

Document title

EURONEXT NEXTHISTORY® DERIVATIVES CLIENT SPECIFICATION

Document type or subject

CLIENT SPECIFICATION

Revision number

Revision Number: 1.4

Date

26 January 2023

This document is for information purposes only and is not a recommendation to engage in investment activities. The information and materials contained in this document are provided 'as is' and Euronext does not warrant the accuracy, adequacy or completeness of the information and materials and expressly disclaims liability for any errors or omissions. This document is not intended to be, and shall not constitute in any way a binding or legal agreement, or impose any legal obligation on Euronext. This document and any contents thereof, as well as any prior or subsequent information exchanged with Euronext in relation to the subject matter of this document, are confidential and are for the sole attention of the intended recipient. All proprietary rights and interest in or connected with this publication shall vest in Euronext. No part of it may be redistributed or reproduced without the prior written permission of Euronext.

Euronext refers to Euronext N.V. and its affiliates. Information regarding trademarks and intellectual property rights of Euronext is located at <https://www.euronext.com/terms-use>.

PREFACE

DOCUMENT HISTORY

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

VERSION NO.	DATE	CHANGE DESCRIPTION
1.0	01 Mar 2016	Initial distribution
1.1	09 May 2016	Planned for July 2016: <ul style="list-style-type: none"> “InstrumentISIN” field added to Referential File
1.2	06 July 2016	Inclusion of “InstrumentISIN” in Referential File postponed until further notice
1.3	28 October 2016	Inclusion of “VolatilityForValuation” in EOD Summary Files
1.3.1	29 June 2017	Effective 01 August 2017 <ul style="list-style-type: none"> “InstrumentISIN” field added to Referential File (see page 11)
1.3.2.	01 March 2021	Effective 01 March 2021 <ul style="list-style-type: none"> Change to the “TradeValueEuro” field to align with ESMA MiFID II requirements (see pages 17/18)
1.3.3	09 September 2022	(Effective 01 Sept 2022) – the following changes will be made <ul style="list-style-type: none"> - Full Order Book (FOB) files will be added to the NextHistory offering - OPTIQ MDG binary data (RAW) files (in PCAP format) will be added to the NextHistory offering
1.4	26/01/2023	(Effective 01 February 2023) <ul style="list-style-type: none"> - File delivery via SFTP - except for the RAW Files - will become available (see section 3.4 – “FTP/SFTP Delivery”) - File delivery via HTTPS will become available (see section 3.6 – “HTTPS Delivery”) (Effective 18 March 2023) <ul style="list-style-type: none"> - File delivery via FTP will stop for all products, except for the RAW Files (see section 3.4 – “FTP/SFTP Delivery”)

CONTACT INFORMATION

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

- Email: serviceoperations@euronext.com
- Telephone: +44 (0) 20 7660 8588

FURTHER INFORMATION

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

CONTENTS

- 1. INTRODUCTION 5**
- 2. DATA OVERVIEW 6**
- 3. DATA FILES 7**

1. INTRODUCTION

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

Table 1 Euronext NextHistory Derivatives Data Products

	A END OF DAY PACKAGE	B TRADES PACKAGE (INCLUDES A)	C BBO PACKAGE (INCLUDES A AND B)	D FOB PACKAGE (INCLUDES A, B AND C)	E RAW PACKAGE
Referential Files	✓	✓	✓	✓	
EOD Summary Files	✓	✓	✓	✓	
Trade Files		✓	✓	✓	
BBO Files			✓	✓	
FOB Files				✓	
RAW Files					✓

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

END-OF-DAY, TRADES, BBO, FOB packages: ZIP compressed CSV files are provided.

RAW package: GZ compressed PCAP files are provided. Euronext does not provide a file decoder.

2. DATA OVERVIEW

Euronext NextHistory Derivatives is stored in the following files.

