

Document title**EURONEXT MARKETS - OPTIQ® FILE SPECIFICATIONS****Document type or subject****Optiq Files Specifications****Version number****3.1.0****Date****6 Sep 2019****Number of pages****103****SBE Template Version****204**

This document is for information purposes only. The information and materials contained in this document are provided 'as is' and Euronext does not warrant the accuracy, adequacy or completeness 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 presentation, are confidential and are for the sole attention of the intended recipient. Except as described below, 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. Portions of this presentation may contain materials or information copyrighted, trademarked or otherwise owned by a third party. No permission to use these third party materials should be inferred from this presentation.

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

Purpose

The purpose of this document is to describe all the file specifications required for trading on Optiq®.

Target audience

This document must be read by Euronext's clients developing tools for retrieving and processing Market Data files.

Scope

The scope of this document is listed below (✓ In scope, ✗ Out of scope):

Products	
Equities	✓
Funds	✓
Fixed Income	✓
Warrants and Certificates	✓
Equity Derivatives	✓
Index Derivatives	✓
Commodities	✓
Financial Derivatives	✓

Associated Documents

Please read the following documents along with these specifications:

Title	Description
Euronext Markets – Optiq MDG Client Specifications	Description of Market Data Gateway and all message structures
Euronext Optiq® Market Data Gateway Production Environment	Description of the Production feed configuration
Euronext Optiq® Market Data Gateway External User acceptance Environment	Description of the External User Acceptance feed configuration
Optiq Euronext File Services User Guide	EFS user guide

For latest version of all documentation please visit the [IT Documentation page](#).

Support

Optiq Support Desk

Tel: +33 1 70 48 25 55

Email: optiq@euronext.com

What's New?

The following lists only the most recent modifications made to this version of the document. For the complete document history table, please see the [Appendix](#).

Version Number	Change Description
3.1.0	<p>The following changes have been made:</p> <ul style="list-style-type: none"> ■ Fields name in messages have been renamed to be in line with produced files ■ Added section 2.6 "Derivatives parameters" ■ Added section 2.7 "Price, Quantity, Ratio and Amount Decimals" ■ The following changes have been updated in the existing file: <ul style="list-style-type: none"> a) Cash Standing Data File (9007): Added field <i>Asset Class</i> (wrongly removed), <i>BPS Low Collar</i>, <i>Bps High Collar</i>, <i>Block Price Control ID</i>, <i>Declaration Duration</i>, <i>Eligible For Margin</i>; b) Derivatives Standing Data File (9013): Renamed 3 fields <i>Reference Price Origin</i> in respectively <i>Reference Price Origin In Opening Call</i>, <i>Reference Price Origin In Continuous</i>, <i>Reference Price Origin in Trading Interruption</i> in Contract Standing Data section; Added fields <i>MIFID II Liquid Flag</i>, <i>Pricing Algorithm</i> in Contract Standing Data section; Added field <i>Trading Unit</i> in Outright Standing Data section; Deprecated field <i>Lot Size</i> in Outright Standing Data; c) Reference Spreads File (9045): Renamed field <i>Time To Expiry</i> in <i>TTE Range Lower Limit</i> ■ Field Descriptions: <ul style="list-style-type: none"> a) Updated description for field <i>Maturity Date</i> – now provide actual date of expiry instead of 00 b) Enriched conditions and descriptions for fields <i>Collar Max Unhalt Nb</i>; <i>Collar Unhalt Delay</i>; <i>Dynamic Collar Logic</i>; <i>Param Name</i>; <i>Strategy Authorized</i>; <i>Trading Unit</i> c) Added new fields: <i>MIFID II Liquid Flag</i>; <i>Pricing Algorithm</i> d) Enriched values for fields as follows: <i>Contract Type</i> – added value U = Underlying; <i>Derivatives Instrument Type</i> – added value 4 = Underlying (not used for Euronext Markets); <i>EMM</i> – added value 15 = Delta Neutral Contingency leg; <i>Optiq Segment</i> – added value 15 = Forex e) Updated values for fields <i>Param Name</i>; <i>Param Type of Expression</i>; f) Deprecated values for field <i>Strategy Code</i> ■ Formatting and clarification of descriptions <ul style="list-style-type: none"> a) Updated formatting, and wording throughout the document to clarify existing functionality / use.

Further information

- For additional product information please visit: <https://connect2.euronext.com/en/projects/optiq>

CONTENTS

1.	EURONEXT OPTIQ MARKET DATA GATEWAY SOLUTION	5
1.1	Introduction	5
1.2	Access to File Server	5
1.3	File Naming Convention	7
1.4	Server Availability.....	8
1.5	File Version availability	8
2.	FILE OVERVIEW.....	9
2.1	Functional Format Fields	9
2.2	Technical Format Fields	9
2.3	Date convention	10
2.4	Time Convention	10
2.5	Feed Configuration	11
2.6	Derivatives parameters.....	14
2.7	Price, Quantity, Ratio and Amount Decimals	15
3.	FILE DESCRIPTION	16
3.1	SBE Template Files.....	16
3.2	CashStandingDataFile (9007).....	16
3.3	CashTickSizeReferentialFile (9020)	26
3.4	DerivativesStandingDataFile (9013).....	27
3.5	DerivativesTickSizeFile (9021)	35
3.6	OpenInterestFile (9014)	36
3.7	ReferenceSpreadsFile (9045).....	37
3.8	PrevDayCapAndVolTradFile (9015).....	38
3.9	RepoSettlementPriceFile (9016)	39
3.10	TimetableFile (9001)	39
4.	FIELD DESCRIPTION.....	41

1. EURONEXT OPTIQ MARKET DATA GATEWAY SOLUTION

1.1 INTRODUCTION

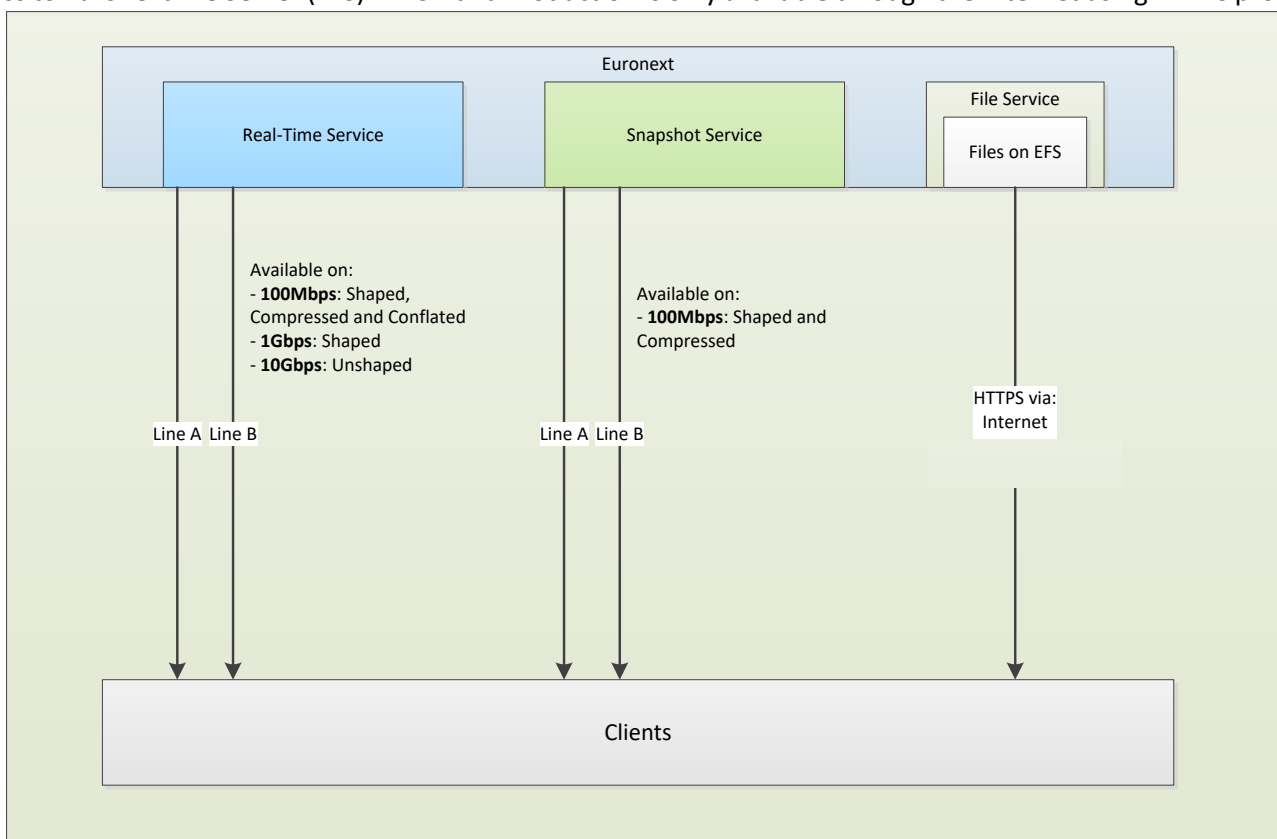
This document details the Referential Data HTTPS Service for Euronext, to be used in conjunction with the Optiq MDG and OEG messages specifications.

The service provides full referential data for the Euronext markets, as well as feed configurations, key trading information and MDG and OEG SBE templates. Users of the Euronext market data feed should use the service to:

- Configure feed connections,
- Obtain the referential data, configuration and setup parameters, that are published on a daily basis.

1.2 ACCESS TO FILE SERVER

Access to Euronext File Server (EFS) in EUA and Production is only available through the Internet using HTTPS protocol.



Access to EFS for EUA and Production environment will only be granted to customers that have at least one of the agreements in place with Euronext as defined in Optiq Euronext File Services User Guide.

Clients have a read only access that allows them to download files, but not to upload or modify them.

The details of the HTTPS protocol server can be found in Euronext File Service User Guide.

Below is the description of the folder structure that contains files provided on EFS for 5 rolling trading days:

Folder	Description
OptiqMDG	Root folder, which identifies that all the following folders and files are used for Optiq
└ Environment	Defines if this is in "Production", "v-EUA" or "p-EUA"
└ Current	For the current day file.
└ OptiqSegment	Defines the segment on Optiq
└ Current	For the current day file.

Latest files are stored in the folder "Current" located either within the Environment or individual OptiqSegment folders.

Files available under the Environment folder are:

- CashTickSizeReferentialFile¹

Files available in the individual OptiqSegment folder, as needed, are:

- SBETemplates (for MDG and OEG)
- CashStandingDataFile
- CashTickSizeReferentialFile
- DerivativesStandingDataFile
- DerivativesTickSizeFile
- OpenInterestFile
- ReferenceSpreadsFile
- PrevDayCapAndVolTradeFile
- TimetableFile
- RepoSettlementPriceFile
- TRF Conversion Parameters File²

The files are needed / made available for individual segments as follows:

Files	Optiq Segment									
	EQ	FND	FXI	SP	EQD	IDD	FID	CMO	BLK	Indices
SBETemplates (for MDG and OEG)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CashStandingDataFile	✓	✓	✓	✓	-	-	-	-	✓	✓
CashTickSizeReferentialFile	-	-	-	-	✓	✓	✓	✓	-	-
DerivativesStandingDataFile	-	-	-	-	✓	✓	✓	✓	-	-
DerivativesTickSizeFile	-	-	-	-	✓	✓	✓	✓	-	-
OpenInterestFile	-	-	-	-	✓	✓	✓	✓	-	-
ReferenceSpreadsFile	-	-	-	-	✓	✓	✓	✓	-	-
PrevDayCapAndVolTradeFile	✓	✓	✓	✓	-	-	-	-	✓	-
TimetableFile	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
RepoSettlementPriceFile	✓	-	-	-	-	-	-	-	-	-
TRF Conversion Parameters File	-	-	-	-	-	✓	-	-	-	-

¹ The CashTickSizeReferentialFile is currently provided under (1) Environment, and (2) individual OptiqSegment folders for Derivatives

² Currently the TRF Conversion parameters files are described in a dedicated specifications document

1.3 FILE NAMING CONVENTION

The files available on EFS are of different types:

- Cross Optiq Segment Files, i.e. a single file generated for multiple Optiq Segments.
- Individual Optiq Segment specific Files generated / provided for each individual Optiq Segment on a daily basis

As a result, the file naming convention varies according to the type of file.

Cross Optiq Segment Files

These files are unique referential files, valid for all Optiq Segments. It is therefore not required to generate the same file for each Optiq Segment.

Cross Optiq Segment files have the following naming convention:

<OptiqGateway>_<Environment>_<FileName>_<ALL>_<Date>.xml

Where:

- OptiqGateway is 'OptiqMDG', for MDG files or 'OptiqOEG', for OEG files
- Environment and FileName are the same as defined in folder structure
- OptiqSegment is always 'ALL'
- Date is the trading date for which the file is provided - with format 'YYYYMMDD'

The file provided in this manner is:

- CashTickSizeReferentialFile

Example of the Cash Tick Size Referential File generated in Production on the 1st of June 2017:

OptiqMDG_Production_CashTickSizeReferentialFile_ALL_20170601.xml.

And it will be located in:

```
OptiqMDG
├── Production
│   └── Current
│       └── CashTickSizeReferentialFile
```

Files generated / provided for individual Optiq Segment

Files generated / provided for individual Optiq Segment on a daily basis have the following naming convention:

<OptiqGateway>_<Environment>_<FileName>_<OptiqSegment>_<Date>.xml

Where:

- OptiqGateway is 'OptiqMDG', for MDG files or 'OptiqOEG', for OEG files
- Environment and FileName are the same as defined in folder structure
- OptiqSegment is one of the values of the available segments available on EFS
- Date is the current trading date with format 'YYYYMMDD'

The files provided in this manner are:

- SBETemplates (for MDG and OEG)
- CashStandingDataFile
- CashTickSizeReferentialFile
- DerivativesStandingDataFile
- DerivativesTickSizeFile
- OpenInterestFile
- ReferenceSpreadsFile
- PrevDayCapAndVolTradeFile
- TimetableFile
- RepoSettlementPriceFile

- TRF Conversion Parameters File³

Example of the Open Interest File generated in Production on 1st of June 2017, on the 'Commodities' Optiq Segment:
OptiqMDG_Production_OpenInterest_Commodities_20170601.xml

1.4 SERVER AVAILABILITY

The server is available 24 hours a day, seven days a week.

1.5 FILE VERSION AVAILABILITY

The OEG and MDG SBE Template files are Backward and Forward compatible. The latest supported versions for each Optiq segment is made available on the sever. For more information on Backward and forward compatibility of SBE, please refer to the OEG and MDG specifications documents, as well as the technical notes on SBE compatibility and the chosen approach for individual migration / projects.

For all other file types, in case of a new version of the file, customers will have to migrate to the new version of the file on the go-live date. Only the latest version of the file, applicable for the environment, is provided for the current trading day.

³ The TRF Conversion Parameters files are provided for Start of Day (SOD) and End of Day (EOD) processing. For the naming convention used for this please refer to the dedicated TRF file specifications document.

2. FILE OVERVIEW

The aim of this section is to describe the fields types used in the reference data files. For full details of file format, values and use, please review to the OEG and MDG specifications documents.

2.1 FUNCTIONAL FORMAT FIELDS

Functional Format	Description
Alphanumeric ID	String type identifying an element.
Amount	Signed numerical field representing an amount.
Bitmap	Array of bits, each bit specifying whether an optional value is present (set to "1") or not (set to "0") (in Little-Endian).
Boolean	Indicator having two possible values, either 'true - 1' or 'false - 0'. This value is set on the first bit of the byte (in Little-Endian).
Date	Date of an event.
Decimal Places	Number of decimals associated to a numerical field.
Enumerated	Information having a delimited set of possible values.
Epoch Time in Nanoseconds	UTC time in nanoseconds since 1970 January the 1st.
Integer Time in hhmmss	Time in an integer on 2 bytes expressed as hhmmss
Intraday Time in Seconds	UTC time in seconds since the beginning of the day.
Numerical	Generic numerical field.
Numerical ID	Numerical field identifying an element.
Price	Numerical field representing a price (either signed or not signed).
Quantity	Unsigned numerical field representing a quantity of elements (for example a number of shares).
Text	Text in UTF-8.
Timestamp	Time of an event.

2.2 TECHNICAL FORMAT FIELDS

The following technical types are used:

- All integers are numeric (signed/ unsigned specified in each field format description) using two's complement method.
- Binary data are in Intel byte order (Little-Endian).
- All "Alphanumeric ID" and "Text" fields are alphanumeric based on UTF-8.

Technical Format	Description
character	Alphanumeric field containing only 1 character
signed integer 64	8 bytes signed numerical field
unsigned integer 8	1 byte unsigned numerical field
unsigned integer 16	2 bytes unsigned numerical field

Technical Format	Description
unsigned integer 32	4 bytes unsigned numerical field
unsigned integer 64	8 bytes unsigned numerical field
XML date	Date displayed in YYYYMMDD format
XML timeSec	Text formatted according to ISO 8601: hh:mm:ssZ where Z = UTC
XML timeNano	Text formatted according to ISO 8601: hh:mm:ss:mmmμμnnnZ where "mmm" indicate the milliseconds "μμμ" indicate the microseconds "nnn" indicate the nanoseconds Z = UTC
XML text50	Alphanumerical field which length is 50 characters
Decimals	Numerical field with "." as a separator

2.3 DATE CONVENTION

Dates are defined in number of days since 1970 January the 1st (01/01/1970 is the day "0"). The file structure provides them in human readable format YYYYMMDD where

- "YYYY" is the year
- "MM" is the month
- "DD" is the day

2.4 TIME CONVENTION

In XML files, timestamps are provided in two (2) formats, based on ISO 8601: Time in seconds and time in nanoseconds.

- Times in seconds: hh:mm:ssZ

Where:

- hh is the hours
- mm the minutes
- ss the seconds
- Z stands for UTC time

- Times in nanoseconds: hh:mm:ss:mmmμμnnnZ

Where:

- hh is the hours
- mm the minutes
- ss the seconds
- mmm the milliseconds
- μμμ the microseconds
- nnn the nanoseconds
- Z stands for UTC time

2.5 FEED CONFIGURATION

The CashStandingDataFile (9007) and DerivativesStandingDataFile (9013) are provided on a daily basis per Optiq Segment. Every Instrument in the file has a repeating section called MDGSetOfChannels and this repeating section provides the MDGSetOfChannelsID and the MDGSetOfChannelsName. The ID is a unique number for the combination of Asset Class and Country Split.

MDGSetOfChannels					
	MDGSetOfChannelsID	Identifier of an MDG Set Of Channels.	unsigned integer 16	2	From 0 to 65534
	MDGSetOfChannelsName	Name of the MDG Set Of Channels.	string	100	(See field description)
/MDGSetOfChannels					

Most instruments have only one repeating section, but instruments belonging to the Equities Optiq Segment for instance can have more than one repeating section :

1. ID=5 – Equities France
2. ID=11 – Best of Book (Retail Matching Facility)

Possible values for MDGSetOfChannelsID:

MDG Set Of Channels ID	MDG Set Of Channels Name
1	Funds
2	Fixed Income
3	Bourse De Luxembourg
4	Warrants and Certificates
5	Equities France
6	Equities Netherlands
7	Equities Belgium
8	Equities Portugal
9	Equities Dublin
11	Best of Book (BoB)
13	Euronext Indices
14	Euronext iNAVs
15	Euronext Dublin Indices
16	Commodity Derivatives
17	Currency Derivatives
20	Equity Derivatives France
21	Equity Derivatives Netherlands
22	Equity Derivatives Other
23	Index Options France

24	Index Options Netherlands
25	Index Derivatives Other
26	Index Futures France
27	Index Futures Netherlands
29	APA SI Quotes
30	APA Trade Publication
31	Best of Book (BoB) Funds
32	ETF Access
33	Euronext Block

At end of the Standing Data file, two connectivity configuration sections are provided: SetOfChannels and LogicalAccessConnectivity.

For more information on the section LogicalAccessConnectivity please refer to the *Euronext Markets – Optiq OEG Connectivity Specifications* document.

SetOfChannels provides the full feed configuration details for the Optiq Segment are made available. For each SetOfChannels, the ChannelType is provided for Real-Time and Snapshot channels, together with the available ChannelID's and ChannelSpeed.

SetOfChannels					
	MDGSetOfChannelsID	Identifier of an MDG Set Of Channels.	unsigned integer 16	2	From 0 to 65534
	MDGSetOfChannelsName	Name of the MDG Set Of Channels.	string	100	(See field description)
Channels					
	ChannelType	Defines the channel.	string	4	(See field description)
MulticastDataRealTime					
	ChannelID	Identifies the channel.	unsigned integer 16	2	From 0 to 65534
	ChannelSpeed	Defines the Channel bandwidth.	string	4	100M 100Mbps Channel 1G 1Gbps Channel 10G 10Gbps Channel
	PartitionID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	From 0 to 2^16-2
MulticastA					
	SourceIPRange	Defines the primary and secondary IP range (IP v4).	string	20	(See field description) (See field description)

DRSourceIPRange	Defines the Disaster Recovery IP address /25 range number (IP v4).	string	20	(See field description)
MulticastGroupIP	Defines the IP number (IP v4).	string	15	(See field description)
PortNumber	Defines the port number.	unsigned integer 16	2	From 0 to 65534
/MulticastA				
MulticastB				
SourceIPRange	Defines the primary and secondary IP range (IP v4).	string	20	(See field description)
DRSourceIPRange	Defines the Disaster Recovery IP address /25 range number (IP v4).	string	20	(See field description)
MulticastGroupIP	Defines the IP number (IP v4).	string	15	(See field description)
PortNumber	Defines the port number.	unsigned integer 16	2	From 0 to 65534
/MulticastB				
/MulticastDataRealTime				
MulticastDataSnapshot				
ChannelID	Identifies the channel.	unsigned integer 16	2	From 0 to 65534
ChannelSpeed	Defines the Channel bandwidth.	string	4	100M 100Mbps Channel 1G 1Gbps Channel 10G 10Gbps Channel
PartitionID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	From 0 to 2^16-2
MulticastA				
SourceIPRange	Defines the primary and secondary IP range (IP v4).	string	20	(See field description)
DRSourceIPRange	Defines the Disaster Recovery IP address /25 range number (IP v4).	string	20	(See field description)
MulticastGroupIP	Defines the IP number (IP v4).	string	15	(See field description)
PortNumber	Defines the port number.	unsigned integer 16	2	From 0 to 65534
/MulticastA				
MulticastB				
SourceIPRange	Defines the primary and secondary IP range (IP v4).	string	20	(See field description) (See field description)

DRSourceIPRange	Defines the Disaster Recovery IP address /25 range number (IP v4).	string	20	(See field description) (See field description)
MulticastGroupID	Defines the IP number (IP v4).	string	15	(See field description) (See field description)
PortNumber	Defines the port number.	unsigned integer 16	2	From 0 to 65534
/MulticastB				
/MulticastDataSnapshot				
/Channels				
/SetOfChannels				

2.6 DERIVATIVES PARAMETERS

DerivativesStandingDataFile (9013) are provided on a daily basis per Optiq Segment. Every contract in the file comes with a set of trading parameters that are provided in a dedicated substructure.

