.19 | <Best ask price> (Field added on 04 Feb 2019) | D | ATTENTION - All data presented in this column refers to <Best bid price>. |
| 5.20 | <Size on best ask> (Field added on 04 Feb 2019) | N | ATTENTION - All data presented in this column refers to <Size on best bid> |

### 3.4.6 Intraday Trades

This data file is only available in the products Trade file and BBO file.

File name:

Euronext location-IntradayTrades-YYYYMMDD.csv.zip (compressed)

Euronext location-IntradayTrades-YYYYMMDD.csv (uncompressed)

This file contains one record per trade occurring during the relevant period and one record per trade cancelled during that period.

**Table 9 IntradayTrades File**

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 6.01 | <Internal code> | X | Internal code for the instrument also referred to as instrument ID. If the ISIN is changed, this code is not modified as a result, trading prices can be compared using an adjustment coefficient before and after the change takes place. The code enables the old ISINs to be linked to the new ones. |
| 6.02 | <ISIN code> | X | International Securities Identification Number (ISIN) which identifies the instrument in accordance with the ISO 6166 standard. Also referred to as instrument ID. |
| 6.03 | <Instrument name> | X | Brief description of a security. |
| 6.04 | <Trading place> | X | The market at which the instrument is traded (place of the Market of Reference, MoR).<br>Possible values:<br>▪ Amsterdam<br>▪ Brussels<br>▪ Dublin<br>▪ Lisbon<br>▪ Oslo<br>▪ Paris |
| 6.05 | <Category> | X | Type of instrument.<br>Possible values:<br>▪ Government bond<br>▪ Other bond<br>▪ Certificate<br>▪ Investment fund<br>▪ Repo<br>▪ Share<br>▪ Tracker<br>▪ Warrant |
| 6.06 | <Issuing country code> | X | This code is designated in accordance with the ISO 3166-1 alpha 3 coding system and represents the country in which the corporate headquarters of the issuing company are located. |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 6.07 | <Segment> | X | This field is no longer used. |
| 6.08 | <Trading currency code> | X | Code for the currency in which an instrument is traded as defined in ISO 4217alpha 3. When the price of a cash instrument is expressed as a percentage of the nominal value, the currency in which the nominal value is expressed must be placed in this field. |
| 6.09 | <Trading unit type> | X | Unit used to express the price and quantity of an instrument for orders and trades.<br>Possible values:<br>■ '1' - Price per share expressed as a currency<br>■ '2' - Price expressed as a percentage of the nominal value, excluding accrued interest (Clean)<br>■ '5' = Price expressed as a percentage of the nominal value with accrued coupon included (Dirty) |
| 6.10 | <Registered date> | YYYY-MM-DD | Date when the trade was executed, modified or cancelled. |
| 6.11 | <Registered number> | N | Unique trade ID when combined with the registered date, internal code and quotation place. When a trade is cancelled or modified, a new ID is provided. |
| 6.12 | <Trade indicator> | X | Indicates whether the record concerns a trade or a trade cancellation.<br>Possible values:<br>■ '1' - Trade<br>■ '2' - Trade cancellation |
| 6.13 | <Trade date> | YYYY-MM-DD | Date when the trade took place. |
| 6.14 | <Trade time><br>(Timestamp granularity changed on 06 April 2020) | **As of 06 April 2020**<br>HH:MM:SS:mmmµµµnnn<br>**Prior to 06 April 2020**<br>HH:MM:SS:mmmµµµ | Time when the trade took place. |
| 6.15 | <Cross-trade indicator> | X | Indicates whether the trade originates from a cross order type. That is a buy-sell order.<br>Possible values:<br>■ '0' - Not a cross trade<br>■ '1' - Classic cross trade |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| | | | ■ '3' - Basket cross trade<br>■ '4' - Valuation trade |
| 6.16 | <Trade price> | D | Price at which the instrument was traded (may take the value 0). |
| 6.17 | <Trade size> | N | Number of units traded (per trade). |
| 6.18 | <Turnover in Euros> | D | Total value traded (per trade), expressed in Euros. |

### 3.4.7 Off-Market Intraday Trades

File name: Euronext location-TCS-YYYYMMDD.csv.zip (compressed)

Euronext location-TCS-YYYYMMDD.csv (uncompressed)

The file contains one record per off-market trade or off-market trade cancellation.