FILE NAME	CONTENTS
Referential Files	Historical referential data for contracts listed/traded on Euronext Derivatives markets. Offers one file covering all Euronext markets.
End of Day Files	Historical end-of-day summary data for contracts listed/traded on Euronext Derivatives markets. Offers one file covering all Euronext markets.
Trade Files	Historical trade data for contracts listed/traded on Euronext Derivatives markets. Offers one file covering all Euronext markets.
BBO Files	Historical best bid and offer (L1) data for contracts listed/traded on Euronext Derivatives markets. Offers one file covering all Euronext markets.
FOB Files	Incremental order updates
RAW	As detailed in the OPTIQ MDG Client Specification and OPTIQ MDDG Connectivity documentation available on Euronext's website

3. DATA FILES

3.1 FILE FORMAT

END-OF-DAY, TRADES, BBO, FOB files

- All files are in CSV format (ZIP compressed). The field delimiter is a semicolon.
- All numerical values follow standard international practice (decimal separator is a point).

RAW files

- All files are in PCAP format.

3.2 FILE AVAILABILITY

There is no fixed availability time for Euronext NextHistory Derivatives 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.

3.3 FILE NAMING CONVENTION

FILE TYPE	FILE NAME
Referential File	DER_EU_ENXT_ALL_REF_yyyymmdd
End of Day Summary File	DER_EU_ENXT_ALL_SUM_yyyymmdd
Trade File	DER_EU_ENXT_ALL_TRADE_yyyymmdd
BBO File	DER_EU_ENXT_ALL_BBO_yyyymmdd
FOB File	<MARKET_PLACE>_<PRODUCT_GROUP>_<INSTRUMENT2D>_yyymmdd
RAW	mdg.<IP ADDRESS>.yyymmdd

where

- yyyymmdd refers to the creation date of the file
- <MARKET_PLACE> refers to AMS, BRU, LIS, OSL or PAR
- <PRODUCT_GROUP> refers to the asset class (Equity, Index or Commodities)
- <INSTRUMENT2D> refers to the last two digits of the instrument_ids_code (internal code)
- <IP ADDRESS> refers to the IP address of the OPTIQ MDG channel

3.4 FTP/SFTP DELIVERY

Until 17 March 2023*, the files are available via FTP:

- Production: <ftp.data.euronext.com>
- EUA: <ftp.eua-data.euronext.com>

NOTE: The delivery of files (except for the RAW files) via ftp will stop effective 18 March 2023.

Effective 01 February 2023* (except for the RAW files), the files are available via SFTP:

the files are available on our sftp server:

- Host: data.prodnr.euronext.cloud
- Port: 22000

Please refer to the Data Shop SFTP Guide (available [here](#)) for instructions on how to set up your sftp account.

* Information regarding the NDM to DataShop migration is available [here](#).

3.5 FTP/SFTP FILE LOCATION

FILE TYPE	DIRECTORIES
Referential File	/DER_EU_ENXT_ALL_REF Most Recent File <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_REF/CURRENT Historical Archive <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_REF/DER_EU_ENXT_ALL_REF_yyyy/ DER_EU_ENXT_ALL_REF_yyyymm
End of Day Summary File	/DER_EU_ENXT_ALL_SUM Most Recent File <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_SUM/CURRENT Historical Archive <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_SUM/DER_EU_ENXT_ALL_SUM_yy yy/ DER_EU_ENXT_ALL_SUM_yyyymm
Trade File	/DER_EU_ENXT_ALL_TRADE Most Recent File <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_TRADE/CURRENT Historical Archive <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_TRADE/DER_EU_ENXT_ALL_TRADE _yyyy/DER_EU_ENXT_ALL_TRADE_yyyymm
BBO File	/DER_EU_ENXT_ALL_BBO