The trading parameters are provided to clients as non-mandatory referential data than can be used to build finer trading algorithms across Exchange Market Mechanisms. The Derivatives parameters, for each contract, are provided as follows :

DerivativesParameters				0..254	Optional
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Optional
Param Name	Name of a Contract parameter.	Enumerated	1	(See field description)	Optional
Param Value	Value of a Contract Parameter.	Text	255		Optional
Param Type Of Expression	Parameter Type Of Expression of Contract Parameter Name.	Enumerated	1	(See field description)	Optional
/DerivativesParameters					Optional

- The Param Name field is an enumerated field. Repeated for each parameter for each EMM. It identifies for each record the parameter provided. Details of the parameter (description, use, unit) are provided in the field description.
 - Example (for EMM RFC): 4 - RFCMinimumQuantityForReactor: Quantity (Minimum quantity to submit for RFC as a reactor)
- The Param Type of expression is an enumerated field that provides the technical format of the parameter being given its unit provided in the description
 - Example (for EMM RFC, and Param Name 4 above): 3 – Absolute Value

Absolut Value indicates that the value is provided – based on its unit – according to Optiq standards. For this parameter, it is a Quantity, it will be thus expressed as a non-decimalized integer.

- The Param Type field is a string allowing to provide the value as indicated by the combination of the parameter unit provided in the parameter description and the Param type of expression. Providing the field in a string allows client to format it on their side according to their needs.

This method allows Euronext to provide all parameters, whether they are prices, quantities, bitmaps, Booleans, or time in a single framework, to be systematically interpreted by clients willing to use them in order to build flexible trading algorithms able to adapt to each contract through calibration via the Derivatives parameters.

2.7 PRICE, QUANTITY, RATIO AND AMOUNT DECIMALS

Some numerical fields are processed using another field for decimalization. Client have to link each field to the associated decimal field.

Name of the associated decimal field is always defined in the field description.

The decimalized value must be calculated according to the following formula:

$$\text{Decimalized Value} = \frac{\text{Integer}}{10^{\text{"Value in decimal field"}}$$

For example, a Tick Factor Max Period as defined in the field description is to be calculated with Ratio / Multiplier Decimals. Value provided in the DerivativesTickSizeFile (9021) file is integer of 300, and the field Ratio Decimals is equal to 2.

$$\text{Using these values the calculation is} = \frac{300 \text{ (Tick Factor Max Period field in the file)}}{10^2 \text{ (Value in the Ratio Decimals field)}}$$

As a result, the value of Tick Factor Max Period has the value of **3** (meaning 3 months).

The same mechanism is used for:

- All quantities with "Quantity Decimals"
- All prices with "Price Decimals"
- All amounts with "Amount Decimals"

3. FILE DESCRIPTION

3.1 SBE TEMPLATE FILES

SBE Template files aim to help decode SBE messages using an SBE decoder.

- Two (2) SBE Template files are available: one for OEG and one for MDG. These files are stored in each individual <OptiqSegment> folder.

SBE tools and documentation that can be used to generate (encode and decode) SBE messages are available on:

<https://github.com/real-logic/simple-binary-encoding> (refer to [SBE Disclaimer in appendix](#))

This file structure is defined by SBE protocol and contains:

- The list of all technical fields
- SBE Headers structure
- The list of all possible values for each Enumerated field
- The list of all possible values for each Bitmap field
- The structure of each message with the expected order of each fields

Clients must check the file every day to determine whether a new Schema Version is available.

Full and detailed message structures are specified in the **Euronext Markets – Optiq MDG Client Specifications**.

File Availability: Available 24/7.

Scope of contents: All Euronext segments and all SBE messages for Market Data and Order Entry. One file per Optiq Segment.

3.2 CASHSTANDINGDATAFILE (9007)

The Cash Standing Data file provides referential data for cash markets.

The file provides three structures per instrument breakdown, as per the following tree:

- CashStandingDataFile
 - StandingDataUnitary
 - Common Standing Data
 - MDGSetOfChannels
 - ETFDataFromMarketOfReference
 - FeedConfigurationFile
 - SetOfChannels
 - Channels
 - MulticastDataRealTime
 - MulticastA
 - MulticastB
 - MulticastDataSnapshot
 - MulticastA
 - MulticastB
 - LogicalAccessConnectivity
 - Partition

- Repeated sections in the tree structure are displayed with a green border below, including their header.
- XML Headers and Footers are displayed in a different colour than fields
- The first structure provides the standing data functionally needed for trading purpose.
 - All operational referential data broadcasted on the feed at start of day via Optiq MDG Standing Data 1007 message is also available in this section.
 - As an example, Timestamps on the feed are provided in number of ns since 1970 January the 1st. The file structure provides them in human readable format (YYYYMMDD).
- The second structure is dedicated to MD connectivity. It provides the physical addresses of channels on which data is disseminated for the given instrument, access to which depends on client authorization.
- The third structure provides connectivity information for all Cash Order Entry Gateways (OEG) of the concerned Optiq Segment and the associated Drop Copy (DC) gateways.
- File Availability: Available 24/7.
- Scope of contents: Cash instruments.
- Intraday updates: This file will be updated overnight.

Field	Short Description	Format	Len	Values	Presence
CashStandingDataFile					
StandingDataUnitary					
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
Optiq Segment	An Optiq segment is a universe of instruments sharing common trading properties.	Enumerated	1	(See field description)	Mandatory
Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
Full Instrument Name	Full Instrument Name.	Text	102	(See field description)	Optional
Instrument Name	Instrument Name	Text	18	(See field description)	Mandatory
Instrument Trading Code	Cash: Trading code is a 12-character string, the only instrument identifier that is unique in the feed in addition to the symbol index.	Alphanumeric ID	15	(See field description)	Optional
Instrument Group Code	Instrument Group / Class Identifier.	Alphanumeric ID	2	(See field description)	Mandatory
ISIN Code	Instrument ISIN following ISO 6166.	Alphanumeric ID	12	(See field description)	Mandatory
Price Decimals	Indicates the number of decimals for each Price / Index Level related to this Symbol Index	Decimal Places	1	0..2^8-2	Mandatory
Quantity Decimals	Indicates the number of decimals for each Quantity related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
Amount Decimals	Indicates the number of decimals for each Amount related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
Ratio Decimals	Indicates the number of decimals for each Ratio / Multiplier related to this Symbol Index	Decimal Places	1	0..2^8-2	Mandatory
CFI	Classification code of a financial instrument defined by the ISO-10962:2015 standard.	Text	6	(See field description)	Mandatory

Field	Short Description	Format	Len	Values	Presence
Instrument Event Date	Date of the last instrument characteristic modification(s) except for some exceptions.	Date	2	0..2^16-2	Mandatory
Strike Price	The strike price of an option/warrant is the specified price at which the underlying can be bought (in the case of a call/right to buy) or sold (in case of a put/right to sell) by the holder (buyer) of the option/warrant contract, at the moment he exercises his right against a writer (seller) of the option/warrant.	Price	8	From -2^63+1 to 2^63-1	Optional
Dark Eligibility	Indicates the Eligibility to dark. 0 is not eligible, 1 is eligible.	Boolean	1	0..2^8-2	Optional
Dark LIS Threshold	Defines the minimum amount of an order to benefit from the LIS (Large In Scale) pre-transparency waiver (to be calculated with the Amount Decimals).	Amount	8	0..2^64-2	Optional
Dark Min Quantity	Defines the minimum quantity required for an order to be filled in the Dark liquidity. 0 indicates that no minimum amount is required.	Quantity	4	0..2^32-2	Optional
Date Of Last Trade	Date of the Last Price for the Instrument	Date	2	0..2^16-2	Optional
Depository List	Identifies the possible main depository organizations (maximum four) for shares or fixed income.	Text	20	(See field description)	Optional
Main Depository	Identifies the default (or main) depository organization of the instrument (between the possible 4 depositories registered) used by priority for the settlement (for example: multi-listed instruments which have several depositories).	Alphanumerical ID	5	(See field description)	Optional
First Settlement Date	Represents the first possible settlement date for a given instrument.	Date	2	0..2^16-2	Optional
Guarantee Indicator	Indicates if the trade is guaranteed or not (for clearing purpose)	Enumerated	1	0 This instrument is not guaranteed 1 This instrument is guaranteed 2 This instrument is not clearable 8 This instrument is part of Cleared Borrowing and Lending Service (CBLM) and is guaranteed	Optional

Field	Short Description	Format	Len	Values	Presence
ICB	Identifies for a listed instrument, the economic subsector of the issuing company in the ICB (Industry Classification Benchmark) classification.	Alphanumerical ID	16	(See field description)	Optional
Issuing Country	Issuing country.	Alphanumerical ID	3	(See field description)	Optional
Last Adjusted Closing Price	Last traded price of the previous trading day after application of the adjustment coefficient (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Optional
Lot Size	Not Used	Quantity	8	Not Used	Optional
Maturity Date	Maturity Date of the instrument (text formatted as YYYYMMDD).	Text	8	(See field description)	Optional
Maximum Decimals In Quantity	Maximum Decimals In Quantity was introduced for Euronext Fund Services Paris and indicates the maximum of relevant decimal number for trading.	Numerical	1	0..2^8-2	Optional
MIC	Identifies the market to which an instrument belongs by its MIC (Market Identification Code), segment MIC according to ISO 10383.	Alphanumerical ID	4	(See field description)	Mandatory
MIC List	Identifies the Euronext markets on which an instrument is listed by its MIC (Market Identification Code).	Alphanumerical ID	20	(See field description)	Optional
Country Of Exchange	Country of exchange is the Country associated to the MIC following ISO 3166 Alpha-3.	Alphanumerical ID	3	(See field description)	Optional
Mnemonic	Mnemonic code of the instrument. This field is not populated for every instrument.	Alphanumerical ID	5	(See field description)	Optional
Underlying MIC	Identifies the market to which an instrument' underlying belongs by its MIC (Market Identification Code), according to ISO 10383. Refer to MIC field to have all the authorized values.	Alphanumerical ID	4	(See field description)	Optional
Underlying ISIN Code	Underlying ISIN.	Alphanumerical ID	12	(See field description)	Optional
Trading Currency	Code of the currency (ISO 4217-3A).	Alphanumerical ID	3	(See field description)	Optional
Currency Coefficient	When an actual price is displayed in a different 'price expression' than the official instrument trading currency, the Currency Coefficient represents the ratio 'price expression' divided by 'official currency' (To be calculated with Ratio / Multiplier Decimals).	Numerical ID	4	0..2^32-2	Optional
Trading Currency Indicator	Indicates whether the 'price expression' is in the Currency or in a ratio of this Currency. Use Currency Coefficient field to identify the ratio to apply.	Enumerated	1	0 Change rate not applied to the traded price 1 Change rate applied to the traded price	Optional

Field	Short Description	Format	Len	Values	Presence
Strike Currency Indicator	Indicates whether the 'price expression' is in the Currency or in a ratio of this Currency. Use Currency Coefficient field to identify the ratio to apply.	Enumerated	1	0 Change rate not applied to the strike price 1 Change rate applied to the strike price	Optional
Number Instrument Circulating	For stocks: this is the total number of shares issued by the company. For Fix Income: this is the number of Fix Income still to be repaid.	Quantity	8	0..2^64-2	Optional
Par Value	Par Value (also called Nominal value) for Instrument. For Fixed Income it represents the par amount to be repaid at maturity (not including interest revenue) (to be calculated with the Amount Decimals).	Amount	8	0..2^64-2	Optional
Quantity Notation	Indication of the type of measurement (e.g. number of units, nominal, monetary value, etc.) in which the transaction is expressed.	Text	3	(See field description)	Optional
Inst Unit Exp	Not Used	Text	3	Not Used	Optional
Settlement Delay	Gives the number of trading days that represents the period between the trade date and the settlement date (delivery and payment) for an instrument to be cleared and settled.	Alphanumeric ID	2	(See field description)	Optional
Strike Currency	Code of the strike currency (ISO 4217-3A).	Alphanumeric ID	3	(See field description)	Optional
Tax Code	Tax deduction code to which the instrument belongs.	Enumerated	1	0 Not eligible to PEA 3 Eligible to PEA 9 Not Applicable	Optional
Type Of Corporate Event	Indicates the last type of corporate event that has occurred on an instrument, such as detachment of rights, or of coupons. The data item is automatically calculated by the adjustment application but in case of problem or error, the data item value could be modified manually, particularly for purging the order book in case of absence of corporate event.	Alphanumeric ID	2	(See field description)	Optional
Type Of Market Admission	Indicates the type of market to which an instrument has been listed.	Enumerated	1	(See field description)	Optional
Repo Indicator	Indicates whether the instrument listed underlies any loan contracts, meaning it has been admitted to the Deferred Settlement system and/or to the lending market.	Enumerated	1	(See field description)	Optional
Issue Price	Issuing price of the instrument	Price	8	From -2^63+1 to 2^63-1	Optional
Nominal Currency	Code of the nominal currency (ISO 4217-3A).	Alphanumeric ID	3	(See field description)	Optional

Field	Short Description	Format	Len	Values	Presence
Issue Price Decimals	Indicates the number of decimals for Issue Price related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
Strike Price Decimals	Indicates the number of decimals for Strike Price related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
Liquid Instrument Indicator	Indicates whether the instrument is liquid or not, as defined per MiFID II. (0 = Illiquid ; 1 = Liquid)	Boolean	1	0..2^8-2	Optional
Market Of Reference MIC	Indicates the instrument Exchange of Reference by its MIC (Market Identification Code according to ISO 10383) (For Future Use).	Alphanumerical ID	4	(See field description)	Optional
ICB Code	Identifies for a listed instrument, the economic subsector of the issuing company in the ICB (Industry Classification Benchmark) classification.	Alphanumerical ID	8	(See field description)	Optional
Threshold LIS Post Trade 60mn	Defines the amount of an order to benefit from the LIS Trade Deferred publication to 60 min (to be calculated with the Amount Decimals).	Amount	8	0..2^64-2	Optional
Threshold LIS Post Trade 120mn	Defines the amount of an order to benefit from the LIS Trade Deferred publication to 120 min (to be calculated with the Amount Decimals).	Amount	8	0..2^64-2	Optional
Threshold LIS Post Trade EOD	Defines the amount of an order to benefit from the LIS Trade Deferred publication to EOD (to be calculated with the Amount Decimals).	Amount	8	0..2^64-2	Optional
Asset Class	Defines the Asset Class for a group of products.	Enumerated	3	(See field description)	Optional
Instrument Category	Indicates to which category the instrument belongs.	Enumerated	1	(See field description)	Optional
Instrument Type	Instrument Type.	Enumerated	4	(See field description)	Optional
Closing Price Type	Closing Price Type.	Enumerated	1	1 Last Traded Price (LTP) 2 Volume Weighted Average Price (VWAP) 3 Volume Weighted Average Price (VWAP X Trades)	Mandatory
EMMPattern					
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory

Field	Short Description	Format	Len	Values	Presence
Pattern ID	Numerical Pattern identifier available as a characteristic of an instrument in Standing Data file and message, and used in the MDG timetable message. Cash Markets only.	Numerical ID	2	0..2 ¹⁶ -2	Optional
Tick Size Index ID	ID of the tick size table available in the Tick Table file.	Numerical ID	2	0..2 ¹⁶ -2	Optional
Market Model	Market Model identifier.	Enumerated	1	(See field description)	Optional
Lot Size	For Cash and Derivatives, it defines a multiple of the tradable quantity.	Quantity	8	0..2 ⁶⁴ -2	Optional
Inst Unit Exp	Unit in which the instrument is quoted.	Enumerated	1	(See field description)	Optional
Bps Low Collar	Indicates the low collar applied on the NAV order book of ETF MTF. It is derived from the redemption fees of the primary market. Information expressed in basis points (bps) (to be calculated with the Price/Index Level Decimals).	Price	8	From -2 ⁶³ +1 to 2 ⁶³ -1	Mandatory
Bps High Collar	Indicates the High collar applied on the NAV order book of ETF MTF. It is derived from the creation fees of the primary market. Information expressed in basis points (bps) (to be calculated with the Price/Index Level Decimals).	Price	8	From -2 ⁶³ +1 to 2 ⁶³ -1	Mandatory
Block Price Control ID	ID of the Block Price Table.	Numerical ID	2	(See field description)	Optional
Declaration Duration	Declaration Duration (in minutes).	Time	8	(See field description)	Optional
Eligible For Margin	Indicates if the instrument is eligible for margin or not.	Enumerated	1	0 No 1 Yes	Optional
/EMMPattern					
MDGSetOfChannels					
MDG Set Of Channels ID	Identifier of an MDG Set Of Channels.	Enumerated	1	(See field description)	Mandatory
MDG Set Of Channels Name	Name of the MDG Set Of Channels.	Text	100	(See field description)	Mandatory
/MDGSetOfChannels					
ETFDataFromMarketOfReference					
Six Months ADV Exchange Of Ref	Indicates the 6 months average daily volume (number of shares) traded on the exchange of reference (to be calculated with Quantity Decimals).	Quantity	8	0..2 ⁶⁴ -2	Mandatory
AUM	Stands for Asset Under Management. Indicates the fund's total market value (to be calculated with the Amount Decimals).	Amount	8	0..2 ⁶⁴ -2	Mandatory
BIC Main Depository	Identifies the BIC of the default depository organization.	Alphanumeric ID	11	(See field description)	Mandatory

Field	Short Description	Format	Len	Values	Presence
Cut Off Time	Indicates the point reached in the day from which the order will not be processed for the current business day. Time in an integer on 4 bytes expressed as hhmmss	Integer Time in hhmmss	4	0..2^32-2	Mandatory
Date Next Tradable NAV	Date of the next tradable NAV. Date in an integer on 4 bytes expressed as YYYYMMDD	Date	4	0..2^32-2	Mandatory
Publication Date Next Tradable NAV	Publication Date of the next tradable NAV. Date in an integer on 4 bytes expressed as YYYYMMDD	Date	4	0..2^32-2	Mandatory
Dividend Frequency	Indicates how often a dividend is paid by an individual instrument.	Enumerated	1	1 Capitalization 2 Monthly 3 Yearly	Mandatory
MIC Exchange Of Reference	Indicates the instrument's Exchange of Reference by its MIC (Market Identification Code according to ISO 10383).	Alphanumeric ID	4	(See field description)	Mandatory
Name Exchange Of Reference	Indicates the instrument's Exchange of Reference by its Name.	Text	50	(See field description)	Mandatory
Exposition Type	Indicates the ETF replication method.	Enumerated	1	1 Physical 2 Synthetic 3 Sampling	Mandatory
ICSD	Indicates if the settlement can be processed through an International CSD (1) or not (0).	Boolean	1	0..2^8-2	Mandatory
Index Leverage	Indicates the multiplier coefficient of an leveraged fund. (To be calculated with RatioDecimal)	Numerical	4	0..2^32-2	Mandatory
Issuer Name	Indicates the name of the Legal Issuing Entity.	Text	80	(See field description)	Mandatory
LEI Code	LEI (Legal Entity Identifier) Code	Alphanumeric ID	20	(See field description)	Mandatory
Listing Date	Indicates the listing date of the fund on the Exchange of Reference. Date in an integer on 4 bytes expressed as YYYYMMDD	Date	4	0..2^32-2	Mandatory
NAV Currency	Code of the NAV currency (ISO 4217-3A).	Alphanumeric ID	3	(See field description)	Mandatory
Previous NAV	Indicates the previous official Net Asset Value (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Mandatory
Reuters RIC Code	Indicates the Reuters RIC Code.	Alphanumeric ID	24	(See field description)	Mandatory
Total Expense Ratio	Total Expense Ratio (TER): total costs associated with managing and operating a fund.	Numerical	4	0..2^32-2	Mandatory
Bloomberg Ticker Code	Indicates the Bloomberg Ticker Code.	Alphanumeric ID	13	(See field description)	Mandatory
NAV Publication Time	Indicates the official NAV publication time. Time in an integer on 4 bytes expressed as hhmmss	Integer Time in hhmmss	4	0..2^32-2	Mandatory
UMTF	Indicates the instrument code based on 'Uniform MTF' symbology.	Alphanumeric ID	6	(See field description)	Mandatory
Underlying Name	Indicates the full name of the ETF underlying.	Text	102	(See field description)	Mandatory

Field	Short Description	Format	Len	Values	Presence
Underlying Return Type	Indicates the dividend treatment applied.	Enumerated	1	1 Net Total Return 2 Price Return 3 Total Return	Mandatory
Underlying Segmentation	Indicates the underlying asset segmentation.	Enumerated	1	(See field description)	Mandatory
Bps Low Collar	Indicates the low collar applied on the NAV order book of ETF MTF. It is derived from the redemption fees of the primary market. Information expressed in basis points (bps) (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Mandatory
Bps High Collar	Indicates the High collar applied on the NAV order book of ETF MTF. It is derived from the creation fees of the primary market. Information expressed in basis points (bps) (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Mandatory
/ETFDataFromMarketOfReference					
/StandingDataUnitary					
SetOfChannels					
MDG Set Of Channels ID	Identifier of an MDG Set Of Channels.	Enumerated	1	(See field description)	Mandatory
MDG Set Of Channels Name	Name of the MDG Set Of Channels.	Text	100	(See field description)	Mandatory
Channels				1..254	Mandatory
Channel Type	Defines the channel.	Enumerated	4	(See field description)	Mandatory
MulticastDataRealTime					
Channel ID	Identifies the channel.	Numerical	2	0..2^16-2	Mandatory
Channel Speed	Defines the Channel bandwidth.	Enumerated	4	100M 100Mbps Channel 1G 1Gbps Channel 10G 10Gbps Channel	Mandatory
Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
MulticastA					
Source IP Range	Defines the primary and secondary IP range (IP v4).	Text	20	(See field description)	Mandatory
DR Source IP Range	Defines the Disaster Recovery IP address /25 range number (IP v4).	Text	20	(See field description)	Mandatory
Multicast Group IP	Defines the IP number (IP v4).	Text	15	(See field description)	Mandatory
Port Number	Defines the port number.	Numerical	2	0..2^16-2	Mandatory
/MulticastA					
MulticastB					