**Table 10 Off-Market Intraday Trades File**

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 7.01 | <Internal code> | X | Internal code for the instrument also referred to as instrument ID. If the ISIN is changed, this code is not modified as a result, trading prices can be compared using an adjustment coefficient before and after the change takes place. The code enables the old ISINs to be linked to the new ones. |
| 7.02 | <ISIN code> | X | International Securities Identification Number (ISIN) which identifies the instrument in accordance with the ISO 6166 standard. Also referred to as instrument ID. |
| 7.03 | <Instrument name> | X | Brief description of a security. |
| 7.04 | <Trading place> | X | The market at which the instrument is traded (place of the Market of Reference, MoR).<br>Possible values:<br>■ Amsterdam<br>■ Brussels<br>■ Dublin<br>■ Lisbon<br>■ Oslo<br>■ Paris |
| 7.05 | <Registered date> | YYYY-MM-DD | Date when the trade was executed, modified or cancelled. |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 7.06 | <Registered number> | N | Trade ID. Unique identifier of the trade, when combined with the ISIN code and the Registered date. |
| 7.07 | <Trade indicator> | X | Indicates whether the record concerns a trade or a trade cancellation.<br>Possible values:<br>■ '1' - Trade<br>■ '2' - Trade cancellation |
| 7.08 | <Publication date> | YYYY-MM-DD | Date when the report of the trade was published. |
| 7.09 | <Trade date> | YYYY-MM-DD | Date when the trade took place. |
| 7.10 | <Trade time><br>(Timestamp granularity changed on 06 April 2020) | **As of 06 April 2020**<br>HH:MM:SS:mmmµµµnnn<br>**Prior to 06 April 2020**<br>HH:MM:SS:mmmµµµ | Time when the trade took place. |
| 7.11 | <Trade size> | N | Number of units traded. |
| 7.12 | <Trade price> | D | Price at which the instrument was traded (may take the value 0). |
| 7.13 | <Turnover in Euros> | D | Total value traded, expressed in Euros. |
| 7.14 | <Trade type><br>(Possible values changed on 06 April 2020) | X | **As of 06 April 2020**<br>■ '1' – Conventional Trade<br>■ '5' – Guaranteed Cross Trade<br>■ '20' – BoB Trade<br>■ '25' – Out of Market Trade<br>■ '26' – Delta Neutral Trade – Underlying Cash Leg<br>■ '27' – Market VWAP Operation Trade<br>■ '28' – Euronext Fund Service Trade<br>■ '29' – Secondary Listing Trade<br>■ '33' – Dark Trade<br>■ '41' – LIS Trade<br>**Prior to 06 April 2020**<br>■ 'D' - LIFFE CONNECT® delta neutral trades (trades in a cash instrument listed on Euronext |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| | | | that correspond to the cash leg of trades based on a delta neutral-type strategy executed in the LIFFE CONNECT system), or delta neutral trades entered in TCS by the market control department.<br>■ 'E' - Market VWAP trades (trades executed outside the central order book whose prices are based on the average price of the trades executed in the relevant listed instrument via the central order book during a specific period).<br>■ 'G' -Block trades reported to the regulator and executed outside the regulated markets. These trades are not subject to the rules governing regulated markets due to their nature but they are subject to Euronext's rules and must be reported to the regulators.<br>■ 'H' - Trades executed outside the central order book outside trading hours, or block trades.<br>■ 'I' - Investment funds market trade<br>■ 'L' - Exercising of options traded outside the central order book (no price check)<br>■ 'O' - Other trades reported to the regulator. These trades are not subject to the rules governing regulated markets due to their nature but they must be reported to Euronext and the regulator. They do not have to meet any quality or minimum market capitalization requirements.<br>■ 'R' - Trades reported on listing place other than Market of Reference for multi listed instruments |