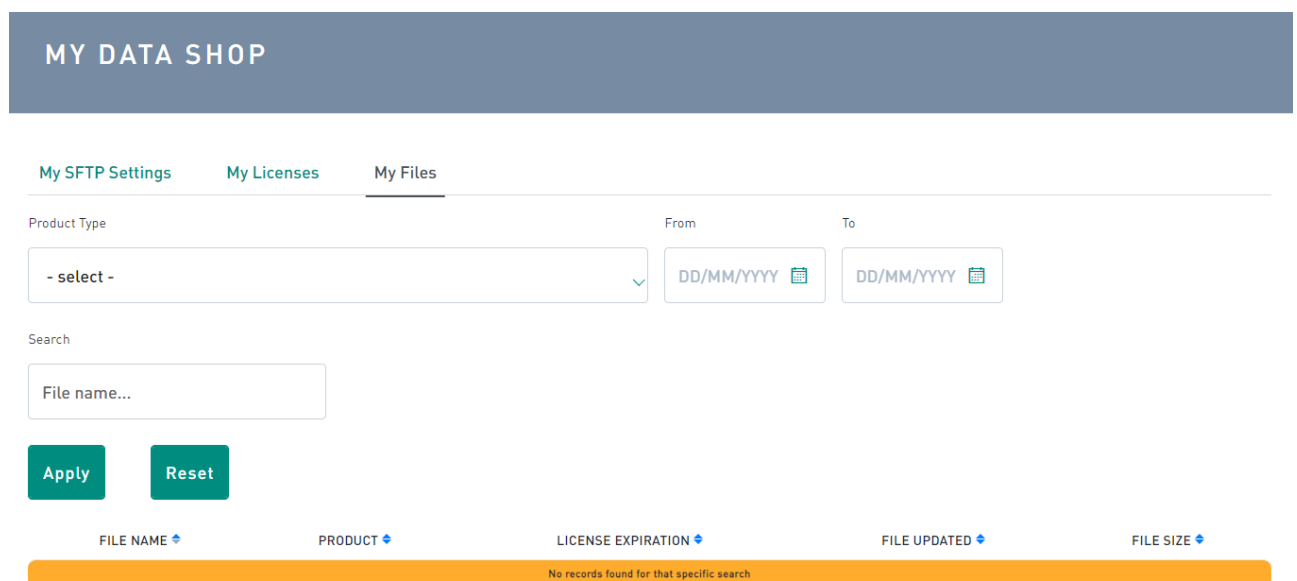
	<p>Most Recent File</p> <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_BBO/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_BBO/DER_EU_ENXT_ALL_BBO_yyy y/DER_EU_ENXT_ALL_BBO_yyyyymm
FOB File	<p>/DER_EU_ENXT_ALL_FOB</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_FOB/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • DER_EU_ENXT_ALL_FOB/DER_EU_ENXT_ALL_FOB_yyyy /DER_EU_ENXT_ALL_FOB_yyyyymm
RAW – Euronext Commodities	<p>/DER_EU_ENXT_COM_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_COM_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_COM_RAW/DER_EU_ENXT_COM_RAW _yyyy/DER_EU_ENXT_COM_RAW_yyyyymm
Euronext Equity & Index Futures – France	<p>/DER_EU_ENXT_EQY-IND-FUT-FR_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-IND-FUT-FR_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-IND-FUT- FR_RAW/DER_EU_ENXT_EQY-IND-FUT- FR_RAW_yyyy/DER_EU_ENXT_EQY-IND-FUT- FR_RAW_yyyyymm
Euronext Equity & Index Futures – Netherlands	<p>/DER_EU_ENXT_EQY-IND-FUT-NL_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-IND-FUT-NL_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-IND-FUT- NL_RAW/DER_EU_ENXT_EQY-IND-FUT- NL_RAW_yyyy/DER_EU_ENXT_EQY-IND-FUT- NL_RAW_yyyyymm
Euronext Equity & Index Futures – Other	<p>/DER_EU_ENXT_EQY-IND-FUT-BE-PT_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-IND-FUT-BE-PT_RAW/CURRENT

	<p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-IND-FUT-BE-PT_RAW/DER_EU_ENXT_EQY-IND-FUT-BE-PT_RAW_yyyy/DER_EU_ENXT_EQY-IND-FUT-BE-PT_RAW_yyyymm
Euronext Equity Options - France	<p>/DER_EU_ENXT_EQY-OPT-FR_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-OPT-FR_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-OPT-FR_RAW/DER_EU_ENXT_EQY-OPT-FR_RAW_yyyy/DER_EU_ENXT_EQY-OPT-FR_RAW_yyyymm
Euronext Equity Options - Netherlands	<p>/DER_EU_ENXT_EQY-OPT-NL_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-OPT-NL_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-OPT-NL_RAW/DER_EU_ENXT_EQY-OPT-NL_RAW_yyyy/DER_EU_ENXT_EQY-OPT-NL_RAW_yyyymm
Euronext Equity Options – Other	<p>/DER_EU_ENXT_EQY-OPT-BE_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-OPT-BE_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_EQY-OPT-BE_RAW/DER_EU_ENXT_EQY-OPT-BE_RAW_yyyy/DER_EU_ENXT_EQY-OPT-BE_RAW_yyyymm
Euronext Index Options - France	<p>/DER_EU_ENXT_IND-OPT-FR_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_IND-OPT-FR_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_IND-OPT-FR_RAW/DER_EU_ENXT_IND-OPT-FR_RAW_yyyy/DER_EU_ENXT_IND-OPT-FR_RAW_yyyymm
Euronext Index Options – Netherlands	<p>/DER_EU_ENXT_IND-OPT-NL_RAW</p> <p>Most Recent File</p>