Field	Short Description	Format	Len	Values	Presence
Source IP Range	Defines the primary and secondary IP range (IP v4).	Text	20	(See field description)	Mandatory
DR Source IP Range	Defines the Disaster Recovery IP address /25 range number (IP v4).	Text	20	(See field description)	Mandatory
Multicast Group IP	Defines the IP number (IP v4).	Text	15	(See field description)	Mandatory
Port Number	Defines the port number.	Numerical	2	0..2^16-2	Mandatory
/MulticastB					
/MulticastDataRealTime					
MulticastDataSnapshot					
Channel ID	Identifies the channel.	Numerical	2	0..2^16-2	Mandatory
Channel Speed	Defines the Channel bandwidth.	Enumerated	4	100M 100Mbps Channel 1G 1Gbps Channel 10G 10Gbps Channel	Mandatory
Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
MulticastA					
Source IP Range	Defines the primary and secondary IP range (IP v4).	Text	20	(See field description)	Mandatory
DR Source IP Range	Defines the Disaster Recovery IP address /25 range number (IP v4).	Text	20	(See field description)	Mandatory
Multicast Group IP	Defines the IP number (IP v4).	Text	15	(See field description)	Mandatory
Port Number	Defines the port number.	Numerical	2	0..2^16-2	Mandatory
/MulticastA					
MulticastB					
Source IP Range	Defines the primary and secondary IP range (IP v4).	Text	20	(See field description)	Mandatory
DR Source IP Range	Defines the Disaster Recovery IP address /25 range number (IP v4).	Text	20	(See field description)	Mandatory
Multicast Group IP	Defines the IP number (IP v4).	Text	15	(See field description)	Mandatory
Port Number	Defines the port number.	Numerical	2	0..2^16-2	Mandatory
/MulticastB					
/MulticastDataSnapshot					
/Channels					
/SetOfChannels					
LogicalAccessConnectivity					
Partition					
Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
IP Address Primary	IP Address of the Primary and Secondary (backup) access to the gateway. Provided for all environments (IP v4).	Text	15	Valid IP v4 address	Mandatory

Field	Short Description	Format	Len	Values	Presence
IP Address DR	IP Address of the Disaster Recovery access to the gateway. Populated only for the Disaster Recovery environment, in the file generated for the Production environment. Blank for all other environments (IP v4).	Text	15	Valid IP v4 address	Optional
Partition Type	Indicates the type of Partition, either Order Entry or Drop Copy. Use of Order Entry and Drop Copy gateways require separate and individual setup of the Logical access to each service.	Enumerated	2	OE Order Entry DC Drop Copy	Mandatory
/Partition					
/LogicalAccessConnectivity					
/CashStandingDataFile					

3.3 CASHTICKSIZEREFERENTIALFILE (9020)

- The Ticksize file contains different tables defining the variable tick sizes used for trading activity. A tick size table is composed of an index (identifying a table instance) with a list of price ranges that have corresponding tick sizes, associated to an instrument class level. If an instrument uses specific variable tick sizes, which are different from the Class, the specific table index will figure in the Instrument Standing Data.
- Fixed tick sizes are also included in the tick size file, they correspond to indexes for which only one entry range [0,MaxValue[is defined. In this case, the tick value itself is sent in the Instrument Standing Data, instead of the table index. If a fix tick size and a variable tick size are defined on an instrument, the fix tick size takes priority over the variable tick size.
- Point of attention: certain TCS products do not have tick sizes (and this is the expected behaviour). Tick sizes depend of the EMM and certain EMMs do not support tick sizes.
- File availability: This file is available at the start of day and is needed by the Customers for the trading day. Customers must be able to download and process this file on a daily basis.
- Scope of contents: The file scope includes a tick size table for Cash markets, and the variable (price range-dependent) ticks and fixed price ticks.
- Intraday updates: No intraday update will be performed on the Tick Size table. Should the need arise, updates will be done in the referential tool and will be applied on the following business day (i.e. D+1). Meaning, the file will only be updated on a daily basis.

The file provides three structures per instrument breakdown, as per the following:

- CashTickSizes
 - Tick Size Index ID
 - Cash Tick Size

Field	Short Description	Format	Len	Values	Presence
CashTickSizes					
Tick Size Index ID	ID of the tick size table available in the Tick Table file.	Numerical ID	2	0..2^16-2	Mandatory
CashTickSize					

Field	Short Description	Format	Len	Values	Presence
Minimum Price	Minimum Price of the order.	Price	8	(See field description)	Mandatory
Tick Size	Tick Size applied in the price range	Price	8	(See field description)	Mandatory
/CashTickSize					
/CashTickSizes					

3.4 DERIVATIVESSTANDINGDATAFILE (9013)

The Derivatives Standing Data file provides all referential data for derivatives markets.

On the derivatives market, three (3) different messages will broadcast standing data on the feed: Contract Standing Data, Outright Standing Data and Strategies Standing Data.

This file provides the following structure breakdown as per the following:

- DerivativesStandingDataFile
 - ContractStandingDataUnitary
 - ContractEMMProperties
 - Derivatives Parameters Rep
 - OutrightStandingDataUnitary
 - Common Outright Standing Data
 - OutrightStandingDataRep
 - StrategyStandingDataUnitary
 - StrategyStandingDataRep
 - MDGSetOfChannels
 - FeedConfigurationFile
 - SetOfChannels
 - Channels
 - MulticastDataRealTime
 - MulticastA
 - MulticastB
 - MulticastDataSnapshot
 - MulticastA
 - MulticastB
 - LogicalAccessConnectivity
 - Partition
- On a contract-based breakdown, data is provided with a file with one nested structure. Following that, at a contract level, two sections are added to deal respectively with MD connectivity and in the OE connectivity.
 - File Availability: Available 24/7.
 - Scope of contents: Derivative instruments.
 - Intraday updates: This file will be updated overnight.

Note on values in the field Dynamic Collar Logic for Derivatives markets. Values have the following meaning:

- Dynamic Collar Logic “0” (Not Active): Trade Price Validation is not activated.
- Dynamic Collar Logic “3” (Reservation with Acceptation): Indicates that Trade Price Validation is activated.

- The fields Collar Max Unhalt Nb and Collar Unhalt Delay provide the parameters for management of Trade Price Validation when it is activated.
- Value "2" (No Halt with Reject) - is not currently in use.

Field	Short Description	Format	Len	Values	Presence
ContractStandingDataUnitary				1..254	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
Optiq Segment	An Optiq segment is a universe of instruments sharing common trading properties.	Enumerated	1	(See field description)	Mandatory
Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
Contract Event Date	Date of the last contract characteristics modification(s) except for some exceptions.	Date	2	0..2^16-2	Optional
Exchange Code	Indicates the Market Place.	Enumerated	1	(See field description)	Mandatory
Exer Style	Type of exercise of a derivatives instrument	Enumerated	1	0 European 1 American 2 Asian 3 Bermudan 4 Other	Optional
Contract Name	Contract Name	Text	60		Mandatory
Contract Type	Generic Contract Type.	Enumerated	1	F Future O Option U Underlying	Optional
Underlying Type	Defines the instrument type of the underlying.	Enumerated	1	C Commodity F Future I Index S Stock X Exchange Rate	Mandatory
Price Decimals	Indicates the number of decimals for each Price / Index Level related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
Quantity Decimals	Indicates the number of decimals for each Quantity related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
Amount Decimals	Indicates the number of decimals for each Amount related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
Ratio Decimals	Indicates the number of decimals for each Ratio / Multiplier related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
Main Depository	Identifies the default (or main) depository organization of the instrument (between the possible 4 depositories registered) used by priority for the settlement (for example: multi-listed instruments which have several depositories).	Alphanumeric ID	5	(See field description)	Optional
MIC	Identifies the market to which an instrument belongs by its MIC (Market Identification Code), segment MIC according to ISO 10383.	Alphanumeric ID	4	(See field description)	Mandatory

Field	Short Description	Format	Len	Values	Presence
Country Of Exchange	Country of exchange is the Country associated to the MIC following ISO 3166 Alpha-3.	Alphanumeric al ID	3	(See field description)	Mandatory
Product Code	Physical alphanumeric product code.	Alphanumeric al ID	4	(See field description)	Mandatory
Underlying MIC	Identifies the market to which an instrument' underlying belongs by its MIC (Market Identification Code), according to ISO 10383. Refer to MIC field to have all the authorized values.	Alphanumeric al ID	4	(See field description)	Optional
Underlying ISIN Code	Underlying ISIN.	Alphanumeric al ID	12	(See field description)	Optional
Underlying Expiry	Expiry Date of the underlying (in number of days since the 1st of January 1970).	Date	4	0..2^32-2	Optional
Order Type Rules	Order types supported by the matching engine.	Bitmap	2	(See field description)	Mandatory
Settlement Method	Settlement method	Alphanumeric al ID	1	(See field description)	Optional
Trading Currency	Code of the currency (ISO 4217-3A).	Alphanumeric al ID	3	(See field description)	Mandatory
Strike Price Decimals Ratio	Value used , only for the AMR code, to determine the number of decimals present in the Option contract strike price, as the strike price is disseminated in format of an integer.	Numerical	1	0..2^8-2	Optional
MM Protections	Indicates allowed MM Protection type on the contract.(0: Disabled ; 1: Enabled)	Bitmap	1	0 Delta 1 Volume	Mandatory
Contract Trading Type	Contract Trading Type.	Enumerated	1	1 Traded as an outright 2 Not traded, but listed in contract data. Traders may subscribe to it 3 Traded as a simple inter-commodity spread 4 Traded as an inter-commodity spread	Mandatory
Inst Unit Exp	Unit in which the instrument is quoted.	Enumerated	1	(See field description)	Optional
Underlying Subtype	Defined the underlying sub-type associated to the underlying type.	Enumerated	1	(See field description)	Optional
Mother Stock ISIN	ISIN Code of the index underlying of the TRF contract.	Text	12	(See field description)	Optional
Settlement Tick Size	Default Tick Size value applicable for all Settlement Prices. It's calculated using the PriceDecimals.	Price	8	0..2^64-2	Optional
EDSP Tick Size	Specific Tick Size value applicable for EDSP. It's calculated using the PriceDecimals.	Price	8	0..2^64-2	Optional

Field	Short Description	Format	Len	Values	Presence
Underlying Symbol Index	Identifies the Symbol Index of the underlying of the instrument.	Numerical ID	4	0..2^32-2	Optional
Trading Policy	Trading Policy enabling to allocate a given incoming volume to orders.	Enumerated	1	1 Price Explicit Time 2 Price Pro Rata	Optional
Reference Spread Table ID	ID of the Reference Spread Table.	Numerical ID	2	0..2^16-2	Optional
Derivatives Market Model	Type of synthetic quote applied to the contract	Enumerated	1	0 No Synthetic Quote 1 Spontaneous Implied Matching 2 Event Driven Implied Matching	Optional
Trading Unit	Amount of underlying instrument per unit of a derivative contract (to be calculated with the Quantity Decimals). Due to corporate actions, the value may be different between value provided within this field in Contract Standing Data and Outright Standing Data. Value in Outright Standing Data reflects the adjustment due to the corporate action and should be used for that Outright instrument.	Quantity	8	0..2^64-2	Optional
Reference Price Origin in Opening Call	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.	Enumerated	1	(See field description)	Optional
Reference Price Origin in Continuous	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.	Enumerated	1	(See field description)	Optional
Reference Price Origin in Trading Interruption	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.	Enumerated	1	(See field description)	Optional
Collar Expansion Factor	Numerical coefficient applied in collar calculation.	Numerical ID	1	0..2^8-2	Optional
MIFID II Liquid Flag	Defines if a contract is to be considered as liquid under MIFID II Regulation.	Boolean	1	From 0 to 2^8-2	Mandatory
Pricing Algorithm	This field provides the defined pricing algorithm value for a given contract. It is used to identify Total Return Future (TRF) contracts and Market On Close (MOC) contracts. For other contract types the value is set to Standard.	Enumerated	1	0 = Standard 1 = Total Return Future 2 = Market On Close	Mandatory
ContractEMMProperties					Optional
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Optional
Tick Size Index ID	ID of the tick size table available in the Tick Table file.	Numerical ID	2	0..2^16-2	Optional
Pattern ID	Numerical Pattern identifier available as a characteristic of an instrument in Standing Data file and message, and used in the MDG timetable message. Cash Markets only.	Numerical ID	2	0..2^16-2	Optional
Lot Size	For Cash and Derivatives, it defines a multiple of the tradable quantity.	Quantity	8	0..2^64-2	Optional

Field	Short Description	Format	Len	Values	Presence
Strategy Authorized	Provides strategy types authorized for contract.	Bitmap	8	(See field description)	Optional
Dynamic Collar Logic	For Derivatives, Dynamic Collar Logic is a field used to identify the method of handling orders in case of Trade Price Validation (TPV) being triggered. For Cash, Dynamic Collar Logic is used internally.	Enumerated	1	0 Not Active 2 No Halt with Reject 3 Halt with Acceptation	Optional
Collar Max Unhalt Nb	Maximum number of automatic unhalts if collar logic enables unhalting.	Quantity	1	0..2^8-2	Optional
Collar Unhalt Delay	Delay (in seconds) of automatic unhalt if collar logic enables unhalting.	Time	4	0..2^32-2	Optional
/ContractEMMProperties					Optional
DerivativesParameters				0..254	Optional
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Optional
Param Name	Name of a Contract parameter.	Enumerated	1	(See field description)	Optional
Param Value	Value of a Contract Parameter.	Text	255		Optional
Param Type Of Expression	Parameter Type Of Expression of Contract Parameter Name.	Enumerated	1	1 Percentage 2 Tick	Optional
/DerivativesParameters					Optional
OutrightStandingDataUnitary				0..254	Optional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
Contract Symbol Index	Identifies the contract of this instrument by its Symbol Index.	Numerical ID	4	0..2^32-2	Mandatory
Instrument Event Date	Date of the last instrument characteristic modification(s) except for some exceptions.	Date	2	0..2^16-2	Mandatory
ISIN Code	Instrument ISIN following ISO 6166.	Alphanumeric ID	12	(See field description)	Mandatory
CFI	Classification code of a financial instrument defined by the ISO-10962:2015 standard.	Text	6	(See field description)	Optional
Maturity Date	Maturity Date of the instrument (text formatted as YYYYMMDD).	Text	8	(See field description)	Mandatory
Lot Size	Not Used	Quantity	8	Not Used	Mandatory
Strike Price	The strike price of an option/warrant is the specified price at which the underlying can be bought (in the case of a call/right to buy) or sold (in case of a put/right to sell) by the holder (buyer) of the option/warrant contract, at the moment he exercises his right against a writer (seller) of the option/warrant.	Price	8	From -2^63+1 to 2^63-1	Optional
Last Trading Date	Last available trading date for the instrument	Date	2	0..2^16-2	Optional
Days To Expiry	Number of Calendar days until the Last Trading Day of the Expiry.	Numerical	2	0..2^16-2	Optional

Field	Short Description	Format	Len	Values	Presence
Derivatives Instrument Trading Code	Derivatives Instrument Trading Code (formerly AMR) is composed of Exchange Code, Contract Type, Product Code, Expiry. For Options, Strike and Option Type (Put or Call) is added.	Alphanumeric ID	18	(See field description)	Optional
Derivatives Instrument Type	Indicates the type of derivative instrument	Enumerated	1	0 Call Option 1 Put Option 2 Strategy 3 Individual Future 4 Underlying	Optional
Expiry Cycle Type	Defines the expiry cycle type	Enumerated	1	1 Daily 2 Weekly 3 Monthly	Optional
Underlying Derivatives Instrument Trading Code	Is the underlying of the Derivatives Instrument Trading Code.	Alphanumeric ID	18	(See field description)	Optional
Underlying Symbol Index	Identifies the Symbol Index of the underlying of the instrument.	Numerical ID	4	0..2^32-2	Optional
Trading Unit	Amount of underlying instrument per unit of a derivative contract (to be calculated with the Quantity Decimals). Due to corporate actions, the value may be different between value provided within this field in Contract Standing Data and Outright Standing Data. Value in Outright Standing Data reflects the adjustment due to the corporate action and should be used for that Outright instrument.	Quantity	8	0..2^64-2	Optional
OutrightStandingDataRep					Optional
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
/OutrightStandingDataRep					Optional
/OutrightStandingDataUnitary					Optional
StrategyStandingDataUnitary				0..254	Optional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
Derivatives Instrument Trading Code	Derivatives Instrument Trading Code (formerly AMR) is composed of Exchange Code, Contract Type, Product Code, Expiry. For Options, Strike and Option Type (Put or Call) is added.	Alphanumeric ID	18	(See field description)	Mandatory
Exchange Code	Indicates the Market Place.	Enumerated	1	(See field description)	Mandatory
Maturity Date	Maturity Date of the instrument (text formatted as YYYYMMDD).	Text	8		Mandatory
Strategy Code	Exchange-recognized strategy code	Alphanumeric ID	1	(See field description)	Mandatory
Contract Symbol Index	Identifies the contract of this instrument by its Symbol Index.	Numerical ID	4	0..2^32-2	Mandatory
CFI	Classification code of a financial instrument defined by the ISO-10962:2015 standard.	Text	6	(See field description)	Optional
StrategyStandingDataRep				0..254	Optional

Field	Short Description	Format	Len	Values	Presence
Leg Symbol Index	MDG proprietary identification code of the instrument leg for the strategy.	Numerical ID	4	0..2^32-2	Mandatory
Leg Price	Price of corresponding strategy leg (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Optional
Leg Ratio	Ratio of lots for the leg. For contingent trades, the delta.	Quantity	4	0..2^32-2	Mandatory
Leg Buy Sell	Leg Side.	Enumerated	1	B Buy S Sell	Mandatory
/StrategyStandingDataRep					Optional
/StrategyStandingDataUnitary					Optional
MDGSetOfChannels				0..254	Optional
MDG Set Of Channels ID	Identifier of an MDG Set Of Channels.	Enumerated	1	(See field description)	Mandatory
MDG Set Of Channels Name	Name of the MDG Set Of Channels.	Text	100	(See field description)	Mandatory
/MDGSetOfChannels					Optional
/ContractStandingDataUnitary					Mandatory
SetOfChannels				1..254	Mandatory
MDG Set Of Channels ID	Identifier of an MDG Set Of Channels.	Enumerated	1	(See field description)	Mandatory
MDG Set Of Channels Name	Name of the MDG Set Of Channels.	Text	100	(See field description)	Mandatory
Channels					
Channel Type	Defines the channel.	Enumerated	4	(See field description)	Mandatory
MulticastDataRealTime					
Channel ID	Identifies the channel.	Numerical	2	0..2^16-2	Mandatory
Channel Speed	Defines the Channel bandwidth.	Enumerated	4	100M 100Mbps Channel 1G 1Gbps Channel 10G 10Gbps Channel	Mandatory
Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
MulticastA					
Source IP Range	Defines the primary and secondary IP range (IP v4).	Text	20	(See field description)	Mandatory
DR Source IP Range	Defines the Disaster Recovery IP address /25 range number (IP v4).	Text	20	(See field description)	Mandatory
Multicast Group IP	Defines the IP number (IP v4).	Text	15	(See field description)	Mandatory
Port Number	Defines the port number.	Numerical	2	0..2^16-2	Mandatory
/MulticastA					
MulticastB					
Source IP Range	Defines the primary and secondary IP range (IP v4).	Text	20	(See field description)	Mandatory

Field	Short Description	Format	Len	Values	Presence
DR Source IP Range	Defines the Disaster Recovery IP address /25 range number (IP v4).	Text	20	(See field description)	Mandatory
Multicast Group IP	Defines the IP number (IP v4).	Text	15	(See field description)	Mandatory
Port Number	Defines the port number.	Numerical	2	0..2^16-2	Mandatory
/MulticastB					
/MulticastDataRealTime					
MulticastDataSnapshot					
Channel ID	Identifies the channel.	Numerical	2	0..2^16-2	Mandatory
Channel Speed	Defines the Channel bandwidth.	Enumerated	4	100M 100Mbps Channel 1G 1Gbps Channel 10G 10Gbps Channel	Mandatory
Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
MulticastA					
Source IP Range	Defines the primary and secondary IP range (IP v4).	Text	20	(See field description)	Mandatory
DR Source IP Range	Defines the Disaster Recovery IP address /25 range number (IP v4).	Text	20	(See field description)	Mandatory
Multicast Group IP	Defines the IP number (IP v4).	Text	15	(See field description)	Mandatory
Port Number	Defines the port number.	Numerical	2	0..2^16-2	Mandatory
/MulticastA					
MulticastB					
Source IP Range	Defines the primary and secondary IP range (IP v4).	Text	20	(See field description)	Mandatory
DR Source IP Range	Defines the Disaster Recovery IP address /25 range number (IP v4).	Text	20	(See field description)	Mandatory
Multicast Group IP	Defines the IP number (IP v4).	Text	15	(See field description)	Mandatory
Port Number	Defines the port number.	Numerical	2	0..2^16-2	Mandatory
/MulticastB					
/MulticastDataSnapshot					
/Channels					
/SetOfChannels					
LogicalAccessConnectivity					
Partition					
Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
IP Address Primary	IP Address of the Primary and Secondary (backup) access to the gateway. Provided for all environments (IP v4).	Text	15	Valid IP v4 address	Mandatory

Field	Short Description	Format	Len	Values	Presence
IP Address DR	IP Address of the Disaster Recovery access to the gateway. Populated only for the Disaster Recovery environment, in the file generated for the Production environment. Blank for all other environments (IP v4).	Text	15	Valid IP v4 address	Optional
Partition Type	Indicates the type of Partition, either Order Entry or Drop Copy. Use of Order Entry and Drop Copy gateways require separate and individual setup of the Logical access to each service.	Enumerated	2	OE Order Entry DC Drop Copy	Mandatory
/Partition					
/LogicalAccessConnectivity					

3.5 DERIVATIVESTICKSIZEFILE (9021)

- The Ticksize file contains different tables defining the variable tick sizes used for trading activity. A table is composed of an index (identifying a table instance) with a list of price ranges that have corresponding tick sizes. A contract is associated to a table for each EMM it is tradable through.