#### 3.4.8 BBO (Best Bid and Offer)

File name:

**As of 06 April 2020**

Euronext location-BBO-YYYYMMDD.csv###.zip (compressed)

Euronext location-BBO-YYYYMMDD.csv### (uncompressed)

Where ### refers to the file sequence number when there are more than one file for the same trading day

**Prior to 06 April 2020**

Euronext location-BBO-YYYYMMDD.csv.zip (compressed)

Euronext location-BBO-YYYYMMDD.csv (uncompressed)

The file contains one record per instrument per day and per BBO.

**Table 11 BBO File**

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 08.01 | <Internal code> | X | Internal code for the instrument also referred to as instrument ID. If the ISIN is changed, this code is not modified as a result, trading prices can be compared using an adjustment coefficient before and after the change takes place. The code enables the old ISINs to be linked to the new ones. |
| 08.02 | <ISIN code> | X | International Securities Identification Number (ISIN) which identifies the instrument in accordance with the ISO 6166 standard. Also referred to as instrument ID. |
| 08.03 | <Instrument name> | X | Brief description of a security. |
| 08.04 | <Trading place> | X | The market at which the instrument is traded (place of the Market of Reference, MoR).<br>Possible values:<br>▪ Amsterdam<br>▪ Brussels<br>▪ Dublin<br>▪ Lisbon<br>▪ Oslo<br>▪ Paris |
| 08.05 | <BBO date> | YYYY-MM-DD | Date when the BBO was available. |
| 08.06 | <BBO time><br>(Timestamp granularity changed on 06 April 2020) | **As of 06 April 2020**<br>HH:MM:SS:mmmµµµnnn<br>**Prior to 06 April 2020**<br>HH:MM:SS:mmmµµµ | Time when the BBO was available. |
| 08.07 | <BBO ID> | N | Unique ID for BBO. |

| REF. | FIELD NAME | FORMAT | DESCRIPTION |
|---|---|---|---|
| 08.08 | <Best bid price> | D | Price of best bid limit.<br>For trading sessions prior to 25 Jun 2018, the label for this field in the header record in the actual data files is <Best ask price>, but it should read <Best bid price>. All data presented in this column / position in the file refers to <Best bid price>. |
| 08.09 | <Best ask price> | D | Price of best ask limit.<br>For trading sessions prior to 25 Jun 2018, the label for this field in the header record in the actual data files is <Best bid price>, but it should read <Best ask price>. All data presented in this column / position in the file refers to <Best ask price>. |
| 08.10 | <Size on best bid> | N | Total order size at best bid.<br>For trading sessions prior to 25 Jun 2018, the label for this field in the header record in the actual data files is <Size on best ask>, but it should read <Size on best bid>. All data presented in this column / position in the file refers to <Size on best bid>. |
| 08.11 | <Size on best ask> | N | Total order size at best ask.<br>For trading sessions prior to 25 Jun 2018, the label for this field in the header record in the actual data files is <Size on best bid>, but it should read <Size on best ask>. All data presented in this column / position in the file refers to <Size on best ask>. |
| 08.12 | <Number of orders with best bid> | N | Total number of orders at best bid. |
| 08.13 | <Number of orders with best ask> | N | Total number of orders at best ask. |
| 08.14 | <LP presence indicator at the sell limit><br>(Field added on 23 Mar 2009) | X | Indicates if a Liquidity Provider is present at the sell limit<br>Possible values:<br>■ L – LP present<br>■ Blank – no LP present |
| 08.15 | <LP presence indicator at the buy limit><br>(Field added on 23 Mar 2009) | X | Indicates if a Liquidity Provider is present at the buy limit<br>Possible values:<br>■ L – LP present<br>■ Blank – no LP present |