	<ul style="list-style-type: none"> • /DER_EU_ENXT_IND-OPT-NL_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_IND-OPT-NL_RAW/DER_EU_ENXT_IND-OPT-NL_RAW_yyyy/DER_EU_ENXT_IND-OPT-NL_RAW_yyyymm
Euronext Index Options – Other	<p>/DER_EU_ENXT_IND-OPT-BE_RAW</p> <p>Most Recent File</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_IND-OPT-BE_RAW/CURRENT <p>Historical Archive</p> <ul style="list-style-type: none"> • /DER_EU_ENXT_IND-OPT-BE_RAW/DER_EU_ENXT_IND-OPT-BE_RAW_yyyy/DER_EU_ENXT_IND-OPT-BE_RAW_yyyymm

3.6 HTTPS DELIVERY

Effective 01 February 2023, the files are also available on <https://live.euronext.com/en/user/datashop/files> using the client’s credentials.



3.7 FILE LAYOUTS

Each NextHistory Derivatives file has the following structure :

- The header record (one per trading day)
 - Record Type = 'H';
- The Descriptor Record (one per trading day)

- Record Type = 'D';
- The body record (x per trading day, x > 0)
 - Record Type can take the following values:
 - RO = Referential Outright Data
 - RS = Referential Strategy Data
 - E = EOD Summary Data
 - T = Trade data
 - B = BBO Data;
- The footer record (one per trading day)
 - Record Type = 'F'.

All body records have a variable length and each field is separated by a semicolon.

Header & Footer Records

Each of the NextHistory Derivatives files uses the same structure for the Header record and the same structure for the Footer record.

The structure of the Header record is the following:

Header Record

FIELD NAME	FIELD TYPE	DESCRIPTION
RecordType	Alphanumeric	'H' = Header
FileIdentifier	Alphanumeric	File name (please refer to each file description)
GenerationDateTime	Alphanumeric	Date and START time of file generation trigger according to the System Clock [YYYY-MM-DD hh:mm:ss]

The structure of Footer record is the following:

Footer Record

FIELD NAME	FIELD TYPE	DESCRIPTION
RecordType	Alphanumeric	'F' = Footer
Footer	Alphanumeric	File name (please refer to each file description)

FIELD NAME	FIELD TYPE	DESCRIPTION
CompletionDateTime	Alphanumeric	Date and END time of file generation trigger according to the System Clock

Referential File

There is one descriptor a day in Referential Data file (located after the header record).

Each Referential Data Body record is split up in three consecutive parts :

- First part of Referential Data Record contains contract level information. This data is available for both outright and strategy instruments.
- Second part of Referential Data Record contains instrument level information.
- Third part of Referential Data Record contains only strategy information (i.e. the definition of the strategy).

Referential Data body records are structured as followed :

FIELD NAME	FIELD TYPE	DESCRIPTION
RecordType	Alphanumeric	Identifier indicating the type of record. <ul style="list-style-type: none"> • RO= Referential Outright Data Record • RS= Referential Strategy Data Record
Market Place	Alphanumeric	Market Place: <ul style="list-style-type: none"> • AMS = Amsterdam • BRU = Brussels • LIS = Lisbon • OSL = Oslo (as of 7 Dec 2020) • PAR = Paris
Asset Class	Alphanumeric	Asset Class <ul style="list-style-type: none"> • DRV = Derivatives
Asset Group	Alphanumeric	Asset Group <ul style="list-style-type: none"> • CUR = Currency • EQU = Equity • IND = Index • COM = Commodity