- Derivatives TickSizetable also include two parameters to be used together with the sizes:

- Tick Factor
- Tick Factor Max Period

- Use of Tick Factor and Tick Factor Period :

Tick tables are defined on a per contract basis and are applicable to all outright and strategies within the contract, for both option contract and future contract.

The **Tick Factor** allows to define a reduction of the tick size for a maturity group identified through the **Tick Factor Max Period**.

Tick Factor Max Period is a time to expiry (TTE) expressed in months. For all instruments within the contract having a TTE smaller than the **Tick Factor Max Period**, the **Tick Factor** is applied on top of the tick size determined by the tick table and the price range - i.e. Tick size must be divided by **Tick Factor**.

Note: TTE is calculated the following way: (Last Trading Date – Today). To convert it to months and compare to various thresholds : $TTE \text{ (months)} = TTE(\text{Days}) * (12/360)$.

TTE in days (Last Trading Day – Today) is provided explicitly for each outright in a dedicated field 'Days to Expiry' of DerivativesStandingDataFile (9013).

By definition, a strategy expires when one of its leg expires. So TTE of a strategy is the TTE of its nearest leg.

- Tick Sizes for Strategies :

Strategies always use the smallest possible tick. Independently from TTE and Tick Factor, strategies will always use the smallest tick of the tick table of the contract.

If on top of it, the Strategy has a TTE < Tick Factor Max period, then the Tick Factor also applies.

- File availability

This file is available at the start of day and is needed by the Customers for the trading day. Customers must be able to download and process this file on a daily basis.

- Scope of contents

The file scope is the following: a tick size table for Derivatives markets, contains variable (price range-dependent) ticks and fixed price ticks.

■ Intraday updates

No intraday update will be performed on the Tick Size table. Should the need arise, updates will be done in the referential tool and will be applied on the following business day (i.e. D+1). Meaning, the file will only be updated on a daily basis.

The file provides structure is as per the following tree:

- DerivatigvesTickSizes
 - Tick Size Index ID
 - Tick Table Name
 - Tick Factor Max Period
 - Tick Factor
 - Derivatives Tick Size

Field	Short Description	Format	Len	Values	Presence
DerivativesTickSizes				1..254	
Tick Size Index ID	ID of the tick size table available in the Tick Table file.	Numerical ID	2	0..2 ¹⁶ -2	Mandatory
Tick Table Name	Name of the tick size table available in the Tick Table file.	Text	75	(See field description)	Mandatory
Tick Factor Max Period	Indicator expressed in Month. Instrument whose Time To Expiry are lower than the indicator are impacted by the TickFactor (to be calculated with Ratio / Multiplier Decimals)	Numerical	4	0..2 ³² -2	Mandatory
Tick Factor	Tick factor applied to update the TickSize for more liquid instruments available in the Tick Table file (to be calculated with Ratio / Multiplier Decimals).	Numerical	8	0..2 ⁶⁴ -2	Mandatory
DerivativesTickSize					
Minimum Price	Minimum Price of the order.	Price	8	(See field description)	Mandatory
Tick Size	Tick Size applied between the current Minimum Price and the next Minimum Price.	Price	8	(See field description)	Mandatory
/DerivativesTickSize					
/DerivativesTickSizes					

3.6 OPENINTERESTFILE (9014)

Open Interest file provide open interest as per the end of the previous trading day session information provided by Clearing Partner on derivatives instruments.

- File Availability: Available 24/7.
- Scope of contents: Derivative instruments.
- Intraday updates: XML file will be created as soon as the open interest file is received from LCH.

Field	Short Description	Format	Len	Values	Presence
OpenInterestFile					
OpenInterestUnitary					
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2 ³² -2	Mandatory
ISIN Code	Instrument ISIN following ISO 6166.	Alphanumeric ID	12	(See field description)	Mandatory
Open Interest Date	Open interest date (Format YYYYMMDD).	Date	8	(See field description)	Mandatory
Open Interest	Open interest.	Quantity	8	From 0 to 2 ⁶⁴ -2	Mandatory
/OpenInterestUnitary					
/OpenInterestFile					

3.7 REFERENCESPREADSFILE (9045)

Reference Spreads File provides the following referential data used for:

- Market Quality Spread (MQS) for contracts on which Market Making Agreements are defined (Reference Spread – or Market Quality Spread as described in How the Market Works). The spread is expressed as on a per maturity group basis and as a relative to the bid value. MQS is not updatable intraday.
- The Actual Quality Spread (AQS) multiplier, allowing to determine the effective Market Quality Spread applicable at start of day. AQS can be updated intraday (via MDG) and is the effective spread used to measure Market Makers performance. AQS is defined through this multiplier relatively to the reference spread – MQS – and is as such defined relatively to the bid value.
- The Collars multiplier, allowing to determine the collars spread size, defined as a multiplier of the reference spread. The Reference Spread provides values relative to a price level. As such it is applied as compared with the Dynamic Collar Reference Price (instead of the Best Bid Price used for Market Making).

For more details about the use of reference spreads and associated variables please refer to the How the Market Works.

- File Availability: Available 24/7.
- Scope of contents: Derivatives instruments.
- Intraday updates: No intraday updates.

The file provides structure is as per the following tree:

- Reference Spread Unitary
 - Message Core
 - Reference Spread Range

Field	Short Description	Format	Len	Values	Presence
ReferenceSpreadUnitary					
Message Core					
Reference Spread Table ID	ID of the Reference Spread Table.	Numerical ID	2	0..2 ¹⁶ -2	Mandatory
Reference Spread Table Name	Name of the Reference Spread Table.	Text	75	(See field description)	Mandatory
/Message Core					
ReferenceSpreadRange				1..254	

Field	Short Description	Format	Len	Values	Presence
Message Core					
TTE range Lower Limit	Time to Expiry. Expressed as Months (to be calculated with the Ratio / Multiplier Decimals).	Numerical ID	4	0..2^32-2	Mandatory
Low Price Range	This field is used to define a Price Range. Starting from this Price and until the next 'Low Price Range', the associated parameter should be applied (to be calculated with the Price / Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Mandatory
Reference Spread	Reference Spread.	Numerical	8	From -2^63+1 to 2^63-1	Mandatory
AQS Multiplier	Actual Quality Spread Multiplier. Enable to calculate the Actual Quality Spread to know whether the DCRP is Mid-BBO or Fair Value (to be calculated with the Ratio / Multiplier Decimals).	Numerical	4	0..2^32-2	Mandatory
Collars Multiplier	Allows to determine the effective Collars by applying this multiplier to the Market Quality spread, which enables clients to determine in real time the collars applied by the system for each individual order book (to be calculated with the Ratio / Multiplier Decimals).	Numerical	4	0..2^32-2	Mandatory
Reference Spread Expression	Units in which Reference Spread is expressed.	Enumerated	1	1 Percentage 2 Absolute	Mandatory
/Message Core					
/ReferenceSpreadRange					
/ReferenceSpreadUnitary					

3.8 PREVDAYCAPANDVOLTRADFILE (9015)

Previous Day Capital and Volume Traded file provides Previous Volume Traded and Previous Day Capital Traded information.

- File Availability: Available 24/7.
- Scope of contents: Cash instruments.
- Intraday updates: XML file will be created as soon as this information will be available.

Field	Short Description	Format	Len	Values	Presence
PrevDayCapAndVolTradCore Unitary					
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
ISIN Code	Instrument ISIN following ISO 6166.	Alphanumeric ID	12	(See field description)	Mandatory

Field	Short Description	Format	Len	Values	Presence
Prev Day Capital Traded	Cumulative capital traded for all trades from previous day on an instrument (to be calculated with the Amount Decimals). Not provided for non-Euronext traded instruments.	Amount	8	0..2^64-2	Mandatory
Previous Volume Traded	Number of shares traded (to be calculated with the Quantity Decimals) on this instrument during trading day identified by 'DateOfLastTrade'. Not provided for non-Euronext traded instruments.	Quantity	8	0..2^64-2	Mandatory
/PrevDayCapAndVolTradCoreUnitary					

3.9 REPOSETTLEMENTPRICEFILE (9016)

Repo Settlement Price File is used to communicate the previous day settlement price for each repo instruments.

- File Availability: Available 24/7.
- Scope of contents: Cash instruments.
- Intraday updates: XML file will be created as soon as this information will be available in the morning (for previous day value).

Field	Short Description	Format	Len	Values	Presence
RepoSettlementPriceUnitary					
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
Repo Settlement Price	The settlement price (to be calculated with Price / Index Level Decimals) is a standard price used to value the trade that initiates an instrument lending transaction and to calculate the return price.	Price	8	From -2^63+1 to 2^63-1	Mandatory
/RepoSettlementPriceUnitary					

3.10 TIMETABLEFILE (9001)

The Timetable file indicates the scheduled trading patterns, on a given day, associated to a Symbol Index linked by the Pattern ID. Please Refer to Optiq MDG Client Specifications for details. The file is provided on a per Segment basis, according to the SBE version it follows.

File Availability: Available 24/7.

Scope of contents: All the Exchange segments for Market Data.

Intraday updates: This file will be updated overnight.

Field	Short Description	Format	Len	Values	Presence
Pattern					

Field	Short Description	Format	Len	Values	Presence
Pattern ID	Numerical Pattern identifier available as a characteristic of an instrument in Standing Data file and message, and used in the MDG timetable message.	Numerical ID	2	0..2^16-2	Mandatory
Phase					
Phase Time	Time of Phase start	XML timeSec hh:mm:ssZ where Z is for UTC	8	0..2^64-2	Mandatory
Phase Id	Indicates the phase of the instrument.	Enumerated	1	(See field description)	Mandatory
Phase Qualifier	Indicates the Phase Qualifier (no multiple phase possible at the same time even if this field is a bitmap).	Bitmap	2	(See field description)	Mandatory
Trading Period	Provides the current trading period.	Enumerated	1	1 Opening (Cash and Derivatives) 2 Standard (Cash and Derivatives) 3 Closing (Cash and Derivatives)	Mandatory
Order Entry Qualifier	Field indicating the state of the Order Entry for the current market state.	Enumerated	1	0 Order Entry/Cancel/Modify Disabled 1 Order Entry/Cancel/Modify Enabled 2 Cancel and Modify Only (Derivatives Only) 3 Cancel Only	Optional
Session	Current market session.	Enumerated	1	(See field description)	Mandatory
Scheduled Event	Type of Scheduled Event.	Enumerated	1	(See field description)	Optional
/Phase					
/Pattern					

4. FIELD DESCRIPTION

A

Amount Decimals

Field Name	Amount Decimals
Description	Indicates the number of decimals for each Amount related to this Symbol Index
Format	Decimal Places (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸ -2 Null value: 2 ⁸ -1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

AQS Multiplier

Field Name	AQS Multiplier
Description	Actual Quality Spread Multiplier. Enable to calculate the Actual Quality Spread to know whether the DCRP is Mid-BBO or Fair Value (to be calculated with the Ratio / Multiplier Decimals).
Format	Numerical (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	ReferenceSpreadsFile (9045)
User For	Derivatives

Asset Class

Field Name	Asset Class
Description	Defines the Asset Class for a group of products.
Format	Enumerated
Length	3
Possible Values	EQT = Equities BoB = Best of Book (BoB) TRP = Trade Reporting and Publication SIS = Société Générale Systematic Internalizer (SI) ETF = ETFs FIX = Fixed Income WAC = Warrants and Certificates BDL = Luxembourg Stock Exchange EQO = Equity Options IDO = Index Options CCO = Currency Options ATO = AtomX (for Flex Contracts) EIF = Equity and Index Futures CCF = Currency Futures COD = Commodity Derivatives EXI = Euronext Indices INA = Euronext iNAVs

Field Name	Asset Class
	TPI = Third Party Indices APA = Approved Publication Arrangement
Used In	CashStandingDataFile (9007)
User For	Cash

AUM

Field Name	AUM
Description	Stands for Asset Under Management. Indicates the fund's total market value (to be calculated with the Amount Decimals).
Format	Amount (unsigned integer 64)
Length	8
Possible Values	0..2 ⁶⁴ -2 Null value: 2 ⁶⁴ -1
Used In	CashStandingDataFile (9007)
User For	Cash

B

BIC Main Depository

Field Name	BIC Main Depository
Description	Identifies the BIC of the default depository organization.
Format	Alphanumeric ID (character)
Length	11
Used In	CashStandingDataFile (9007)
User For	Cash

Block Price Control ID

Field Name	Block Price Control ID
Description	ID of the Block Price Table.
Format	Numerical ID (unsigned integer 16) XML: unsigned integer 16
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	CashStandingDataFile (9007)
User For	Cash

Bloomberg Ticker Code

Field Name	Bloomberg Ticker Code
Description	Indicates the Bloomberg Ticker Code.
Format	Alphanumeric ID (character)
Length	13
Used In	CashStandingDataFile (9007)

Field Name	Bloomberg Ticker Code
User For	Cash

Bps High Collar

Field Name	Bps High Collar
Description	Indicates the High collar applied on the NAV order book of ETF MTF. It is derived from the creation fees of the primary market. Information expressed in basis points (bps) (to be calculated with the Price/Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1 Null value: -2^63
Used In	CashStandingDataFile (9007)
User For	Cash

Bps Low Collar

Field Name	Bps Low Collar
Description	Indicates the low collar applied on the NAV order book of ETF MTF. It is derived from the redemption fees of the primary market. Information expressed in basis points (bps) (to be calculated with the Price/Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1 Null value: -2^63
Used In	CashStandingDataFile (9007)
User For	Cash

C

CFI

Field Name	CFI
Description	Classification code of a financial instrument defined by the ISO-10962:2015 standard.
Format	Text (character)
Length	6
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Channel ID

Field Name	Channel ID
Description	Identifies the channel. First figure defines if it is Real-Time feed (1 Production, 3 v-EUA or 5 p-EUA) or Snapshot feed (2 Production, 4 v-EUA or 6 p-EUA). Second figure identifies the MDG partition (partition 1 will start with 0 as second figure). Last 3 figures are channel identifier and it is unique and the same across the different platforms we have (v-EUA/p-EUA/Production).
Format	Numerical (unsigned integer 16)

Field Name	Channel ID
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Channel Speed

Field Name	Channel Speed
Description	Defines the Channel bandwidth.
Format	Enumerated (character)
Length	4
Possible Values	100M 100Mbps Channel 1G 1Gbps Channel 10G 10Gbps Channel
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Channel Type

Field Name	Channel Type
Description	Defines the channel.
Format	Enumerated (character)
Length	4
Possible Values	FBOU Full Order Book – Order Update message FBMU Full Order Book – Market Update message REFI Indices and referential channel REFT Trades and referential channel BBBO Best Bid and Best Offer channel APSI APA SI Quotes channel APTR APA Trade Publication channel SNPS Synapse Trades channel EBLK Block channel
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Closing Price Type

Field Name	Closing Price Type
Description	Closing Price Type. Indicates the type of closing Price configured for the instrument.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Last Traded Price (LTP) 2 Volume Weighted Average Price (VWAP) 3 Volume Weighted Average Price (VWAP X Trades) Null value: 2 ⁸ -1

Field Name	Closing Price Type
Used In	CashStandingDataFile (9007)
User For	Cash

Collar Expansion Factor

Field Name	Collar Expansion Factor
Description	Numerical coefficient applied in collar calculation.
Format	Numerical ID (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸ -2 Null value: 2 ⁸ -1
Used In	DerivativesStandingDataFile (9013)

Collar Max Unhalt Nb

Field Name	Collar Max Unhalt Nb
Description	Maximum number of automatic attempts to unhalt system. Applies only if Dynamic Collar Logic enables unhalting. Used for Trade Price Validation (TPV).
Format	Quantity (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸ -2 Null value: 2 ⁸ -1
Used In	DerivativesStandingDataFile (9013)

Collar Unhalt Delay

Field Name	Collar Unhalt Delay
Description	Delay (in seconds) of automatic unhalt If Dynamic Collar Logic enables unhalting. Used for Trade Price Validation (TPV).
Format	Time (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	DerivativesStandingDataFile (9013)

Collars Multiplier

Field Name	Collars Multiplier
Description	Allows to determine the effective Collars by applying this multiplier to the Market Quality spread, which enables clients to determine in real time the collars applied by the system for each individual order book (to be calculated with the Ratio / Multiplier Decimals).
Format	Numerical (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	ReferenceSpreadsFile (9045)
User For	Derivatives

Contract Event Date

Field Name	Contract Event Date
Description	XML additional information: (Format YYYYMMDD).
Format	Date (unsigned integer 16) XML: XML date
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Contract Name

Field Name	Contract Name
Description	Contract Name
Format	Text (character)
Length	60
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Contract Symbol Index

Field Name	Contract Symbol Index
Description	Identifies the contract of this instrument by its Symbol Index.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Contract Trading Type

Field Name	Contract Trading Type
Description	Contract Trading Type.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Traded as an outright 2 Not traded, but listed in contract data. Traders may subscribe to it 3 Traded as a simple inter-commodity spread 4 Traded as an inter-commodity spread Null value: 2 ⁸ -1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Contract Type

Field Name	Contract Type
Description	Generic Contract Type.
Format	Enumerated (character)
Length	1
Possible Values	F Future O Option U Underlying
Conditions	Value U (Underlying) is for internal Exchange use only
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Country Of Exchange

Field Name	Country Of Exchange
Description	Country of exchange is the Country associated to the MIC following ISO 3166 Alpha-3.
Format	Alphanumerical ID (character)
Length	3
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Currency Coefficient

Field Name	Currency Coefficient
Description	<p>When an actual price is displayed in a different 'price expression' than the official instrument trading currency, the Currency Coefficient represents the ratio 'price expression' divided by 'official currency' (To be calculated with Ratio / Multiplier Decimals).</p> <p>For example a UK-listed instrument with its trading currency GBP having a price expressed in Pence, the Currency Coefficient will be 0.01 expressed with Currency Coefficient set to 1 and Ratio / Multiplier Decimals set to 2.</p> <p>The Currency Coefficient may be used for the Instrument Trading Price (the Referential field Trading Currency Indicator is then set to 1), and/or for the Derivatives and Warrants Instrument Strike Price (the Referential field Strike Currency Indicator is then set to 1).</p>
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	CashStandingDataFile (9007)
User For	Cash

Cut Off Time

Field Name	Cut Off Time
Description	Indicates the point reached in the day from which the order will not be processed for the current business day. Time in an integer on 4 bytes expressed as hhmmss
Format	Integer Time in hhmmss (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	CashStandingDataFile (9007)

Field Name	Cut Off Time
User For	Cash

D

Dark Eligibility

Field Name	Dark Eligibility
Description	Indicates the Eligibility to dark. 0 is not eligible, 1 is eligible.
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸⁻² Null value: 2 ⁸⁻¹
Used In	CashStandingDataFile (9007)
User For	Cash

Dark LIS Threshold

Field Name	Dark LIS Threshold
Description	Defines the minimum amount of an order to benefit from the LIS (Large In Scale) pre-transparency waiver (to be calculated with the Amount Decimals).
Format	Amount (unsigned integer 64)
Length	8
Possible Values	0..2 ⁶⁴⁻² Null value: 2 ⁶⁴⁻¹
Used In	CashStandingDataFile (9007)
User For	Cash

Dark Min Quantity

Field Name	Dark Minimum Quantity
Description	Defines the minimum quantity required for an order to be filled in the Dark liquidity. 0 indicates that no minimum amount is required.
Format	Quantity (unsigned integer 32)
Length	4
Possible Values	0..2 ³²⁻² Null value: 2 ³²⁻¹
Used In	CashStandingDataFile (9007)
User For	Cash

Date Next Tradable NAV

Field Name	Date Next Tradable NAV
Description	Date of the next tradable NAV. Date in an integer on 4 bytes expressed as YYYYMMDD
Format	Date (unsigned integer 32)
Length	4
Possible Values	0..2 ³²⁻² Null value: 2 ³²⁻¹

Field Name	Date Next Tradable NAV
Used In	CashStandingDataFile (9007)
User For	Cash

Date Of Last Trade

Field Name	Date Of Last Trade
Description	XML additional information: (Format YYYYMMDD).
Format	Date (unsigned integer 16) XML: XML date
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	CashStandingDataFile (9007)
User For	Cash

Days To Expiry

Field Name	Days To Expiry
Description	Number of Calendar days until the Last Trading Day of the Expiry.
Format	Numerical (unsigned integer 16)
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	DerivativesStandingDataFile (9013)

Declaration Duration

Field Name	Declaration Duration
Description	Declaration Duration (in minutes).
Format	Time (unsigned integer 64) XML: unsigned integer 64
Length	8
Possible Values	0..2 ⁶⁴ -2 Null value: 2 ⁶⁴ -1
Used In	CashStandingDataFile (9007)

Depository List

Field Name	Depository List
Description	<p>Identifies the possible main depository organizations (maximum four) for shares or fixed income. Use the clearing house to determine the relevant system for settling trades. Valid values are:</p> <ul style="list-style-type: none"> - '00001' – Euroclear France - '00002' – CIK (Belgium) - '00003' – NECIGE (the Netherlands) - '00004' – X/N (BoB service) - '00005' – VIF (non-fungible Belgian instruments) - '00006' – Euroclear Bank

Field Name	Depository List
	<ul style="list-style-type: none"> - '00007' – NIEC - '00008' – Physical - '00009' – Euronext Paris non Euroclear France - '00010' – Interbolsa - '00000' – No depository organization - 'Nulls' – Not significant
Format	Text (character)
Length	20
Used In	CashStandingDataFile (9007)
User For	Cash

Derivatives Instrument Trading Code

Field Name	Derivatives Instrument Trading Code
Description	Derivatives Instrument Trading Code (formerly AMR) is composed of Exchange Code, Contract Type, Product Code, Expiry. For Options, Strike and Option Type (Put or Call) is added.
Format	Alphanumerical ID (character)
Length	18
Used In	DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Derivatives Instrument Type

Field Name	Derivatives Instrument Type
Description	Indicates the type of derivative instrument
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	<ul style="list-style-type: none"> 0 Call Option 1 Put Option 2 Strategy 3 Individual Future 4 Underlying Null value: 2^8-1
Conditions	Value U (Underlying) is for internal Exchange use only
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Derivatives Market Model

Field Name	Derivatives Market Model
Description	Type of synthetic quote applied to the contract
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	<ul style="list-style-type: none"> 0 No Synthetic Quote 1 Spontaneous Implied Matching 2 Event Driven Implied Matching Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Dividend Frequency

Field Name	Dividend Frequency
Description	Indicates how often a dividend is paid by an individual instrument.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Capitalization 2 Monthly 3 Yearly Null value: 2 ⁸ -1
Used In	CashStandingDataFile (9007)
User For	Cash

DR Source IP Range

Field Name	DR Source IP Range
Description	Defines the Disaster Recovery IP address /25 range number (IP v4).
Format	Text (character)
Length	20
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Dynamic Collar Logic

Field Name	Dynamic Collar Logic
Description	For Derivatives, Dynamic Collar Logic is a field used to identify the method of handling orders in case of Trade Price Validation (TPV) being triggered. For Cash, Dynamic Collar Logic is used internally.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Not Active 2 No Halt with Reject (<i>not in use</i>) 3 Halt with Acceptation Null value: 2 ⁸ -1
Used In	DerivativesStandingDataFile (9013)

E

EDSP Tick Size

Field Name	EDSP Tick Size
Description	Specific Tick Size value applicable for EDSP. It's calculated using the PriceDecimals.
Format	Price (unsigned integer 64)
Length	8
Possible Values	0..2 ⁶⁴ -2 Null value: 2 ⁶⁴ -1
Used In	DerivativesStandingDataFile (9013)

Field Name	EDSP Tick Size
User For	Derivatives

Eligible For Margin

Field Name	Eligible For Margin
Description	Indicates if the instrument is eligible for margin or not.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Yes 0 No Null value: 2^8-1
Used In	CashStandingDataFile (9007)

EMM

Field Name	EMM
Description	<p>Defines the Exchange Market Mechanism applied on each platform.</p> <p>In the Reject (07) message:</p> <ul style="list-style-type: none"> ■ Populated only if provided as a valid value in the corresponding Inbound request AND the corresponding Inbound request was technically correctly formatted; otherwise it is provided at the Null value. ■ Not populated for rejection of strategy creation on derivative markets. <p>In the Mass Cancel (13) message, it is mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.</p>
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Cash and Derivative Central Order Book (COB) 2 NAV Trading Facility 4 Derivative Wholesales 5 Cash On Exchange Off book 6 Euronext off-exchange trade reports 7 Derivative On Exchange Off book 8 ETF MTF - NAV Central Order Book 9 Listed-not traded 15 Delta Neutral Contingency leg 99 Not Applicable (For indices and iNAV) Null value: 2^8-1
Conditions	In TCS messages only possible values are '2' = NAV Trading Facility and '5' = Cash On Exchange Off book. Field not populated in Reject (07) messages for rejection of strategy creation on derivatives markets.
Used In	CashStandingDataFile (9007) CashTickSizeReferentialFile (9020) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Exchange Code

Field Name	Exchange Code
Description	Indicates the Market Place.
Format	Enumerated (character)
Length	1
Possible Values	A Amsterdam Equity Derivatives B Brussels Equity Derivatives

Field Name	Exchange Code
	C Paris Equity Underlyings D Brussels Cash Underlyings F Brussels Index Derivatives G Amsterdam Cash Underlyings H Lisbon Cash Underlyings J Paris Index Derivatives K Amsterdam Index Derivatives M Lisbon Index Derivatives P Paris Equity Derivatives R Amsterdam Commodities Derivatives S Lisbon Equity Derivatives Y Paris Commodities Derivatives Z Amsterdam Currency Derivatives
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Exer Style

Field Name	Exercise Style
Description	Type of exercise of a derivatives instrument
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 European 1 American 2 Asian 3 Bermudan 4 Other Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Expiry Cycle Type

Field Name	Expiry Cycle Type
Description	Defines the expiry cycle type
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Daily 2 Weekly 3 Monthly Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Exposition Type

Field Name	Exposition Type
Description	Indicates the ETF replication method.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Physical

Field Name	Exposition Type
	2 Synthetic 3 Sampling Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

F

First Settlement Date

Field Name	First Settlement Date
Description	XML additional information: (Format YYYYMMDD).
Format	Date (unsigned integer 16) XML: XML date
Length	2
Possible Values	0..2^16-2 Null value: 2^16-1
Used In	CashStandingDataFile (9007)
User For	Cash

Full Instrument Name

Field Name	Full Instrument Name
Description	Full Instrument Name.
Format	Text (character)
Length	102
Used In	CashStandingDataFile (9007)
User For	Cash

G

Guarantee Indicator

Field Name	Guarantee Indicator
Description	Indicates if the trade is guaranteed or not (for clearing purpose)
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 This instrument is not guaranteed 1 This instrument is guaranteed 2 This instrument is not clearable 8 This instrument is part of Cleared Borrowing and Lending Service (CBLM) and is guaranteed Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

I

ICB

Field Name	ICB
Description	Identifies for a listed instrument, the economic subsector of the issuing company in the ICB (Industry Classification Benchmark) classification.
Format	Alphanumeric ID (character)
Length	16
Used In	CashStandingDataFile (9007)
User For	Cash

ICB Code

Field Name	ICB Code
Description	Identifies for a listed instrument, the economic subsector of the issuing company in the ICB (Industry Classification Benchmark) classification.
Format	Alphanumeric ID (character)
Length	8
Used In	CashStandingDataFile (9007)
User For	Cash

ICSD

Field Name	ICSD
Description	Indicates if the settlement can be processed through an International CSD (1) or not (0).
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸ -2 Null value: 2 ⁸ -1
Used In	CashStandingDataFile (9007)
User For	Cash

Index Leverage

Field Name	Index Leverage
Description	Indicates the multiplier coefficient of an leveraged fund. (To be calculated with RatioDecimal)
Format	Numerical (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	CashStandingDataFile (9007)
User For	Cash

Instrument Category

Field Name	Instrument Category
Description	Indicates to which category the instrument belongs.

Field Name	Instrument Category
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Equities 2 Fixed Income 3 Warrants And Certificates 6 Trackers 7 Futures 10 Options 11 Indices 12 Euronext Funds Services 14 iNAV (Indicative Net Asset Value) 254 Miscellaneous Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash and Derivatives

Instrument Event Date

Field Name	Instrument Event Date
Description	XML additional information: (Format YYYYMMDD).
Format	Date (unsigned integer 16) XML: XML date
Length	2
Possible Values	0..2^16-2 Null value: 2^16-1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Instrument Group Code

Field Name	Instrument Group Code
Description	Instrument Group / Class Identifier.
Format	Alphanumeric ID (character)
Length	2
Used In	CashStandingDataFile (9007)
User For	Cash

Instrument Name

Field Name	Instrument Name
Description	Instrument Name
Format	Text (character)
Length	18
Used In	CashStandingDataFile (9007)
User For	Cash

Instrument Trading Code

Field Name	Instrument Trading Code
Description	Cash: Trading code is a 12-character string, the only instrument identifier that is unique in the feed in addition to the symbol index.
Format	Alphanumeric ID (character)
Length	15
Used In	CashStandingDataFile (9007)
User For	Cash and Derivatives

Instrument Type

Field Name	Instrument Type
Description	Instrument Type. Represents a group of instruments that are subject to the same issue procedures, general processing, and that give shareholders the same rights with regard to voting, dividends and rights.
Format	Enumerated (character)
Length	4
Possible Values	1 Equities SHRS Shares SBRT Subscription Right DPRP Depository Receipts WNTS Warrant FLXB Flexi Bonds ETFT Exchange Traded Funds MTFU Mutual Funds OTHR Other
Used In	CashStandingDataFile (9007)
User For	Cash

Inst Unit Exp

Field Name	Instrument Unit Expression
Description	Unit in which the instrument is quoted.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Units 2 Percentage of Nominal Excluding Accrued Interest (Clean) 3 Basis Points 5 Percentage of Nominal Including Accrued Interest (Dirty) 8 Kilograms 9 Ounces Null value: 2^8-1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

IP Address DR

Field Name	IP Address DR
Description	IP Address of the Disaster Recovery access to the gateway. Populated only for the Disaster Recovery environment, in the file generated for the Production environment. Blank for all other environments (IP v4).

Field Name	IP Address DR
Format	Text (character) XML: character
Length	XML: 15
Possible Values	XML: Valid IP v4 address
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)

IP Address Primary

Field Name	IP Address Primary
Description	IP Address of the Primary and Secondary (backup) access to the gateway. Provided for all environments (IP v4).
Format	Text (character) XML: character
Length	XML: 15
Possible Values	XML: Valid IP v4 address
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)

ISIN Code

Field Name	ISIN Code
Description	Instrument ISIN following ISO 6166. Identifier of a product. Combined with MIC and Currency, identifies an instrument traded on a given market using a given currency.
Format	Alphanumeric ID (character)
Length	12
Conditions	For MiFID Declaration Trade Entry (40) message, the Symbol Index or MIC - ISIN - Currency must be specified. If both Symbol Index and MIC - ISIN - Currency are populated, MIC - ISIN - Currency will be ignored and only the Symbol Index will be taken into consideration.
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013) PrevDayCapAndVolTradFile (9015)
User For	Cash and Derivatives

Issue Price

Field Name	Issue Price
Description	Issuing price of the instrument
Format	Price (signed integer 64)
Length	8
Possible Values	-2 ⁶³ +1..2 ⁶³ -1 Null value: -2 ⁶³
Used In	CashStandingDataFile (9007)
User For	Cash

Issue Price Decimals

Field Name	Issue Price Decimals
Description	Indicates the number of decimals for Issue Price related to this Symbol Index

Field Name	Issue Price Decimals
Format	Decimal Places (unsigned integer 8)
Length	1
Possible Values	0..2^8-2 Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

Issuer Name

Field Name	Issuer Name
Description	Indicates the name of the Legal Issuing Entity.
Format	Text (character)
Length	80
Used In	CashStandingDataFile (9007)
User For	Cash

Issuing Country

Field Name	Issuing Country
Description	Issuing country. Provides the ISO 3166 (Alpha 3) code for the country of headquarter company that issued the instrument.
Format	Alphanumerical ID (character)
Length	3
Used In	CashStandingDataFile (9007)
User For	Cash

L

Last Adjusted Closing Price

Field Name	Last Adjusted Closing Price
Description	Last traded price of the previous trading day after application of the adjustment coefficient (to be calculated with the Price/Index Level Decimals). Not provided for European instruments.
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1 Null value: -2^63
Used In	CashStandingDataFile (9007)
User For	Cash

Last Trading Date

Field Name	Last Trading Date
Description	XML additional information: (Format YYYYMMDD).
Format	Date (unsigned integer 16)

Field Name	Last Trading Date
	XML: XML date
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Leg Buy Sell

Field Name	Leg Buy or Sell
Description	Leg Side.
Format	Enumerated (character)
Length	1
Possible Values	B Buy S Sell
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Leg Price

Field Name	Leg Price
Description	Price of corresponding strategy leg (to be calculated with the Price/Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2 ⁶³ +1..2 ⁶³ -1 Null value: -2 ⁶³
Conditions	This field is not populated in message Security Definition Request (60) only for the submission of a Delta-neutral strategy.
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Leg Ratio

Field Name	Leg Ratio
Description	Ratio of lots for the leg. For contingent trades, the delta. <ul style="list-style-type: none"> ■ For Futures or Options, it is the leg ratio. In this case, the maximum value is 99999. If the value submitted by a member is higher, it will be changed to the maximum value (99999). ■ For underlyings, the delta is used with special rules: For the underlying leg of volatility strategies, this should be the delta (normally valued on two decimal places) multiplied by 1000 (e.g. a delta of 65% (0.65) is represented by 650). In this case, the maximum value is 99990 (9999%). If the value submitted by a member is higher, it will be changed to the maximum value (99990); For Conversion Reversal Strategies (Type='R'), the delta is always set to 1000.
Format	Quantity (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Leg Symbol Index

Field Name	Leg Symbol Index
Description	MDG proprietary identification code of the instrument leg for the strategy. This identifier is unique per triplet: MIC, ISIN and currency. Once the instrument is expired its number can be used for a new instrument.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

LEI Code

Field Name	LEI Code
Description	LEI (Legal Entity Identifier) Code
Format	Alphanumeric ID (character)
Length	20
Used In	CashStandingDataFile (9007)
User For	Cash and Derivatives

Liquid Instrument Indicator

Field Name	Liquid Instrument Indicator
Description	Indicates whether the instrument is liquid or not, as defined per MiFID II. (0 = Illiquid ; 1 = Liquid)
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸ -2 Null value: 2 ⁸ -1
Used In	CashStandingDataFile (9007)

Listing Date

Field Name	Listing Date
Description	Indicates the listing date of the fund on the Exchange of Reference. Date in an integer on 4 bytes expressed as YYYYMMDD
Format	Date (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	CashStandingDataFile (9007)
User For	Cash

Lot Size

Field Name	Lot Size
Description	For Cash and Derivatives, it defines a multiple of the tradable quantity.
Format	Quantity (unsigned integer 64)

Field Name	Lot Size
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Low Price Range

Field Name	Low Price Range
Description	This field is used to define a Price Range. Starting from this Price and until the next 'Low Price Range', the associated parameter should be applied (to be calculated with the Price / Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1 Null value: -2^63
Used In	ReferenceSpreadsFile (9045)
User For	Derivatives

M

Main Depository

Field Name	Main Depository
Description	<p>Identifies the default (or main) depository organization of the instrument (between the possible 4 depositories registered) used by priority for the settlement (for example: multi-listed instruments which have several depositories).</p> <p>For Cash Markets this data has to be treated in consideration of the data Depository List used by the clearing house to determine the relevant system for settling trades. Valid values are the same as for “Depository List”.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> - '00001' – Euroclear France - '00002' – Euroclear Belgium - '00003' – Euroclear Nederland - '00004' – X/N National Bank of Belgium - '00005' – VIF (non-fungible Belgian instruments) - '00006' – Euroclear Bank - '00008' – Physical - '00010' – Interbolsa - '00000' – No depository organization - 'Nulls' – Not significant
Format	Alphanumeric ID (character)
Length	5
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Market Model

Field Name	Market Model
Description	Market Model identifier.

Field Name	Market Model
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Order Driven 2 Quote Driven 3 IPO 4 Primary Market 5 RFQ 6 Conditional Uncrossing Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

Market Of Reference MIC

Field Name	Market Of Reference MIC
Description	Indicates the instrument Exchange of Reference by its MIC (Market Identification Code according to ISO 10383) (For Future Use).
Format	Alphanumeric ID (character)
Length	4
Conditions	For Declaration Entry (40) message, it is mandatory when Operation Type = '4' or '6'.
Used In	CashStandingDataFile (9007)
User For	Cash

Maturity Date

Field Name	Maturity Date
Description	Maturity Date of the instrument (text formatted as YYYYMMDD). For Derivative instruments populated with the Calendar day of expiry (text formatted as YYYYMMDD). Calendar day may not be an active trading date, the actual last date of trading is indicated in the field Last Trading Date. For repo (repurchase agreement) it represents the inclusive date until which a lending/borrowing contract can be traded.
Format	Text (character)
Length	8
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Maximum Decimals In Quantity

Field Name	Maximum Decimals In Quantity
Description	Maximum Decimals In Quantity was introduced for Euronext Fund Services Paris and indicates the maximum of relevant decimal number for trading.
Format	Numerical (unsigned integer 8)
Length	1
Possible Values	0..2^8-2 Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

MDG Set Of Channels ID

Field Name	MDG Set Of Channels ID
Description	Identifier of an MDG Set Of Channels.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Funds 2 Fixed Income 3 Luxembourg Stock Exchange 4 Warrants and Certificates 5 Equities France 6 Equities Netherlands 7 Equities Belgium 8 Equities Portugal 9 Equities Dublin 11 Best of Book 13 Euronext Indices 14 Euronext iNAVs 15 Euronext Dublin Indices 16 Commodity Derivatives 17 Currency Derivatives 20 Equity Derivatives France 21 Equity Derivatives Netherlands 22 Equity Derivatives Other 23 Index Options France 24 Index Options Netherlands 25 Index Derivatives Other 26 Index Futures France 27 Index Futures Netherlands 29 APA SI Quotes 30 APA Trade Publication 31 Best of Book (BoB) Funds 32 ETF Access 33 Block Null value: 2^8-1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)

MDG Set Of Channels Name

Field Name	MDG Set Of Channels Name
Description	Name of the MDG Set Of Channels.
Format	Text (character)
Length	100
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)

MIC

Field Name	MIC
Description	Identifies the market to which an instrument belongs by its MIC (Market Identification Code), segment MIC according to ISO 10383. Euronext owns the following MICs: - 'ALXA' – ALTERNEXT AMSTERDAM

Field Name	MIC
	<ul style="list-style-type: none"> - 'ALXB' – EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' – EURONEXT GROWTH PARIS - 'EMTF' – EURO MTF - 'ENXB' – EURONEXT - EASY NEXT - 'ENXL' – EURONEXT ACCESS LISBON - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'TNLA' – EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' – EURONEXT – TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' – EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XAMS' – EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' – EURONEXT - EURONEXT BRUSSELS - 'XEUC' - EURONEXT COM, COMMODITIES FUTURES AND OPTIONS - 'XEUE' - EURONEXT EQF, EQUITIES AND INDICES DERIVATIVES - 'XEUI' - EURONEXT IRF, INTEREST RATE FUTURE AND OPTIONS - 'XLDN' – EURONEXT - EURONEXT LONDON - 'XLIS' – EURONEXT - EURONEXT LISBON - 'XLUX' – LUXEMBOURG STOCK EXCHANGE - 'XMAT' - EURONEXT PARIS MATIF - 'XMLI' – EURONEXT ACCESS PARIS - 'XMON' - EURONEXT PARIS MONEP - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' – EURONEXT - EURONEXT PARIS - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF
Format	Alphanumeric ID (character)
Length	4
Conditions	For MiFID Declaration Trade Entry (40) message, the Symbol Index or MIC - ISIN - Currency must be specified. If both Symbol Index and MIC - ISIN - Currency are populated, MIC - ISIN - Currency will be ignored and only the Symbol Index will be taken into consideration.
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

MIC Exchange Of Reference

Field Name	MIC Exchange Of Reference
Description	Indicates the instrument's Exchange of Reference by its MIC (Market Identification Code according to ISO 10383).
Format	Alphanumeric ID (character)
Length	4
Used In	CashStandingDataFile (9007)
User For	Cash

MIC List

Field Name	MIC List
Description	<p>Identifies the Euronext markets on which an instrument is listed by its MIC (Market Identification Code).</p> <p>For an instrument listed on a single Euronext market, the listing MIC code is the same than “Market Identification Code (MIC) of the listed instrument” For an instrument listed on several Euronext Markets:</p> <ul style="list-style-type: none"> - The first MIC is the same than the “Market Identification Code (MIC) of the listed instrument - The others MIC indicate the other listing places

Field Name	MIC List
Format	Alphanumeric ID (character)
Length	20
Used In	CashStandingDataFile (9007)

MIFID II Liquid Flag

Field Name	MIFID II Liquid Flag
Description	Defines if a contract is to be considered as liquid under MIFID II Regulation.
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	From 0 to 2 ⁸ -2
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Minimum Price

Field Name	Minimum Price
Description	XML additional information: Price with decimals on x characters, with '.' as a separator
Format	Price (signed integer 64) XML: Decimals
Length	8
Possible Values	-2 ⁶³ +1..2 ⁶³ -1 Null value: -2 ⁶³
Used In	CashTickSizeReferentialFile (9020) DerivativesTickSizeFile (9021)
User For	Cash and Derivatives

MM Protections

Field Name	MM Protections
Description	Indicates allowed MM Protection type on the contract.(0: Disabled ; 1: Enabled)
Format	Bitmap (unsigned integer 8)
Length	1
Possible Values	0 Delta 1 Volume Null value: 2 ⁸ -1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Mnemonic

Field Name	Mnemonic
Description	Mnemonic code of the instrument. This field is not populated for every instrument.
Format	Alphanumeric ID (character)
Length	5
Used In	CashStandingDataFile (9007)
User For	Cash

Mother Stock ISIN

Field Name	Mother Stock ISIN
Description	ISIN Code of the index underlying of the TRF contract.
Format	Text (character)
Length	12
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Multicast Group IP

Field Name	Multicast Group IP
Description	Defines the IP number (IP v4).
Format	Text (character)
Length	15
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

N

Name Exchange Of Reference

Field Name	Name Exchange Of Reference
Description	Indicates the instrument's Exchange of Reference by its Name.
Format	Text (character)
Length	50
Used In	CashStandingDataFile (9007)
User For	Cash

NAV Currency

Field Name	NAV Currency
Description	Code of the NAV currency (ISO 4217-3A).
Format	Alphanumerical ID (character)
Length	3
Used In	CashStandingDataFile (9007)
User For	Cash

NAV Publication Time

Field Name	NAV Publication Time
Description	Indicates the official NAV publication time. Time in an integer on 4 bytes expressed as hhmmss
Format	Integer Time in hhmmss (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2

Field Name	NAV Publication Time
	Null value: 2^32-1
Used In	CashStandingDataFile (9007)
User For	Cash

Nominal Currency

Field Name	Nominal Currency
Description	Code of the nominal currency (ISO 4217-3A).
Format	Alphanumerical ID (character)
Length	3
Used In	CashStandingDataFile (9007)
User For	Cash

Number Instrument Circulating

Field Name	Number Instrument Circulating
Description	For stocks: this is the total number of shares issued by the company. For Fix Income: this is the number of Fix Income still to be repaid.
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	CashStandingDataFile (9007)
User For	Cash

O

Open Interest

Field Name	Open Interest
Description	Open interest.
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	OpenInterestFile (9014)
User For	Cash

Open Interest Date

Field Name	Open Interest Date
Description	XML additional information: (Format YYYYMMDD).
Format	Date (unsigned integer 16) XML: XML date
Length	2
Possible Values	0..2^16-2

Field Name	Open Interest Date
	Null value: 2^16-1
Used In	OpenInterestFile (9014)
User For	Derivatives