FIELD NAME	FIELD TYPE	DESCRIPTION
ExchangeName	Alphanumeric	Long Name of the exchange.
Market Id Code	Alphanumeric	MIC – Place of Trading (Market Place). Empty if not available.
ExchangeCode	Alphanumeric	<p>A code typically indicating the exchange on which a contract trades.</p> <ul style="list-style-type: none"> • A: Amsterdam - Equity Products • B: Brussels - Equity Products • F: Brussels - Index Products • J: Paris - Index Products • K: Amsterdam - Index Products • M: Lisbon - Index Products • N: Oslo Index Derivatives (as of 7 Dec 2020) • O: Oslo Equity Derivatives (as of 7 Dec 2020) • P: Paris - Equity Products • R: Amsterdam - Commodity Products • S: Lisbon - Equity Products • Y: Paris - Commodity Products • Z: Amsterdam - Currency Products
InstrumentType	Alphanumeric	<p>Instrument Type as defined by the exchange.</p> <p>F - Future</p> <p>O - Option</p>
InstrumentTrading Symbol	Alphanumeric	Official Exchange Trading Symbol of Instrument.
InstrumentName	Alphanumeric	Full name of Instrument / Class.
ExerciseType	Alphanumeric	<p>Exercise type of instrument. For Options only.</p> <ul style="list-style-type: none"> • E - European style

FIELD NAME	FIELD TYPE	DESCRIPTION
		<ul style="list-style-type: none"> • A - American style • Blank, if not applicable.
ContractCurrency	Alphanumeric	Trading currency of the contract (ISO Currency Code)
SettlementMethod	Alphanumeric	Settlement Method: <ul style="list-style-type: none"> • C – Cash settlement • P – Physical settlement
Notional Tick Value	Decimal/Floating Point	The tick value per point of the instrument Contract level value
UnderlyingISIN	Alphanumeric	ISIN code of underlying instrument, where applicable.
Underlying Exchange Code	Alphanumeric	<p>A code typically indicating the exchange on which a contract trades.</p> <ul style="list-style-type: none"> • A: Amsterdam - Equity Products • B: Brussels - Equity Products • F: Brussels - Index Products • J: Paris - Index Products • K: Amsterdam - Index Products • M: Lisbon - Index Products • N: Oslo Index Derivatives (as of 7 Dec 2020) • O: Oslo Equity Derivatives (as of 7 Dec 2020) • P: Paris - Equity Products • R: Amsterdam - Commodity Products • S: Lisbon - Equity Products • Y: Paris - Commodity Products • Z: Amsterdam - Currency Products

FIELD NAME	FIELD TYPE	DESCRIPTION
Underlying Instrument Type	Alphanumeric	Instrument Type of the underlying as defined by the exchange e.g. <ul style="list-style-type: none"> • F = Future • S = Stock • I = Index • U = Pseudo Underlyings – pricing purposes only • X = Exchange Rate
Underlying Instrument Trading Symbol	Alphanumeric	Official Exchange Trading Symbol of the underlying instrument
InstrumentID	Alphanumeric	A unique identifier for the derivative instrument
InstrumentISIN (included on 01 August 2017)	Alphanumeric	ISIN code of the derivative instrument. The ISIN code will be available for outright contracts only.
BDM Instrument Code	Numeric/Integer	BDM Internal Instrument Code (BDM is Euronext's database)
ExpiryDate	Numeric/Integer	Expiry date of instrument. (yyyymmdd)
ExercisePrice	Numeric/Integer	For Options only. The exercise (strike) price of the Option instrument in integer tick representation. Shows '0' for Futures and Strategies
ActualExercisePrice	Decimal/Floating Point	For Options only. The actual exercise (strike) price of instrument. (calculated using the ExercisePriceDecimalLocator and ExercisePriceDenominator) Shows '0' for Futures and Strategies
ExercisePriceDecimal Locator (L)	Numeric/Integer	For Options only (used in calculating the actual exercise price).
ExercisePrice Denominator (D)	Numeric/Integer	For Options only (used in calculating the actual exercise price).
OptionCategory	Alphanumeric	Refers to the option category for options :