Optiq Segment

Field Name	Optiq Segment
Description	An Optiq segment is a universe of instruments sharing common trading properties. Instruments have the flexibility to be moved from one partition to another within an Optiq segment.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Equities 2 Funds 3 Fixed Income 4 Warrants and Certificates 5 Bourse de Luxembourg 6 Financial Options 7 Financial Futures 8 Commodity Derivatives 9 Indices 10 Trade Reporting and Publication 14 Block 11 Index Derivatives 12 Equity Derivatives 13 Financial Derivatives 15 Forex Null value: 2^8-1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Order Entry Qualifier

Field Name	Order Entry Qualifier
Description	Field indicating the state of the Order Entry for the current market state.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Order Entry/Cancel/Modify Disabled 1 Order Entry/Cancel/Modify Enabled 2 Cancel and Modify Only (Derivatives Only) 3 Cancel Only Null value: 2^8-1
Used In	TimetableFile (9001)
User For	Cash and Derivatives

Order Type Rules

Field Name	Order Type Rules
Description	Order types supported by the matching engine. - bit in position 0 – Market: Market orders are available for this instrument (0: No ; 1: Yes) - bit in position 1 – Limit: Limit orders are available for this instrument (0: No ; 1: Yes)

Field Name	Order Type Rules
	<ul style="list-style-type: none"> - bit in position 2 - Stop / Stop Loss: Stop and stop loss orders are available for this instrument (0: No ; 1: Yes) - Only for OEG - bit in position 3 - Stop Limit: Stop limit orders are available for this instrument (0: No ; 1: Yes) - Only for OEG - bit in position 4 - Market on Open (MOO): Market on open orders are available for this instrument (0: No ; 1: Yes) - bit in position 5 - Trade at Settlement: Trade at settlement are available for this instrument (0: No ; 1: Yes)
Format	Bitmap (unsigned integer 16)
Length	2
Possible Values	0 Market 1 Limit 2 Stop / Stop Loss 3 Stop Limit 4 Market on Open (MOO) 5 Trade at Settlement Null value: 2^16-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

P

Par Value

Field Name	Par Value
Description	Par Value (also called Nominal value) for Instrument. For Fixed Income it represents the par amount to be repaid at maturity (not including interest revenue) (to be calculated with the Amount Decimals).
Format	Amount (unsigned integer 64)
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	CashStandingDataFile (9007)
User For	Cash

Param Name

Field Name	Param Name
Description	<p>Name of a contract parameter. This field provides the type of parameter. The value of the parameter is displayed in field Param Value. Details on parameters are provided below:</p> <ul style="list-style-type: none"> 1 – RFCPublication: Boolean (If 0 then RFC is considered as illiquid ; If 1 then RFC is considered as liquid) 2 – RFCAlgorithm: Value (Is the RFC Algorithm: 1 – Standard RFC ; 2 – Client Best Execution RFC) 3 - RFCMinimumQuantityForInitiator: Quantity (Minimum quantity to submit for RFC as an initiator) 4 - RFCMinimumQuantityForReactor: Quantity (Minimum quantity to submit for RFC as a reactor) 5 - RFCMaxPickUpPercentageForReactor: Percentage (Maximum percentage of the remaining quantity after price improvement reserved for reactors) 6 - RFCValidityPeriod: Seconds (Period during which RFC Responses are submitted) 7 - AvailableWholesaleTradeType: Bitmap (Bit 0: Large in Scale); (Bit 1: Against Actual); (Bit 2: Exchange for Swaps) 8 - ContractLISTradeThreshold: Amount 9 – RFCCOBIInclusion: Boolean (If 0 then orders from Central Order Book are not part of RFC ; If 1 then orders from Central Order Book are part of RFC) 12 - IntradayInstrumentCreationDelay: Number of minutes 14 - FSP Cool Down Period: Number of seconds 15 - FSP Period: Number of seconds 16 - LISPriceChecks: Bitmap (Bit 0: Dynamic Collars); (Bit 1: Daily High/Low); (Bit 2: Lifetime High/Low) 17 - AAPriceChecks: Bitmap (Bit 0: Dynamic Collars); (Bit 1: Daily High/Low); (Bit 2: Lifetime High/Low)

Field Name	Param Name
	18 - EFSPriceChecks: Bitmap (Bit 0: Dynamic Collars); (Bit 1: Daily High/Low); (Bit 2: Lifetime High/Low) 19 - WholesaleValidityPeriod: Number of minutes 20 - DN Underlying Price Limit Deviation: Absolute Value (Price Variation) 21 - CVF: Absolute Value (This field represents the monetary value of a decimal price of 1.0 points) 22 – ProRataThreshold: Volume (Minimal volume threshold for the pro rata trading policy)
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 RFCPublication 3 RFCMinimumQuantityForInitiator 4 RFCMinimumQuantityForReactor 5 RFCPickUpPerc 6 RFCImprovementPeriod 7 AvailableWholesaleTradeType 8 ContractLISTradeThreshold 9 RFCCOBInclusion 12 IntradayInstrumentCreationDelay 13 FSP Spread 14 FSP Cool Down Period 15 FSP Period 16 LISPriceChecks 17 AAPPriceChecks 18 EFSPriceChecks 19 WholesaleValidityPeriod 20 DN Underlying Price Limit Deviation 21 CVF 22 ProRataThreshold Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Param Type Of Expression

Field Name	Param Type Of Expression
Description	Parameter Type Of Expression of Contract Parameter Name.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Percentage 2 Tick 3 Absolute Value 4 Bps 5 Bitmap Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Param Value

Field Name	Contract Parameter Value
Description	Value of a Contract Parameter.
Format	Text (character)
Length	255
Used In	DerivativesStandingDataFile (9013)

Field Name	Contract Parameter Value
User For	Derivatives

Partition ID

Field Name	Partition ID
Description	Identifies uniquely an Optiq partition across all the Exchange partitions.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Partition Type

Field Name	Partition Type
Description	Indicates the type of Partition, either Order Entry or Drop Copy. Use of Order Entry and Drop Copy gateways require separate and individual setup of the Logical access to each service.
Format	Enumerated (character)
Length	2
Possible Values	OE Order Entry DC Drop Copy
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Pattern ID

Field Name	Pattern ID
Description	Numerical Pattern identifier available as a characteristic of an instrument in Standing Data file and message, and used in the MDG timetable message.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013) TimetableFile (9001)
User or	Cash

Phase Id

Field Name	Phase Id
Description	Indicates the phase of the instrument.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Inaccessible 2 Closed

Field Name	Phase Id
	3 Call 4 Uncrossing 5 Continuous 7 Continuous Uncrossing (Warrants and Certificates Only) Null value: 2^8-1
Used In	TimetableFile (9001)
User For	Cash and Derivatives

Phase Qualifier

Field Name	Phase Qualifier
Description	Indicates the Phase Qualifier (no multiple phase possible at the same time even if this field is a bitmap). - bit in position 0 – No Qualifier: indicates that no phase qualifier are applicable (0: No ; 1: Yes) - Deprecated - bit in position 1 – Call BBO Only (Cash Only): indicates a call on BBO only phase (0: No ; 1: Yes) - bit in position 2 – Trading At Last (Cash Only): indicates a trading at last phase (TaL) phase (0: No ; 1: Yes) - bit in position 3 – Random Uncrossing (Cash Only): indicates a random uncrossing phase (0: No ; 1: Yes) - bit in position 4 – Suspended (Derivatives Only): indicates a suspended phase (0: No ; 1: Yes) - bit in position 5 – Wholesale Allowed (Derivatives Only): indicates a wholesale allowed phase (0: No ; 1: Yes) - bit in position 6 - Collars Enabled (Derivatives Only): indicated if the Collars are enabled or not (0: No ; 1: Yes)
Format	Bitmap (unsigned integer 16)
Length	2
Possible Values	0 No Qualifier 1 Call BBO Only (Cash Only) 2 Trading At Last (Cash Only) 3 Random Uncrossing (Cash Only) 4 Suspended (Derivatives Only) 5 Wholesale Allowed (Derivatives Only) 6 Collars Enabled Null value: 2^16-1
Used In	TimetableFile (9001)
User For	Cash and Derivatives

Phase Time

Field Name	Phase Time
Description	XML additional information: (Text formatted following ISO 8601: hh:mm:ssZ where Z is for UTC).
Format	XML timeSec hh:mm:ssZ where Z is for UTC
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	TimetableFile (9001)
User For	Cash and Derivatives

Port Number

Field Name	Port Number
Description	Defines the port number.
Format	Numerical (unsigned integer 16)

Field Name	Port Number
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Prev Day Capital Traded

Field Name	Prev Day Capital Traded
Description	Cumulative capital traded for all trades from previous day on an instrument (to be calculated with the Amount Decimals). Not provided for non-Euronext traded instruments.
Format	Amount (unsigned integer 64)
Length	8
Possible Values	0..2 ⁶⁴ -2 Null value: 2 ⁶⁴ -1
Used In	PrevDayCapAndVolTradFile (9015)
User For	Cash

Previous NAV

Field Name	Previous NAV
Description	Indicates the previous official Net Asset Value (to be calculated with the Price/Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2 ⁶³ +1..2 ⁶³ -1 Null value: -2 ⁶³
Used In	CashStandingDataFile (9007)
User For	Cash

Previous Volume Traded

Field Name	Previous Volume Traded
Description	Number of shares traded (to be calculated with the Quantity Decimals) on this instrument during trading day identified by 'DateOfLastTrade'. Not provided for non-Euronext traded instruments.
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2 ⁶⁴ -2 Null value: 2 ⁶⁴ -1
Used In	PrevDayCapAndVolTradFile (9015)
User For	Cash

Price Decimals

Field Name	Price / Index Level Decimals
Description	Indicates the number of decimals for each Price / Index Level related to this Symbol Index
Format	Decimal Places (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸ -2

Field Name	Price / Index Level Decimals
	Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013) CashStandingDataFile (9007)
User For	Cash and Derivatives

Price Multiplier

Field Name	Price Multiplier
Description	Number of units of the financial instrument that are contained in a trading lot. Price multiplier coefficient for instrument unit price.
Format	Numerical (unsigned integer 32)
Length	4
Possible Values	0..2^32-2 Null value: 2^32-1
Used In	CashStandingDataFile (9007)
User For	Cash

Price Multiplier Decimals

Field Name	Price Multiplier Decimals
Description	Number of decimals for the field Price Multiplier.
Format	Numerical (unsigned integer 8)
Length	1
Possible Values	0..2^8-2 Null value: 2^8-1
Conditions	For Declaration Entry (40) message, it is mandatory when Price Multiplier is provided.
Used In	CashStandingDataFile (9007)
User For	Cash

Pricing Algorithm

Field Name	Pricing Algorithm
Description	This field provides the defined pricing algorithm value for a given contract. It is used to identify Total Return Future (TRF) contracts and Market On Close (MOC) contracts. For other contract types the value is set to Standard.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = Standard 1 = Total Return Future 2 = Market On Close
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Product Code

Field Name	Product Code
Description	Physical alphanumeric product code.
Format	Alphanumeric ID (character)

Field Name	Product Code
Length	4
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Publication Date Next Tradable NAV

Field Name	Publication Date Next Tradable NAV
Description	Publication Date of the next tradable NAV. Date in an integer on 4 bytes expressed as YYYYMMDD
Format	Date (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	CashStandingDataFile (9007)
User For	Cash

Publication Date Time

Field Name	Publication Date Time
Description	<p>Date and time when the transaction was published by a trading venue or Approved Publication Arrangement (APA). Date and time in the following format: YYYY-MM-DDThh:mm:ss.ddddddZ.</p> <p>Where:</p> <ul style="list-style-type: none"> - 'YYYY' is the year. - 'MM' is the month. - 'DD' is the day. - 'T' constant 'T' letter used as separator between YYYY-MM-DD and hh:mm:ss.ddddddZ. - 'hh' is the hour. - 'mm' is the minute. - 'ss.dddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.
Format	Text (character)
Length	27
Used In	CashStandingDataFile (9007)
User For	Cash and Derivatives

Q

Quantity Decimals

Field Name	Quantity Decimals
Description	Indicates the number of decimals for each Quantity related to this Symbol Index
Format	Decimal Places (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸ -2 Null value: 2 ⁸ -1
Used In	DerivativesStandingDataFile (9013) CashStandingDataFile (9007)
User For	Cash and Derivatives

Quantity Notation

Field Name	Quantity Notation
Description	Indication of the type of measurement (e.g. number of units, nominal, monetary value, etc.) in which the transaction is expressed. Possible values: "UNT" - Units "FMT" - Facial Amount "-" - Not Applicable
Format	Text (character)
Length	3
Used In	CashStandingDataFile (9007)
User For	Cash

R

Ratio Decimals

Field Name	Ratio / Multiplier Decimals
Description	Indicates the number of decimals for each Ratio / Multiplier related to this Symbol Index
Format	Decimal Places (unsigned integer 8)
Length	1
Possible Values	0..2^8-2 Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013) CashStandingDataFile (9007)
User For	Cash and Derivatives

Reference Price Origin In Continuous

Field Name	Reference Price Origin
Description	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Internal 2 External 3 External BBO 4 Opening Call Price 5 Mid-BBO or Fair Value 6 Fair Value 7 Future Market Price Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)

Reference Price Origin In Opening Call

Field Name	Reference Price Origin
Description	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.
Format	Enumerated (unsigned integer 8)
Length	1

Field Name	Reference Price Origin
Possible Values	1 Internal 2 External 3 External BBO 4 Opening Call Price 5 Mid-BBO or Fair Value 6 Fair Value 7 Future Market Price Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)

Reference Price Origin In Trading Interruption

Field Name	Reference Price Origin
Description	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Internal 2 External 3 External BBO 4 Opening Call Price 5 Mid-BBO or Fair Value 6 Fair Value 7 Future Market Price Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)

Reference Spread

Field Name	Reference Spread
Description	Reference Spread.
Format	Numerical (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1 Null value: -2^63
Used In	ReferenceSpreadsFile (9045)
User For	Derivatives

Reference Spread Expression

Field Name	Reference Spread Expression
Description	Units in which Reference Spread is expressed.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Percentage 2 Absolute Null value: 2^8-1
Used In	ReferenceSpreadsFile (9045)
User For	Derivatives

Reference Spread Table ID

Field Name	Reference Spread Table ID
Description	ID of the Reference Spread Table.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2 ¹⁶ -2 Null value: 2 ¹⁶ -1
Used In	DerivativesStandingDataFile (9013) ReferenceSpreadsFile (9045)
User For	Derivatives

Reference Spread Table Name

Field Name	Reference Spread Table Name
Description	Name of the Reference Spread Table.
Format	Text (character)
Length	75
Used In	ReferenceSpreadsFile (9045)
User For	Derivatives

Repo Indicator

Field Name	Repo Indicator
Description	Indicates whether the instrument listed underlies any loan contracts, meaning it has been admitted to the Deferred Settlement system and/or to the lending market.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Instrument neither eligible for the SRD, nor eligible for the Loan and Lending Market 1 Instrument eligible for the SRD and for the Loan and Lending Market 2 Instrument eligible for the SRD long only 3 Instrument eligible for the Loan and Lending Market and for the SRD long only 4 Easy-to-borrow Instrument eligible for the SRD and the for Loan and Lending Market 5 Instrument eligible for the Loan and Lending Market 8 Non significant Null value: 2 ⁸ -1
Used In	CashStandingDataFile (9007)
User For	Cash

Repo Settlement Price

Field Name	Repo Settlement Price
Description	The settlement price (to be calculated with Price / Index Level Decimals) is a standard price used to value the trade that initiates an instrument lending transaction and to calculate the return price. - If the instrument was listed on day D-1, its settlement price, calculated on day D, will be given by the closing price on D-1, with no adjustment for OST effective as of day D - If the instrument was not listed on day D-1, its settlement price, calculated on day D, will be given by the latest price, adjusted and super-adjusted for Corporate Action effective as of day D-1, but not as of day D.
Format	Price (signed integer 64)
Length	8
Possible Values	-2 ⁶³ +1..2 ⁶³ -1

Field Name	Repo Settlement Price
	Null value: -2^63
Used In	RepoSettlementPriceFile (9016)
User For	Cash

Reuters RIC Code

Field Name	Reuters RIC Code
Description	Indicates the Reuters RIC Code.
Format	Alphanumerical ID (character)
Length	24
Used In	CashStandingDataFile (9007)
User For	Cash

S

Scheduled Event

Field Name	Scheduled Event
Description	Type of Scheduled Event. Notifies an event that will occur at the Scheduled Event Time.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Cancel Previously Scheduled Event(Cash and Derivatives) 1 Reopening (Cash Only) 3 Resumption of trading (Cash Only) 4 Closed (Derivatives Only) 5 Expiry (Derivatives Only) 6 Wholesale Large in Scale (LiS) trades open extension (Derivatives Only) 7 Wholesale Basis trades open extension (Derivatives Only) 8 Wholesale Against Actuals trades open extension (Derivatives Only) 9 Wholesale Large in Scale (LiS) Package trades open extension (Derivatives Only) 10 Wholesale Exchange For Swaps trades open extension (Derivatives Only) 11 Wholesale Trades Open Extension (Derivatives Only) 12 Suspension (Cash Only) 13 Collars Normal 14 Collars Wide 15 Pre-Expiry Null value: 2^8-1
Used In	TimetableFile (9001)
User For	Cash and Derivatives

Session

Field Name	Session
Description	Current market session.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Session 0

Field Name	Session
	1 Session 1 2 Session 2 3 Session 3 4 Session 4 5 Session 5 6 Session 6 7 Session 7 8 Session 8 9 Session 9 Null value: 2^8-1
Used In	TimetableFile (9001)
User For	Cash and Derivatives

Settlement Delay

Field Name	Settlement Delay
Description	<p>Gives the number of trading days that represents the period between the trade date and the settlement date (delivery and payment) for an instrument to be cleared and settled.</p> <p>This is generally a standard period for Euronext Cash markets.</p> <p>Permitted Values</p> <ul style="list-style-type: none"> - From 0 to 30 (Standard values) - X: This value is assigned for a lot of products and internal management rules shared by Euronext and LCH-Clearnet (D+2). - Z: This value is assigned for Lending/Borrowing instruments. This value is especially interpreted to manage the associated management rules (D+3).
Format	Alphanumerical ID (character)
Length	2
Used In	CashStandingDataFile (9007)
User For	Cash

Settlement Method

Field Name	Settlement Method
Description	<p>Settlement method</p> <ul style="list-style-type: none"> - "C" = Cash Settlement - "P" = Physical Settlement - "O" = Optional - Blank/null for exchanges "C", "G", "D", "H" containing Underlying instruments
Format	Alphanumerical ID (character)
Length	1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Settlement Tick Size

Field Name	Settlement Tick Size
Description	Default Tick Size value applicable for all Settlement Prices. It's calculated using the PriceDecimals.
Format	Price (unsigned integer 64)
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	DerivativesStandingDataFile (9013)

Field Name	Settlement Tick Size
User For	Derivatives

Six Months ADV Exchange Of Ref

Field Name	6 Months ADV Exchange Of Reference
Description	Indicates the 6 months average daily volume (number of shares) traded on the exchange of reference (to be calculated with Quantity Decimals).
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2 ⁶⁴ -2 Null value: 2 ⁶⁴ -1
Used In	CashStandingDataFile (9007)
User For	Cash

Source IP Range

Field Name	Source IP Range
Description	Defines the primary and secondary IP range (IP v4). This IP Range is given to clients to allow these IP in client firewall. It will be the same for a line (A or B) on primary and secondary feed. A range from IP 123.123.123.0 to 25 will be set like this: 123.123.123.0/25.
Format	Text (character)
Length	20
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013)
User For	Cash and Derivatives

Start Time Vwap

Field Name	Start Time Vwap
Description	XML additional information: (Text formatted following ISO 8601: hh:mm:ssZ where Z stands for UTC).
Format	Intraday Time in Seconds (unsigned integer 32) XML: XML timeSec
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1 Default value: 2 ³² -1
Conditions	For Declaration Entry (40) message, it is mandatory for declarations when Operation Type = '5'.
Used In	CashStandingDataFile (9007)
User For	Cash

Strategy Authorized

Field Name	Strategy Authorized
Description	Provides strategy types authorized for contract. Bit 2, Bit 23, Bit 42 are not used and will always be set to 0.
Format	Bitmap (unsigned integer 64)
Length	8
Possible Values	0 Jelly Roll 1 Butterfly

Field Name	Strategy Authorized
	2 Call or Put Cabinet 3 Spread 4 Calendar Spread 5 Diagonal Calendar Spread 6 Guts 7 Two by One Ratio Spread 8 Iron Butterfly 9 Combo 10 Strangle 11 Ladder 12 Strip 13 Straddle Calendar Spread 14 Pack 15 Diagonal Straddle Calendar Spread 16 Simple Inter Commodity Spread 17 Conversion / Reversal 18 Straddle 19 Volatility Trade 20 Condor 21 Box 22 Bundle 23 Reduced Tick Spread 24 Ladder versus Underlying 25 Butterfly versus Underlying 26 Call Spread versus Put versus Underlying 27 Call or Put Spread versus Underlying 28 Call or Put Calendar Spread versus Underlying 29 Call/Put Diagonal Calendar Spread versus Underlying 30 Guts versus Underlying 31 Two by One Call or Put Ratio Spread versus Underlying 32 Iron Butterfly versus Underlying 33 Combo versus Underlying 34 Strangle versus Underlying 35 Exchange for Physical 36 Straddle Calendar Spread versus Underlying 37 Put Spread versus Call versus Underlying 38 Diagonal Straddle Calendar Spread versus Underlying 39 Synthetic 40 Straddle versus Underlying 41 Condor versus Underlying 42 Buy Write 43 Iron Condor versus Underlying 44 Iron Condor 45 Call Spread versus Sell a Put 46 Put Spread versus Sell a Call 47 Put Straddle versus Sell a Call or a Put Null value: 2^64-1
Used In	DerivativesStandingDataFile (9013)

Strategy Code

Field Name	Strategy Code
Description	Exchange-recognized strategy code
Format	Alphanumeric ID (character)