FIELD NAME	FIELD TYPE	DESCRIPTION
		<ul style="list-style-type: none"> • C – Call • P – Put <p>Refers to the type of instrument for futures and strategies</p> <ul style="list-style-type: none"> • F – Future • F - Strategy
LotSize	Numeric/Integer	Trading lot
IntradayCreation	Alphanumeric	Intraday Creation : "Y" Not Intraday Creation : Empty
StrategyMarketCode	Alphanumeric	Indicates the type of strategy listed (e.g. Calendar Spread). Please check list of strategies available on Euronext's website.
StrategyLegsNumber	Numeric/Integer	Number of legs of that make up the strategy
Leg1InstrumentID	Alphanumeric	A unique identifier for the outright leg instrument. Corresponds to the Exchange Instrument ID for the future/option/underlying leg instrument.
Leg1Side	Alphanumeric	Buy (+) or Sell (-)
Leg1Ratio	Numeric/Integer	Ratio of this leg compared to other legs of strategy
Leg1Price	Decimal/Floating Point	Price at which the underlying contingent leg for Delta Neutral and Conversion Reversal strategies must trade
Leg1Number	Numeric/Integer	Leg Number 1
...
Leg50InstrumentID	Alphanumeric	A unique identifier for the outright leg instrument. Corresponds to the Exchange Instrument ID for the future/option/underlying leg instrument.
Leg50Side	Alphanumeric	Buy (+) or Sell (-)
Leg50Ratio	Numeric/Integer	Ratio of this leg compared to other legs of strategy

FIELD NAME	FIELD TYPE	DESCRIPTION
Leg50Price	Decimal/Floating Point	Price at which the Underlying contingent leg for Delta Neutral and Conversion Reversal strategies must trade
Leg50Number	Numeric/Integer	Leg Number 50

End of Day Summary File

There is one descriptor a day in EOD Summary file (located after the header record).

Each EOD file detail is structured as followed:

FIELD NAME	FIELD TYPE	DESCRIPTION
RecordType	Alphanumeric	Identifier indicating the type of record. <ul style="list-style-type: none"> E = End Of Day Record
Market Place	Alphanumeric	Market Place: <ul style="list-style-type: none"> AMS = Amsterdam BRU = Brussels LIS = Lisbon OSL = Oslo (as of 7 Dec 2020) PAR = Paris
Asset Class	Alphanumeric	Asset Class <ul style="list-style-type: none"> DRV = Derivatives
Asset Group	Alphanumeric	Asset Group <ul style="list-style-type: none"> CUR = Currency EQU = Equity IND = Index COM = Commodity
ExchangeCode	Alphanumeric	A code typically indicating the exchange on which a contract trades. <ul style="list-style-type: none"> A: Amsterdam - Equity Products B: Brussels - Equity Products F: Brussels - Index Products

FIELD NAME	FIELD TYPE	DESCRIPTION
		<ul style="list-style-type: none"> • J: Paris - Index Products • K: Amsterdam - Index Products • M: Lisbon - Index Products • N: Oslo Index Derivatives (as of 7 Dec 2020) • O: Oslo Equity Derivatives (as of 7 Dec 2020) • P: Paris - Equity Products • R: Amsterdam - Commodity Products • S: Lisbon - Equity Products • Y: Paris - Commodity Products • Z: Amsterdam - Currency Products
InstrumentType	Alphanumeric	Instrument Type as defined by the exchange: <ul style="list-style-type: none"> • F – Future • O – Option
InstrumentTrading Symbol	Alphanumeric	Official Exchange Trading Symbol of instrument.
InstrumentID	Alphanumeric	A unique identifier for the derivative instrument.
ExpiryDate	Alphanumeric	Expiry date of instrument. (yyyymmdd)
ExercisePrice	Numeric/Integer	For Options only. The exercise (strike) price of the Option instrument in integer tick representation. Shows '0' for Futures and Strategies
ActualExercisePrice	Decimal/Floating Point	For Options only. The actual exercise (strike) price of instrument. (calculated using the ExercisePriceDecimalLocator and ExercisePriceDenominator) Shows '0' for Futures and Strategies