Field Name	Strategy Code
Length	1
Possible Values	A Jelly Roll B Butterfly <i>C Call or Put Cabinet – Deprecated</i> D Spread E Calendar Spread F Diagonal Calendar Spread G Guts H Two by One Ratio Spread I Iron Butterfly J Combo K Strangle L Ladder M Strip N Straddle Calendar Spread O Pack P Diagonal Straddle Calendar Spread Q Simple Inter Commodity Spread R Conversion / Reversal S Straddle V Volatility Trade W Condor X Box Y Bundle <i>Z Reduced Tick Spread - Deprecated</i> a Ladder versus Underlying b Butterfly versus Underlying c Call Spread versus Put versus Underlying d Call or Put Spread versus Underlying e Call or Put Calendar Spread versus Underlying f Call/Put Diagonal Calendar Spread versus Underlying g Guts versus Underlying h Two by One Call or Put Ratio Spread versus Underlying i Iron Butterfly versus Underlying j Combo versus Underlying k Strangle versus Underlying m Exchange for Physical n Straddle Calendar Spread versus Underlying p Put Spread versus Call versus Underlying q Diagonal Straddle Calendar Spread versus Underlying r Synthetic s Straddle versus Underlying t Condor versus Underlying <i>u Buy Write - Deprecated</i> v Iron Condor versus Underlying w Iron Condor x Call Spread versus Sell a Put y Put Spread versus Sell a Call z Put Straddle versus Sell a Call or a Put
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Strike Currency

Field Name	Strike Currency
Description	Code of the strike currency (ISO 4217-3A).
Format	Alphanumeric ID (character)
Length	3
Used In	CashStandingDataFile (9007)
User For	Cash

Strike Currency Indicator

Field Name	Strike Currency Indicator
Description	Indicates whether the 'price expression' is in the Currency or in a ratio of this Currency. Use Currency Coefficient field to identify the ratio to apply. This is the case for strike instruments in pennies. The currency will be 'GBP', Strike Currency Indicator sets to '1' and Currency Coefficient set to '0.001'.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Change rate not applied to the strike price 1 Change rate applied to the strike price Null value: 2 ⁸ -1
Used In	CashStandingDataFile (9007)
User For	Cash

Strike Price

Field Name	Strike Price
Description	The strike price of an option/warrant is the specified price at which the underlying can be bought (in the case of a call/right to buy) or sold (in case of a put/right to sell) by the holder (buyer) of the option/warrant contract, at the moment he exercises his right against a writer (seller) of the option/warrant. Only provided for warrants or other derivatives instruments. To be calculated with Strike Price Decimals for Cash instruments and Price/Index Level Decimals for Derivatives instruments.
Format	Price (signed integer 64)
Length	8
Possible Values	-2 ⁶³ +1..2 ⁶³ -1 Null value: -2 ⁶³
Used In	DerivativesStandingDataFile (9013) CashStandingDataFile (9007)
User For	Cash and Derivatives

Strike Price Decimals

Field Name	Strike Price Decimals
Description	Indicates the number of decimals for Strike Price related to this Symbol Index
Format	Decimal Places (unsigned integer 8)
Length	1
Possible Values	0..2 ⁸ -2 Null value: 2 ⁸ -1
Used In	CashStandingDataFile (9007)
User For	Cash

Strike Price Decimals Ratio

Field Name	Strike Price Decimals Ratio
Description	Value used , only for the AMR code, to determine the number of decimals present in the Option contract strike price, as the strike price is disseminated in format of an integer. For example, for AMR code POTO1250404300C, you need to use the AMR Strike Price Decimals Ratio for the Exercise (Strike) Price part of the AMR code as defined in Chapter 4.6.2. In this case it's 04300 and if the AMR Strike Price Decimals Ratio=2, it will result in Strike Price 43.
Format	Numerical (unsigned integer 8)
Length	1
Possible Values	0..2^8-2 Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Symbol Index

Field Name	Symbol Index
Description	Exchange identification code of the instrument/contract. This identifier is unique per triplet: MIC, ISIN and currency. The correspondence of the Symbol Index and with the instrument characteristics is provided in the standing data messages and associated files. Symbol Index is valid for the life of the instrument.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2 Null value: 2^32-1
Conditions	For inbound messages, the Symbol Index must be specified. For second listing place trade, the Symbol Index and the MIC of secondary listing must be specified. If provided in the User Notification (39) message, it specifies the scope of the action specified in User Status. In the Reject (07) message, it is populated only if provided as a valid value in the corresponding Inbound request AND the corresponding Inbound request was technically correctly formatted; otherwise it is provided at the Null value. Field not populated in Reject (07) messages for rejection of strategy creation on derivatives markets. For all messages, with exception of MM sign-in and MM protection, this field represent the Symbol Index of the Instrument. For the MM sign-in and MM protection this field represents the Symbol Index of the Contract. For wholesale order this represents numerical leg instrument identifier (Security ID).
Used In	CashStandingDataFile (9007) DerivativesStandingDataFile (9013) OpenInterestFile (9014) PrevDayCapAndVolTradFile (9015) RepoSettlementPriceFile (9016)
User For	Cash and Derivatives

T

Tax Code

Field Name	Tax Code
Description	Tax deduction code to which the instrument belongs.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Not eligible to PEA 3 Eligible to PEA

Field Name	Tax Code
	9 Not Applicable Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

Threshold LIS Post Trade 120mn

Field Name	Threshold LIS Post Trade 120mn
Description	Defines the amount of an order to benefit from the LIS Trade Deferred publication to 120 min (to be calculated with the Amount Decimals).
Format	Amount (unsigned integer 64)
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	CashStandingDataFile (9007)
User For	Cash

Threshold LIS Post Trade 60mn

Field Name	Threshold LIS Post Trade 60mn
Description	Defines the amount of an order to benefit from the LIS Trade Deferred publication to 60 min (to be calculated with the Amount Decimals).
Format	Amount (unsigned integer 64)
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	CashStandingDataFile (9007)
User For	Cash

Threshold LIS Post Trade EOD

Field Name	Threshold LIS Post Trade EOD
Description	Defines the amount of an order to benefit from the LIS Trade Deferred publication to EOD (to be calculated with the Amount Decimals).
Format	Amount (unsigned integer 64)
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	CashStandingDataFile (9007)
User For	Cash

Tick Factor

Field Name	Tick Factor
Description	Tick factor applied to update the TickSize for more liquid instruments available in the Tick Table file (to be calculated with Ratio / Multiplier Decimals).
Format	Numerical (unsigned integer 64)
Length	8
Possible Values	0..2^64-2

Field Name	Tick Factor
	Null value: 2^64-1
Used In	DerivativesTickSizeFile (9021)
User For	Derivatives

Tick Factor Max Period

Field Name	Tick Factor Max Period
Description	Indicator expressed in Month. Instrument whose Time To Expiry are lower than the indicator are impacted by the TickFactor (to be calculated with Ratio / Multiplier Decimals)
Format	Numerical (unsigned integer 32)
Length	4
Possible Values	0..2^32-2 Null value: 2^32-1
Used In	DerivativesTickSizeFile (9021)
User For	Derivatives

Tick Size

Field Name	Tick Size
Description	XML additional information: Tick size on x characters, with . as a separator
Format	Price (signed integer 64) XML: Decimals
Length	8
Possible Values	-2^63+1..2^63-1 Null value: -2^63
Used In	CashTickSizeReferentialFile (9020) DerivativesTickSizeFile (9021)
User For	Cash and Derivatives

Tick Size Index ID

Field Name	Tick Size Index ID
Description	ID of the tick size table available in the Tick Table file.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-2 Null value: 2^16-1
Used In	CashTickSizeReferentialFile (9020) DerivativesStandingDataFile (9013) DerivativesTickSizeFile (9021) CashStandingDataFile (9007)
User For	Cash and Derivatives

Tick Table Name

Field Name	Tick Table Name
Description	Name of the tick size table available in the Tick Table file.
Format	Text (character)

Field Name	Tick Table Name
Length	75
Used In	DerivativesTickSizeFile (9021)
User For	Derivatives

TTE range Lower Limit

Field Name	Time To Expiry
Description	Time to Expiry. Expressed as Months (to be calculated with the Ratio / Multiplier Decimals).
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	Reference Spreads File (9045)
User For	Derivatives

Total Expense Ratio

Field Name	Total Expense Ratio
Description	Total Expense Ratio (TER): total costs associated with managing and operating a fund.
Format	Numerical (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	CashStandingDataFile (9007)
User For	Cash

Trade Reference

Field Name	Trade Reference
Description	Reference of the trade reported to the Exchange.
Format	Alphanumeric ID (character)
Length	30
Used In	CashStandingDataFile (9007)
User For	Cash and Derivatives

Trading Currency

Field Name	Trading Currency
Description	Code of the currency (ISO 4217-3A).
Format	Alphanumeric ID (character)
Length	3
Used In	DerivativesStandingDataFile (9013) CashStandingDataFile (9007)
User For	Cash and Derivatives

Trading Currency Indicator

Field Name	Trading Currency Indicator
Description	Indicates whether the 'price expression' is in the Currency or in a ratio of this Currency. Use Currency Coefficient field to identify the ratio to apply. This is the case for instruments traded in pennies. The currency will be 'GBP', Trading Currency Indicator sets to '1' and Currency Coefficient set to '0.001'.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Change rate not applied to the traded price 1 Change rate applied to the traded price Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

Trading Date Time

Field Name	Trading Date Time
Description	Date and time when the transaction was executed. Date and time in the following format: YYYY-MM-DDThh:mm:ss.ddddddZ. Where: - 'YYYY' is the year. - 'MM' is the month. - 'DD' is the day. - 'T' constant 'T' letter used as separator between YYYY-MM-DD and hh:mm:ss.ddddddZ. - 'hh' is the hour. - 'mm' is the minute. - 'ss.dddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.
Format	Text (character)
Length	27
Conditions	It indicates the original execution date for a reporting/publication entered.
Used In	CashStandingDataFile (9007)
User For	Cash and Derivatives

Trading Period

Field Name	Trading Period
Description	Provides the current trading period.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Opening (Cash and Derivatives) 2 Standard (Cash and Derivatives) 3 Closing (Cash and Derivatives) Null value: 2^8-1
Used In	TimetableFile (9001)
User For	Cash and Derivatives

Trading Policy

Field Name	Trading Policy
Description	Trading Policy enabling to allocate a given incoming volume to orders.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Price Explicit Time 2 Price Pro Rata Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Trading Unit

Field Name	Trading Unit
Description	Amount of underlying instrument per unit of a derivative contract (to be calculated with the Quantity Decimals). Due to corporate actions, the value may be different between value provided within this field in Contract Standing Data and Outright Standing Data. Value in Outright Standing Data reflects the adjustment due to the corporate action and should be used for that Outright instrument.
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2 Null value: 2^64-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Transaction Type

Field Name	Transaction Type
Description	Transaction type or publication type.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Plain Vanilla Trade 2 Dark Trade 3 Benchmark Trade 4 Technical Trade 5 Give-up/Give-in Trade 6 Ex/Cum dividend Trade 7 Trade With Condition 15 Summary Report Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

Transparency Indicator

Field Name	Transparency Indicator
Description	Used to define the transparency of the trade.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Lit/Regular Trade

Field Name	Transparency Indicator
	1 Dark Trade and Immediate Publication 2 Dark Trade and Deferred Publication Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

Type Of Corporate Event

Field Name	Type Of Corporate Event
Description	<p>Indicates the last type of corporate event that has occurred on an instrument, such as detachment of rights, or of coupons. The data item is automatically calculated by the adjustment application but in case of problem or error, the data item value could be modified manually, particularly for purging the order book in case of absence of corporate event. This data has to be treated in consideration of the date of the event included into the header of the message.</p> <p>Valid values are:</p> <p>"00" – No specific event</p> <p>"01" – Dividend payment in cash or in stocks</p> <p>"02" – Interest payment (Fix Income for which the price is not expressed in% of the nominal, only)</p> <p>"04" – Split</p> <p>"05" – Bonus (i.e. attribution)</p> <p>"06" – Subscription</p> <p>"07" – Share allocation</p> <p>"08" – Share swap</p> <p>"09" – Reverse split</p> <p>"10" – Merger</p> <p>"11" – Final Fix Income redemption</p> <p>"12" – Capital amortization</p> <p>"13" – Draw announcement (Belgian Fix Income only)</p> <p>"14" – Block trade of controlling interest</p> <p>"15" – Optional corporate events(dividend option)</p> <p>"16" – Complex corporate event</p> <p>"17" – Purge of the order book (purge is initiated manually in the absence of a corporate event, for example, following the modification of the variable tick of the listed instrument)</p> <p>"22" - Luxembourg Stock Exchange corporate event</p>
Format	Alphanumerical ID (character)
Length	2
Used In	CashStandingDataFile (9007)
User For	Cash

Type Of Market Admission

Field Name	Type Of Market Admission
Description	Indicates the type of market to which an instrument has been listed.
Format	Enumerated (character)
Length	1
Possible Values	A Instruments traded on the primary market B Instruments traded on the secondary market C Instruments traded on the New Market D Non-regulated market / instruments traded on the free market ('Marche Libre') E Non-regulated market / Alternext F Non listed G Regulated Market / Non equities H Regulated Market / Equities / Segment A I Regulated Market / Equities / Segment B

Field Name	Type Of Market Admission
	J Regulated Market / Equities / Segment C K Regulated Market / All securities / Special Segment L Regulated Market / Equities / Other instruments S OPCVM, SICOMI non listed (French Investment Funds) 6 Off Market 7 Gold, Currencies, and Indices 9 Foreign
Used In	CashStandingDataFile (9007)
User For	Cash

U

UMTF

Field Name	UMTF
Description	Indicates the instrument code based on 'Uniform MTF' symbology.
Format	Alphanumeric ID (character)
Length	6
Used In	CashStandingDataFile (9007)
User For	Cash

Underlying Derivatives Instrument Trading Code

Field Name	Underlying Derivatives Instrument Trading Code
Description	Is the underlying of the Derivatives Instrument Trading Code.
Format	Alphanumeric ID (character)
Length	18
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Underlying Expiry

Field Name	Underlying Expiry
Description	Expiry Date of the underlying (in number of days since the 1st of January 1970).
Format	Date (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Underlying ISIN Code

Field Name	Underlying ISIN Code
Description	Underlying ISIN. For Repo: Underlying instrument (instrument used in the loan quotation system) for loan contracts on centralized lending market. For Warrant: Gives the trading code of the underlying listed instrument of a warrant.

Field Name	Underlying ISIN Code
Format	Alphanumeric ID (character)
Length	12
Used In	DerivativesStandingDataFile (9013) CashStandingDataFile (9007)
User For	Cash and Derivatives

Underlying MIC

Field Name	Underlying MIC
Description	Identifies the market to which an instrument' underlying belongs by its MIC (Market Identification Code), according to ISO 10383. Refer to MIC field to have all the authorized values.
Format	Alphanumeric ID (character)
Length	4
Used In	DerivativesStandingDataFile (9013) CashStandingDataFile (9007)

Underlying Name

Field Name	Underlying Name
Description	Indicates the full name of the ETF underlying.
Format	Text (character)
Length	102
Used In	CashStandingDataFile (9007)
User For	Cash

Underlying Return Type

Field Name	Underlying Return Type
Description	Indicates the dividend treatment applied.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Net Total Return 2 Price Return 3 Total Return Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

Underlying Segmentation

Field Name	Underlying Segmentation
Description	Indicates the underlying asset segmentation.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 Equity 2 Fixed Income 3 Mixed 4 Alternative

Field Name	Underlying Segmentation
	5 Currency 6 Commodities Null value: 2^8-1
Used In	CashStandingDataFile (9007)
User For	Cash

Underlying Subtype

Field Name	Underlying Subtype
Description	<p>Defined the underlying sub-type associated to the underlying type.</p> <p>Underlying Type "Stock" accepts following Underlying Subtypes: Basket, Dividend, ETF and Share</p> <p>Underlying Type "Index" accepts: Dividend Index, Equity Index, TRF Index and Volatility Index</p> <p>Underlying Type "Future" accepts: Future on Commodities</p> <p>Underlying Type "Exchange rate" accepts: FX Cross Rates (FXCR), FX Emerging Markets (FXEM) and FX Majors (FXMJ)</p> <p>Underlying Type "Commodity" accepts: Agricultural (AGRI), Environmental (ENVR), Freight (FRGT), Fertilizer (FRTL), Industrial products (INDP), Inflation (INFL), Multi Commodity Exotic (MCEX), Metals (METL), Energy (NRGY), Official economic statistics (OEST), Other C10 (OTHC), Other (OTHR), Paper (PAPR) and Polypropylene (POLY)</p>
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 Basket 1 Dividend 2 ETF 3 Share 4 Dividend Index 5 Equity Index 6 TRF Index 7 Volatility Index 8 Future On Commodities 9 FXCR - FX Cross Rates 10 FXEM - FX Emerging Markets 11 FXMJ - FX Majors 12 AGRI - Agricultural 13 ENVR - Environmental 14 FRGT - Freight 15 FRTL - Fertilizer 16 INDP - Industrial products 17 INFL - Inflation 18 MCEX - Multi Commodity Exotic 19 METL - Metals 20 NRGY - Energy 21 OEST - Official economic statistics 22 OTHC - Other C10 23 OTHR - Other 24 PAPR - Paper 25 POLY - Polypropylene Null value: 2^8-1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Underlying Symbol Index

Field Name	Underlying Symbol Index
Description	Identifies the Symbol Index of the underlying of the instrument.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2 ³² -2 Null value: 2 ³² -1
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

Underlying Type

Field Name	Underlying Type
Description	Defines the instrument type of the underlying.
Format	Enumerated (character)
Length	1
Possible Values	C Commodity F Future I Index S Stock X Exchange Rate
Used In	DerivativesStandingDataFile (9013)
User For	Derivatives

V

Venue

Field Name	Venue
Description	Identification of the venue where the transaction was executed using the ISO 10383 segment MIC for transactions executed on a trading venue. Otherwise the BIC is sent following ISO 9362. For Approved Publication Arrangement (APA), possible values are: - SINT – Systematic INTERNALizer (This is not a tag in ISO) - XOFF – OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS.
Format	Alphanumeric ID (character)
Length	11
Used In	CashStandingDataFile (9007)

APPENDIX A: REVISION HISTORY

Version	Change Description
1.1.0	First Version
1.2.0	<p>Specification changes:</p> <ul style="list-style-type: none"> - In the Standing Data files, the feed configuration part has been improved. This imply structure changes. - Chapter 2 added including Feed Configuration - In SBE Template the maximum, minimum and null values have been changed <p>File changes:</p> <ul style="list-style-type: none"> - File name convention changed. - Changed definition of Current folder to 5 rolling trading days. - Removed "version" from file name, will become a tag inside the files. <p>Field changes:</p> <ul style="list-style-type: none"> - "Strike Price Flex Increment" description improved - "Start Time Vwap" and "End Time Vwap" are cash only fields - "Primary Source IP Range" and "Secondary Source IP Range" has been renamed in "Source IP Range" - Multicast IP size changed - "Optiq Segment" possible values added
1.3.0	<p>Specification changes:</p> <ul style="list-style-type: none"> o Renaming Retail Matching Service by Best of Book <p>File changes:</p> <ul style="list-style-type: none"> - FullTradeInformationFile (9030): <ul style="list-style-type: none"> o Following fields are now optional: "Publication Date Time", "MiFID Price Notation", "MMT Market Mechanism", "MMT Publication Mode", "MMT Trading Mode", "MMT Transaction Category", "MMT Negotiation Indicator", "MMT Agency Cross Trade Indicator", "MMT Modification Indicator", "MMT Benchmark Indicator", "MMT Special Dividend Indicator", "MMT Off Book Automated Indicator", "MMT Contribution to Price", "MMT Algorithmic Indicator", "MMT Post Trade Deferral", "MMT Duplicative Indicator", "Effective Date Indicator", "Notional Currency", "Trade Type", "MiFID Currency", "MiFID Notional Amount", "Venue", "MiFID Instrument Id" and "MiFID Instrument Id Type" o Following fields are set to null for step 1: "Mifid Price Notation", "MiFID Qty in Msrmt Unit Notation", "Mifid Quantity Measurement Unit", "Publication Date Time", "MMT Market Mechanism", "MMT Trading Mode", "MMT Transaction Category", "MMT Negotiation Indicator", "MMT Agency Cross Trade Indicator", "MMT Modification Indicator", "MMT Benchmark Indicator", "MMT Special Dividend Indicator", "MMT Off Book Automated Indicator", "MMT Contribution to Price", "MMT Algorithmic Indicator", "MMT Post Trade Deferral" and "MMT Duplicative Indicator" o "Venue Of Publication" has been removed o Trade Qualifier has 2 new possible values (only for phase 2): "NAV Trade expressed in bps" and " NAV Trade expressed in price currency" o "Trade Type" value "Valuation Trade" removed o "MMT Algorithmic indicator", "MMT Duplicative Indicator", "MMT Negotiation Indicator" and "MMT Special Dividend Indicator" are cash only not cash and derivatives o Fields "MiFID Emission Allowance Type" and "Market Of Reference MIC" added - TimetableFile (9001): <ul style="list-style-type: none"> o "Instrument State" field renamed into "Phase Id" and value halted removed o "EMM", "Symbol Index" and "Pattern ID" fields are now optional o "Price Limits" and "Quote Spread Multiplier" fields removed - CashStandingData (9007): <ul style="list-style-type: none"> o "Trading Mode" Renamed in "Phase Qualifier" and values numbers changed (+1 for each value to avoid 0) o "Trading Side" field removed o "Partition ID", "Nominal Currency" and "Issue Price" added o "Nominal Market Price" and "Repo Settlement Price" removed o Following field are now optional: "Mnemonic", "Type of Market Admission" and "Pattern ID" o "Instrument Group Code" field is now mandatory o "Market Model" Field added o "CFI" field is mandatory - DerivativesStandingDataFile (9013): <ul style="list-style-type: none"> o Addition of: "Lot Size" and "Underlying Expiry", "Partition ID", "Outright LIS Trade Threshold ", "Strategy LIS Trade Threshold ", "Outright G.Cross Threshold ", "Strategy G.Cross Threshold ", "Instrument Trading Code", "EMM", "Premium Pricing Threshold", "Tick Value" and "Premium Pricing Tick Size" o "Tick Size Denominator" renamed in "Instrument Decimals Ratio" o "Instrument Numerator EDSP" renamed in "Instrument EDSP Tick Size" o "Tick Size Numerator" renamed in "Instrument Tick Size" o "Strike Price Denominator" renamed in "Strike Price Decimals Ratio" o "Instrument Numerator Settlement" renamed into "Instrument Settlement Tick Size"