FIELD NAME	FIELD TYPE	DESCRIPTION
OptionCategory	Alphanumeric	Refers to the option category for options : <ul style="list-style-type: none"> • C – Call • P – Put Refers to the type of instrument for futures and strategies <ul style="list-style-type: none"> • F – Future • F - Strategy
Open	Decimal/Floating Point	Opening book trade price for the current day.
High	Decimal/Floating Point	Highest book trade price for the current day.
Low	Decimal/Floating Point	Lowest book trade price for the current day.
Trade Count	Numeric/Integer	Number of executed trades for the current day.
Close	Decimal/Floating Point	Close price for the instrument.
Settlement	Decimal/Floating Point	Settlement price for the instrument.
COB Volume	Numeric/Integer	Total daily volume of trades executed through Central Order Book.
Off-COB Volume	Numeric/Integer	Total daily volume of trades reported through ATOMX.
Total Volume	Numeric/Integer	Total daily volume of all trades, both through Central Order Book and Bclear.
Open Interest	Numeric/Integer	Open Interest for the instrument.
Open Interest Date	Alphanumeric	Date to which the Open Interest applies. (yyyymmdd)
End of Day Delta	Numeric/Integer	End of Day Delta (varies between -100 and 100)
Volatility	Numeric/Integer	Volatility (in percentage points e.g. 44 = 44%)
VolatilityForValuation	Decimal/Floating Point	Volatility (in percentage points, with three decimals)

Trade File

There is one descriptor a day in Trade file (located after the header record).

Each Trade file body record is structured as followed:

FIELD NAME	FIELD TYPE	DESCRIPTION
Record Type	Alphanumeric	Identifier indicating the type of record. <ul style="list-style-type: none"> T = Trade Data Record.
Market Place	Alphanumeric	Market Place: <ul style="list-style-type: none"> AMS = Amsterdam BRU = Brussels LIS = Lisbon OSL = Oslo (as of 7 Dec 2020) PAR = Paris
Asset Class	Alphanumeric	Asset Class <ul style="list-style-type: none"> DRV = Derivatives
Asset Group	Alphanumeric	Asset Group <ul style="list-style-type: none"> CUR = Currency EQU = Equity IND = Index COM = Commodity
Instrument Id	Alphanumeric	The unique identifier for the derivative instrument.
Code Inst BDM	Alphanumeric	BDM Internal Instrument Code (BDM is Euronext's database)
Trading Event Number	Alphanumeric	Trading Event Number Reinitialized every day
Matched Trade Id	Alphanumeric	Trade Identification Code Never reinitialized
Trade For Clearing Id	Alphanumeric	Trade For Clearing Identifier. The last character of this identifier allows to determine the execution venue: <ul style="list-style-type: none"> '0': OnExchange trade (Normal Trade)

FIELD NAME	FIELD TYPE	DESCRIPTION
		<ul style="list-style-type: none"> • '9': OnExchangeOffBook Trade (Wholesale Trade) • '8': OffBook Trade (ATOMX Trade)
Cross Trade Type	Alphanumeric	<p>Normal Market:</p> <ul style="list-style-type: none"> • Blank for Trades (different members) • 'T' for Member Cross (different traders from the same member) • 'S' for Trader Cross (same trader) • Specific values for Ex-pits: • Blank for Prof Trades • '2' for Basis Trade and Asset Allocation • 'S' for Block Trade, Against Actual, Guaranteed Cross and Exchange For Swap
Wholesale Trade Type	Alphanumeric	<p>Blank = Normal Trade</p> <p>Wholesale trade type</p> <ul style="list-style-type: none"> • '1' = Block Trade • '2' = Basis Trade • '3' = Against Actual • '4' = Asset Allocation • '5' = Professional • '6' = Guaranteed Cross • '7' = Exchange For Swap
Trade Price	Decimal/Floating Point	Price of the trade. Always a positive value.
Trade Volume	Numeric/Integer	Volume of the trade
Trade Value Euro	Decimal/Floating Point	<p>Before 01 March 2021</p> <p>= TradePrice x TradeVolume</p> <p>As of March 2021</p>

FIELD NAME	FIELD TYPE	DESCRIPTION
		<ul style="list-style-type: none"> Futures: TradeVolume x TradePrice x LotSize x FX rate Options: TradeVolume x ExercisePrice x LotSize x FX rate
Trade Date	Alphanumeric	Date when the trade occurred (yyyymmdd)
Trade Time	Alphanumeric	Time when the trade occurred (hhmmssmmmmμμμ)
Session Id	Alphanumeric	Session in which trade occurred. <ul style="list-style-type: none"> '2' = Morning/Afternoon '3' = Evening
Trading Day	Alphanumeric	Trading Day Date (yyyymmdd)
Trade Cancellation Flag	Alphanumeric	Trade Cancellation Flag <ul style="list-style-type: none"> '1': Valid Trade '2': Cancelled Trade
Trade Cancellation Time	Alphanumeric	Trade Cancellation Time (hh:mm:ss.mmm)

BBO File

There is one descriptor a day in the BBO file (located after the header record).