Version	Change Description
	<ul style="list-style-type: none"> ○ “Strategy Code” field added in a repeated section and is optional ○ following field are now optional: “Option Type” and “Strike Price” ○ “Instrument Unit Expression” field added - StrategyStandingDataUnitary: <ul style="list-style-type: none"> ○ “Price / Index Level Decimal”, “Ratio / Multiplier Decimal”, “Quantity Decimal” and “Amount Decimal” have been removed <p>Field changes:</p> <ul style="list-style-type: none"> - “EMM” field has a new possible value only for phase “2: ETF MTF – NAV Central Order Book” and Naming of possible values reviewed - “MiFID Execution ID”: description improved with the details on how the value is generated - “Currency Coefficient” description has been improved with the use of the decimal scale code - “Strike Price Flex Increment” description improved with the Decimal field to use - “Trade Type”: <ul style="list-style-type: none"> ○ possible values “Delta Neutral Trade – Future Leg”, “Total Traded Volume” and “Hidden Quantity” added ○ Value “26 – Delta Neutral – cash leg” is Cash Only and not Cash and Derivatives - “Par Value” field is now an amount instead of a price - “CFI” field description improved with the correct ISO and values removed. Please refer to the according ISO - “MIC” field is Cash and derivatives and not Cash Only - “Trading Mode” is now a 16bits fields (instead of 32) - Continuous Uncrossing value added in fields: “Instrument State” and “Phase Id” - “Order Entry Qualifier” a new value added “Cancel Only” - MIC field description improved with possible values on derivatives - EMM field: removed value Possible Value
1.4.0	<p>Specification changes:</p> <ul style="list-style-type: none"> - In “Preface” part, a new scope “Trade Reporting and Publication” has been added. - In field descriptions, the format have been updated with the functional type instead of the technical one. - Section 1.3 File Name Convention: Version of the file removed from its name <p>Message changes:</p> <ul style="list-style-type: none"> - FullTradeInformationFile (9030): <ul style="list-style-type: none"> ○ “MiFID Instrument ID Type” and “MiFID Price Notation” fields are now with a format type as “Text” instead of “Alphanum id” ○ In “Trade Type” field the value “34 Delta Neutral Trade – Underlying Future Leg” is now “Derivatives Only” instead of “Cash and Derivatives” ○ “MiFID Price Notation”: new possible value added (BAPO –Basis Point) ○ “MiFID Emission Allowance Type”: OTHR added in the possible values (for others) ○ “Transaction Type” is now optional (not used for derivatives) - DerivativesStandingDataFile (9013): <ul style="list-style-type: none"> ○ “Throttle for Incoming Orders” field description improved ○ “Instrument Decimals Ratio” and “Strike Price Decimals Ratio” field description improved ○ OutrightStandingDataUnitary: “CFI” field is optional ○ StrategyStandingDataUnitary: field “Contract Symbol Index” added <p>Field changes:</p> <ul style="list-style-type: none"> - In “EMM” field, the word “APA” from value “Euronext APA off-exchange trade reports” has been removed - “Premium Pricing Tick Size” description corrected (it is not premium over the threshold but premium under the threshold) - “Trade Type”: “Total Traded Volume” value not used any more - “Phase Time” way to provide time changed (from number of sec to hhhmmss) - “Strike Price Decimals Ratio” and “Quantity Notation” fields description improved - “Instrument Name” is cash only instead of Cash and Derivatives - “Instrument Decimals Ratio” description improved - “PhaseQualifier”, “Trade Qualifier”, “Order Type Rules” and “Available Wholesale Trade Type” field descriptions have been updated - “Channel ID” description has been improved - “Strategy Code”: New value “U – Inter Commodity Spread” added
1.4.1	<p>Message changes:</p> <ul style="list-style-type: none"> - FullTradeInformationFile (9030): MiFID Clearing Flag is now optional - DerivativesStandingDataFile (9013): <ul style="list-style-type: none"> ○ Following fields are now optional when it contains underlying referential: “Contract Event Date”, “Contract Type”, “Price / Index Level Decimals”, “Quantity Decimals”, “Amount Decimals”, “Ratio / Multiplier Decimals”, “MIC”, “Country Of Exchange”, “Order Type Rules”, “Settlement Method”, “Available Wholesale Trade Type”, “Strike Price Decimals Ratio”, “Premium Pricing Tick Size”, “Premium Pricing Threshold”, “Tick Value”, “Outright LIS Trade Threshold”, “Strategy LIS Trade Threshold”, “Outright G.Cross Threshold” and “Strategy G.Cross Threshold” ○ Field “Underlying Instrument Trading Code” added <p>Field changes:</p>

Version	Change Description
	<ul style="list-style-type: none"> - Market Model is Cash only and not Cash and Derivatives <p>Section change:</p> <ul style="list-style-type: none"> - In MulticastDataRealTime and MulticastDataSnapshot sections, field Partition ID has been added
2.0.0	<ol style="list-style-type: none"> EURONEXT Optiq Market Data Gateway Solution: <ul style="list-style-type: none"> - The SBETemplate file for Derivatives is located in the Environment folder - The SBETemplate files for Step 2 are located in each <Optiq Segment> folder - The CashTickSizeReferentialFile is located as a cross Optiq Segment file in the Environment folder with 'ALL' in the name, but also in the per Optiq Segment folders. All files will have the same content. - The Timetable files are now located in each Optiq Segment folder, and the Optiq Segment is included in the file name instead of 'ALL' - File Naming Convention: Optiq OEG file names will begin with 'OptiqOEG' File Overview changes: <ul style="list-style-type: none"> - Rename 'Technical Format Fields' section into 'Functional Format Fields' - 'Technical Format Fields' section added - Date Convention : 'Dates are defined in number of days' instead of 'Timestamps are defined in number of ns' File Description changes: <ul style="list-style-type: none"> - SBETemplate Files : <ul style="list-style-type: none"> o Only for Derivatives: The MDG SBE Template file is a cross Optiq Segment file, directly available in the Environment folder, o In Step 2: 2 SBE Template files are available : one for OEG and one for MDG. These files are stored in each <OptiqSegment> folder, o About SBE Compatibility: Compatibility between MDG SBE template of step 1 and step 2 is not maintained. - TimetableFile (9001) : <ul style="list-style-type: none"> o PhaseQualifier Optional instead of Mandatory o TradingPeriod Mandatory instead of Optional o Session Mandatory instead of Optional - CashStandingDataFile (9007) : <ul style="list-style-type: none"> o Description of the first structure updated : "As an example, Timestamps on the feed are provided on the feeding in number of ns since 1970 January the 1st." o Description of the third structure of the file added instead of 'for future use' o LogicalAccessConnectivity structure added as the third structure of the file o IssuePriceDecimals, StrikePriceDecimals, LiquidInstrumentIndicator and MarketOfReferenceMIC added o FixPriceTick removed - DerivativesStandingDataFile (9013) : <ul style="list-style-type: none"> o MIC Mandatory instead of Optional o CountryOfExchange Mandatory instead of Optional o InstrumentEDSPTickSize Optional instead of Mandatory o TickValueDecimals, PricingAlgorithm, UnderlyingSubtype, MotherStockISIN, ReferenceFutureContractSecGrp added at Contract level o DaysToExpiry added at Outright level o CFI added at Strategy level o LegPrice Optional instead of Mandatory - FullTradeInformationFile (9030) : <ul style="list-style-type: none"> o SymbolIndex Optional instead of Mandatory o MifidPrice Optional instead of Mandatory o TradeQualifier Optional instead of Mandatory Field Description changes: <ul style="list-style-type: none"> - Tech Format added for each field description - AvailableWholesaleTradeType description improved - DaysToExpiry added - EMM : <ul style="list-style-type: none"> o Value 50 'Societe Generale Systematic Internaliser (SI)' removed o Value 254 'Not Applicable (For indices and iNAV)' becomes 99 - ExerStyle : Values 2 'Asian', 3 'Bermudan', 4 'Other' added - FirstSettlementDate description updated - FixPriceTick removed - GuaranteeIndicator : <ul style="list-style-type: none"> o Description updated o Possible values description updated - IPAddressPrimary and IPAddressDR added - IssuePrice description updated - IssuePriceDecimals created - IssuingCountry description updated - LegRatio description updated

Version	Change Description
	<ul style="list-style-type: none"> - LiquidInstrumentIndicator added - LotSize description updated <ul style="list-style-type: none"> o MainDepository description updated - MarketOfReferenceMIC description updated with '(For Future Use)' - MDGSetOfChannelsID : <ul style="list-style-type: none"> o Format switched from 'Numerical ID' to 'Enumerated' o Possible values updated - MIC description updated with the possible values - Remove 'For phase 1 this field is set to null' from the description of the fields MiFIDEmissionAllowanceType, MifidPriceNotation, MiFIDQtyinMsrmUnitNotation, MifidQuantityMeasurementUnit, MMTAgencyCrossTradeIndicator, MMTAlgorithmicIndicator, MMTBenchmarkIndicator, MMTContributiontoPrice, MMTDuplicativeIndicator, MMTMarketMechanism, MMTModificationIndicator, MMTNegotiationIndicator, MMTOffBookAutomatedIndicator, MMTPostTradeDeferral, MMTSpecialDividendIndicator, MMTTradingMode, MMTTransactionCategory - MMTPublicationMode description updated - MotherStockISIN added - OptiqSegment : Value 8 'Commodities Derivatives' renamed to 'Commodity Derivatives' - OrderEntryQualifier : Value 4 'Order Entry Only' removed - OrderTypeRules description improved - PartitionType added - PhaseQualifier description improved - PriceMultiplier description updated - PricingAlgorithm added - PublicationDateTime : Remove 'For phase 1 this field is set to null' from the description - ReferenceFutureContractSecGrp added - SettlementDelay description updated - SettlementMethod : Value 'O' 'Optional' added - StrategyCode : <ul style="list-style-type: none"> o Description updated o Value 'U' 'Inter Commodity Spread' removed - StrikePrice description updated - StrikePriceDecimals added - StrikePriceDecimalsRatio description updated - ThrottleforIncomingOrders description updated - TickValueDecimals added - TradeQualifier : <ul style="list-style-type: none"> o Description updated o Value 1 'Opening Trade' renamed to 'First Trade Price' - TradeType : <ul style="list-style-type: none"> o Value 21 'SI Trade' removed o 'For future use' added in value 33 'Dark Trade' o Value 35 'Hidden Quantity' removed o 'For future use' added in value 36 'Total Traded Volume' o Value 37 'ETF-MTF NAV Trade (price in basis points) (Cash Only) - For future use' added o Value 38 'ETF-MTF NAV Dark Trade (price in basis points) (Cash Only) - For future use' added o UnderlyingSubtype added
2.0.1	<ul style="list-style-type: none"> - MDG Set Of Channels ID 10 – Société Générale Systematic Internalizer (SI) and 12 – Equity Off-Exchange Trade Reports removed - Field PartitionID added in the MulticastDataRealTime and MulticastDataSnapshot XML structures in section 2.5 - Feed Configuration - New ICBCode field added to the section 3.2 CashStandingDataFile (9007)
2.0.2	<ul style="list-style-type: none"> - MDG Set Of Channels ID 9 renamed to Equities Dublin - MDG Set Of Channels ID 15 renamed to Euronext Dublin Indices - Strike Price field description updated : the field is to be calculated with Price/Index Level Decimals
2.0.3	<p>General:</p> <ul style="list-style-type: none"> • SBE Template Version added to the front page and to the Document History <p>Section 4 Field Description:</p> <ul style="list-style-type: none"> • Order Type Rules field: the values bit in position 2 - Stop / Stop Loss and bit in position 3 - Stop Limit are only for OEG • Phase Qualifier field : value 0 – No Qualifier becomes deprecated • Strike Price field : the decimals field to be used for Cash instruments is Strike Price Decimals instead of Price/Index Level Decimals • 3 values added to the Trade Type field : <ul style="list-style-type: none"> - 42 = Large in Scale (LiS) Trade in basis points (Derivatives Only) - 43 = Large in Scale (LiS) Package Trade in basis points (Derivatives Only) - 44 = Strategy Leg Large in Scale (LiS) Trade in basis points (Derivatives Only)

Version	Change Description
2.3.0	<p>Section 3.2 CashStandingDataFile (9007):</p> <ul style="list-style-type: none"> 3 fields added to the message block: ThresholdLISPostTrade60mn; ThresholdLISPostTrade120mn; ThresholdLISPostTradeEOD New XML section ETFDataFromMarketOfReference added at the end of the file with the following fields: SixMonthsADVExchangeOfRef; AUM; BICMainDepository; CutOffTime; DateNextTradableNAV; PublicationDateNextTradableNAV; DividendFrequency; MICExchangeOfReference; NameExchangeOfReference; ExpositionType; ICSD; IndexLeverage; IssuerName; LEICode; ListingDate; NAVCurrency; PreviousNAV; ReutersRICCode; TotalExpenseRatio; BloombergTickerCode; NAVPublicationTime; UMTF; UnderlyingName; UnderlyingReturnType; UnderlyingSegmentation; BpsLowCollar; BpsHighCollar
2.3.0	<p>Section 4 Field Description:</p> <ul style="list-style-type: none"> 27 fields from the new ETFDataFromMarketOfReference structure added Value 9 – Listed not traded added to the EMM field Value 32 – ETF Access added to the MDG Set Of Channels ID field LiquidInstrumentIndicator field is now Cash and Derivatives, instead of Derivatives only MICList field is now Cash only, instead of Cash and Derivatives Value 5 – Luxembourg Stock Exchange of the OptiqSegment field renamed to Bourse de Luxembourg Value 'MOC' – Market On Close added to the PricingAlgorithm field TradeQualifier field: <ul style="list-style-type: none"> "ETF MTF" renamed to "ETF Access" in the field description Bit 7 – Deferred Publication (Cash Only) added TradeType field: <ul style="list-style-type: none"> "For future use" removed from the value 33 = Dark Trade (Cash Only) "Deprecated" added to the values 37 = ETF-MTF NAV Trade (price in basis points) (Cash Only) and 38 = ETF-MTF NAV Dark Trade (price in basis points) (Cash Only)
2.3.1	<p>Section 3.2 CashStandingDataFile (9007):</p> <ul style="list-style-type: none"> 3 fields added to the message block: AssetClass / InstrumentCategory / InstrumentType <p>Section 4 Field Description:</p> <ul style="list-style-type: none"> 3 fields added: AssetClass / InstrumentCategory / InstrumentType
2.5.0	<p>Section 3.2 CashStandingDataFile (9007):</p> <ul style="list-style-type: none"> 1 field added to the message block: ClosingPriceType
2.6.0	One value added to the OptiqSegment field: '14' Block
3.0.0	<p>Major update for the migration of the Derivatives Market to Optiq.</p> <p>Section 1.3 File Naming Convention with the addition of two new files generated by Optiq Segment once per day: DerivativesTickSizeFile and ReferenceSpreadsFile</p> <p>Section 3.2 CashStandingDataFile (9007):</p> <ul style="list-style-type: none"> 1 field with description update: InstrumentCategory 2 fields moved from Common Standing Data to EMMPattern: LoteSize, InstUnitExp 5 fields added to EMMPattern: BpsLowCollar, BpsHighCollar, BlockPriceControlID, DeclarationDuration, EligibleForMargin 1 field deprecated: AssetClass <p>Section 3.4 DerivativesStandingDataFile (9007):</p> <ul style="list-style-type: none"> Following fields are removed from ContractStandingDataUnitary: FlexID, WhRFCDaysBeforeExpiry, WhRFCMinutesBeforeClosing, MinimumQuantityForInitiator, MinimumQuantityForReactor, WhRFCPickUpPerc, WhRFCImprovementPeriod, AvailableWholesaleTradeType, InstrumentDecimalsRatio, InstrumentTickSize, VegaProtectforMM, DeltaProtectorforMM, VolumeProtectorforMM, ThrottleforIncomingOrders, StrikePriceFlexIncrement, PremiumPricingTickSize, PremiumPricingThreshold, TickValue, OutrightLISTradeThreshold, StrategyLISTradeThreshold, OutrightGCrossTradeThreshold, StrategyGCrossTradeThreshold, LotSize, TickValueDecimals, ReferenceFutureContractSecGrp, PriceAlgorithm Following fields UnderlyingSymbolIndex, TradingPolicy, ReferenceSpreadTableID, DerivativesMarketModel, TradingUnit, ReferencePriceOriginInOpeningCall, ReferencePriceOriginInContinuous, ReferencePriceOriginInTradingInterruption, CollarExpansionFactor, MMProtections added on ContractStandingDataUnitary Fields InstrumentSettlementTickSize and InstrumentEDSPTickSize substituted for SettlementTickSize and EDSPTickSize, respectively. Field StrategyAuthorized moved from Common Contract Standing Data to ContractEMMProperties Addition of three structures: <ul style="list-style-type: none"> Contract EMM properties structure with the following fields: EMM, TickSizeindexID, PatternID, LotSize, StrategyAuthorized, DynamicCollarLogic, CollarMaxUnhaltedNb, CollarUnhaltDelay Derivatives Parameters Rep structure with the following fields: EMM, ParamName, ParamValue, ParamTypeOfExpression Logical Access Connectivity structure with the Partition information Following fields DerivativesInstrumentTradingCode, DerivativesInstrumentType, ExpiryCycleType, UnderlyingDerivativesInstrumentTradingCode, UnderlyingSymbolIndex added on OutrightStandingDataUnitary Following fields are deprecated from OutrightStandingDataUnitary: OptionType, UnderlyingInstrumentTradingCode, InstrumentTradingCode

Version	Change Description
	<p>Addition of sections to detail new Optiq Files:</p> <ul style="list-style-type: none"> Section 3.5 DerivativesTickSizeFile (9021) which contains information regarding the Ticks sizes applicable at contract level Section 3.8 ReferenceSpreadsFile (9045) which contains data to calculate dynamic collar reference price <p>Section 3.11 TimeTable (9001):</p> <ul style="list-style-type: none"> Addition of ScheduledEvent field <p>Field description updates: DaysToExpiry, IPAddressDR, IPAddressPrimary, LastTradingDate, LiquidInstrumentIndicator, MDGSetOfChannelsID, MDGSetOfChannelsName, MinimumPrice, PartitionType, PatternD, PricingAlgorithm, TickSize, TickSizeIndexID, Venue, ReferenceSpreadExpression</p> <p>Section 3.6 FullTradeInformationFile (9021):</p> <ul style="list-style-type: none"> Addition of StrategyCode field
3.0.1	Removal of tow duplicated fields (Instrument Unit expression and Lot Size) from Cash Standing Data file, removal of 5 fields not applicable to Euronext Markets from Cash Standing Data files.
3.1.0	<p>The following changes have been made:</p> <ul style="list-style-type: none"> Fields name in messages have been renamed to be in line with produced files Added section 2.6 "Derivatives parameters" Added section 2.7 "Price, Quantity, Ratio and Amount Decimals" The following changes have been updated in the existing file: <ul style="list-style-type: none"> a) Cash Standing Data File (9007): Added field <i>Asset Class</i> (wrongly removed), <i>BPS Low Collar</i>, <i>Bps High Collar</i>, <i>Block Price Control ID</i>, <i>Declaration Duration</i>, <i>Eligible For Margin</i>; b) Derivatives Standing Data File (9013): Renamed 3 fields <i>Reference Price Origin</i> in respectively <i>Reference Price Origin In Opening Call</i>, <i>Reference Price Origin In Continuous</i>, <i>Reference Price Origin in Trading Interruption</i> in Contract Standing Data section; Added fields <i>MIFID II Liquid Flag</i>, <i>Pricing Algorithm</i> in Contract Standing Data section; Added field <i>Trading Unit</i> in Outright Standing Data section; Deprecated field <i>Lot Size</i> in Outright Standing Data; c) Reference Spreads File (9045): Renamed field <i>Time To Expiry</i> in <i>TTE Range Lower Limit</i> Field Descriptions: <ul style="list-style-type: none"> a) Updated description for field <i>Maturity Date</i> – now provide actual date of expiry instead of 00 b) Enriched conditions and descriptions for fields <i>Collar Max Unhalt Nb</i>; <i>Collar Unhalt Delay</i>; <i>Dynamic Collar Logic</i>; <i>Param Name</i>; <i>Strategy Authorized</i>; <i>Trading Unit</i> c) Added new fields: <i>MIFID II Liquid Flag</i>; <i>Pricing Algorithm</i> d) Enriched values for fields as follows: <i>Contract Type</i> – added value U = Underlying; <i>Derivatives Instrument Type</i> – added value 4 = Underlying (not used for Euronext Markets); <i>EMM</i> – added value 15 = Delta Neutral Contingency leg; <i>Optiq Segment</i> – added value 15 = Forex e) Updated values for fields <i>Param Name</i>; <i>Param Type of Expression</i>; f) Deprecated values for field <i>Strategy Code</i> Formatting and clarification of descriptions <ul style="list-style-type: none"> a) Updated formatting, and wording throughout the document to clarify existing functionality / use.

A.1 DOCUMENT HISTORY

Revision No	Date	Author	Change Description
1.1.0	29 Sep 2016	IT Solutions	First Version for Optiq (Phase 1)
1.2.0	4 Jan 2017	IT Solutions	First update for Phase 1
1.3.0	27 Jan 2017	IT Solutions	Second update for Phase 1
1.4.0	15 Mar 2017	IT Solutions	Third update for Phase 1
1.4.1	15 May 2017	IT Solutions	Minor Update for Phase 1
2.0.0	11 Oct 2017	IT Solutions	Major update for go live of Cash markets on Optiq (Phase 2)
2.0.1	13 July 2018	IT Solutions	Minor update with clarifications and update for ICB
2.0.2	13 Sep 2018	IT Solutions	Update for Equities Dublin
2.0.3	8 Oct 2018	IT Solutions	Update with clarifications
2.3.0	29 Nov 2018	IT Solutions	Minor update for Euronext Block
2.3.0	29 Nov 2018	IT Solutions	Update for ETF Access
2.3.1	14 Dec 2018	IT Solutions	Update with clarifications
2.5.0	21 Jan 2019	IT Solutions	Minor update

Revision No	Date	Author	Change Description
2.6.0	21 Jan 2019	IT Solutions	Minor update for Euronext Block
3.0.0	29 Apr 2019	IT Solutions	Major update for the migration of the Derivatives Market to Optiq (Phase 3)
3.0.1	13 May 2019	IT Solutions	Minor update for Phase 3
3.1.0	6 Sep 2019	IT Solutions - WMA	Second update for migration of Derivatives markets to Optiq (Phase 3)