Each BBO file detail is structured as followed:

FIELD NAME	FIELD TYPE	DESCRIPTION
RecordType	Alphanumeric	Identifier indicating the type of record. <ul style="list-style-type: none"> B = Best Bid and Offer Record.
Market Place	Alphanumeric	Market Place: <ul style="list-style-type: none"> AMS = Amsterdam BRU = Brussels LIS = Lisbon OSL = Oslo (as of 7 Dec 2020) PAR = Paris

FIELD NAME	FIELD TYPE	DESCRIPTION
Asset Class	Alphanumeric	Asset Class: <ul style="list-style-type: none"> • DRV = Derivatives
Asset Group	Alphanumeric	Asset Group: <ul style="list-style-type: none"> • CUR = Currency • EQU = Equity • IND = Index • COM = Commodity
InstrumentID	Alphanumeric	The unique identifier for the derivative instrument.
BDM Instrument Code	Alphanumeric	BDM Internal Instrument Code (BDM is Euronext's database)
Trading Event Number	Alphanumeric	Trading Event Number Reinitialized every day
BBO Timestamp	Alphanumeric	Timestamp BBO was updated (yyyymmddHHMMSSsss date time)
BBO Type	Alphanumeric	BBO Type <ul style="list-style-type: none"> • I=Implied • B=BBO
Best Bid	Decimal/Floating Point	Best Bid Price. Can be a positive or a negative value.
Best Bid Qty	Numeric/Integer	Best Bid Volume
Best Offer	Decimal/Floating Point	Best Offer Price. Can be a positive or a negative value.
Best Offer Qty	Numeric/Integer	Best Offer Volume

Please note that, due to the amount of data involved, the BBO file generation process pads records with spaces when they are added to the file. This way, for records type B, any spaces present after the last semi-colon delimiter should be ignored.

FOB File

There is one descriptor a day in the FOB file (located after the header record).

Each FOB file detail is structured as followed:

FIELD NAME	FIELD TYPE	DESCRIPTION
Instrument trading symbol	Alphanumeric	Exchange Trading Symbol of Instrument. Also known as Automated Market Reference (AMR)
Symbol index	Numeric/Integer	A unique system-wide identifier (in private and public messages) assigned to a trading instrument in Optiq
Product group	Alphanumeric	Underlying asset product group. Possible values: <ul style="list-style-type: none"> • Equity • Index • Commodity
Sequence date	DD/MM/YYYY	Date of the event
Sequence time UTC	HH:MM:SS:mmmmμμμnnn	Time of the event in UTC time
Sequence time CET	HH:MM:SS:mmmmμμμnnn	Time of the event in CET time
Sequence number	Alphanumeric	Sequence number of the event
EMM	Alphanumeric	Possible values: <ul style="list-style-type: none"> • COB (Central Order Book) • RFC (Request for Cross)

FIELD NAME	FIELD TYPE	DESCRIPTION
Event id	Numeric/Integer	Event id
Order id	Numeric/Integer	Unique order id
Order event type	Alphanumeric	Possible values: <ul style="list-style-type: none"> • Cancel • Fill • Modify • New • Implicit • Reload
Order side	Alphanumeric	Possible values: <ul style="list-style-type: none"> • Buy • Sell • Cross
Order price	Decimal/Floating Point	Limit price of the order
Order size	Decimal/Floating Point	Order size
Order type	Alphanumeric	Possible values: <ul style="list-style-type: none"> • Limit • Implied • Market • Post Trade Implied
Execution id	Numeric/Integer	The execution id of a trade related to the order
Trade size	Decimal/Floating Point	The size of a trade related to the order
Trade price	Decimal/Floating Point	The price of a trade related to the order

FIELD NAME	FIELD TYPE	DESCRIPTION
Strat link order side	Numeric/Integer	Order linked to strategy instrument. Possible values: <ul style="list-style-type: none">• 1 (Buy)• 2 (Sell)
Strat link symbol index	Numeric/Integer	Symbol index of strategy instrument
Strat link execution id	Numeric/Integer	Execution id of strategy order

RAW Files

Content as detailed in the OPTIQ MDG Client Specification and OPTIQ MDG Connectivity documentation available on Euronext's website