Document title

EURONEXT CASH AND DERIVATIVES - EURONEXT STREAM PRO MESSAGES

Document type or subject

EURONEXT STREAM PRO - INTERFACE SPECIFICATION

Version

6.371.0

Date

13 Oct. 2026

Number of pages

309

Author

Euronext - IT Market Services

Related SBE Version

371

This publication is for information purposes only and is not a recommendation to engage in investment activities. This publication is provided "as is" without representation or warranty of any kind. Whilst all reasonable care has been taken to ensure the accuracy of the content, Euronext does not guarantee its accuracy or completeness. Euronext will not be held liable for any loss or damages of any nature ensuing from using, trusting or acting on information provided. No information set out or referred to in this publication shall form the basis of any contract. The creation of rights and obligations in respect of financial products that are traded on the exchanges operated by Euronext's subsidiaries shall depend solely on the applicable rules of the market operator. All proprietary rights and interest in or connected with this publication shall vest in Euronext. No part of it may be redistributed or reproduced in any form without the prior written permission of Euronext.
Euronext refers to Euronext N.V. and its affiliates. Information regarding trademarks and intellectual property rights of Euronext is located at https://www.euronext.com/terms-use.
© 2026, Euronext N.V. - All rights reserved.

PREFACE

Purpose

The purpose of this document is to describe the Euronext Stream Pro Solution.

Target Audience

This document should be read by Euronext's clients developing a Market Data Feed Handler.

Scope

The scope of this document is listed below [1] (✔ In scope, Out of scope ✖):

Optiq Segment	Segment Value	In/Out of Scope	SBE version
Euronext Cash Market			
Equities EQU	1	✔	116 - 371
Funds FND	2	✔	116 - 371
Fixed Income FXI	3	✔	116 - 371
Structured Products SP	4	✖	-
Block BLK	14	✔	110 - 371
Irish Bonds and Funds IBF	16	✖	-
Euronext Derivatives Market			
Commodity Derivatives CMO	8	✔	216 - 371
Index Derivatives IDD	11	✔	216 - 371
Equity Derivatives EQD	12	✔	216 - 371
Other Markets			
Luxembourg Stock Exchange BDL	5	✖	-

1. How to read the 'SBE versions' information provided in the table:
- When two version numbers are provided with '-' between them, it means that any version between those two versions can be used to access the Optiq segment (SBE forward/backward compatibility);
- When two version numbers are provided with '/' between them, it means that members must use the last version to access the Optiq segment because the SBE compatibility is broken between them;
- When only one version is provided, it means that this version only can be used to access the Optiq segment.

Support

Please find below the contact details:

- Operational Client Services Desk: clientsupport@euronext.com
- Belgium +32 2 620 0585
- France +33 1 8514 8585
- Ireland +353 1 617 4289
- Italy +39 02 7242 6080
- Netherlands +31 20 721 9585
- Portugal +351 2 1060 8585
- UK +44 20 7660 8585

What's New?

The following lists only the most recent modification made to this revision/version. For the Document History table, see the Appendix.

VERSION NO.	CHANGE DESCRIPTION
6.371.0	Added Partition 1 for Funds (Segment: ETF)

CONTENTS

1. INTRODUCTION 7
2. EU and UK MiFID II 8
3. ACCESS TO THE SERVICE 9
4. FUTURE USE 10
5. MARKET DATA CHANNELS 11
5.1. Market Data Messages Overview 11
5.2. Standard feed 12
5.2.1. Kafka Topics 12
5.3. Regulatory feed 15
5.3.1. RTS1 Pre Trade Transparency 15
5.3.2. RTS1 Post Trade Transparency 17
5.3.3. RTS2 Post Trade Transparency 18
6. MESSAGING PROTOCOL AND PUBLISHING MODEL 20
6.1. Overview 20
6.2. Market Data Packet Header 21
6.3. SBE Message Structure 24
6.4. SBE Backward And Forward Compatibility 25
7. EURONEXT STREAM PRO FEATURES 27
7.1. Start and End of Day 27
7.2. Build the Book 27
7.2.1. Standard Feed 27
7.2.2. Regulatory Feed 27
7.3. Book Retransmission 27
7.3.1. Clear the Book 28
7.3.2. Morning Book Retransmission 28
7.3.3. Intraday Book Retransmission 29
7.4. Snapshots 29
7.5. Compression 36
7.6. System Failures 36
7.7. Trade Retransmission 37
7.8. Limit Cancellation 37
7.8.1. Standard feed 37
7.8.2. Regulatory feed 37
7.9. Health Status Mechanism 37
7.10. Production Timetable 37
7.10.1. Euronext Cash and Derivatives Markets 38
8. DATA LIFECYCLE 39

© 2026, Euronext

9. MESSAGE OVERVIEW 40
9.1. Technical Format Fields 40
9.2. Date and Time Conventions 42
9.3. Sequence Numbers 42
9.3.1. The Packet Sequence Number (PSN) 42
9.3.2. The Market Data Sequence Number 42
9.4. Price, Quantity, Ratio and Amount Formats 43
9.5. Trading Day Schedule: Timetable Mechanism 43
9.5.1. Trading Cycle 43
9.5.2. Broadcast Information 44
9.6. Instrument Ticks 44
9.7. Instrument Identifiers 44
9.7.1. Symbol Index 44
9.7.2. Automated Market Reference (AMR) 45
10. HOW TO … 47
10.1. Standard Feed 47
10.1.1. Trade and Quote Cancellation 47
10.1.2. … Determine the Number of Repeating Sections in a Message 47
10.1.3. … Determine the Length of a Packet 47
10.1.4. … Determine the Length of a Message 47
10.1.5. … Manage a New Version of a Message if the Client Has not Implemented the New Fields 47
10.1.6. … Look for a Trade 47
10.1.7. … Determine a Closing Price 47
10.1.8. … Determine the Option Underlying Expiry 48
10.1.9. … Determine Round Lot with Quantity Notation 48
10.1.10. … Use an Execution Summary Message 0
10.1.11. … Determine the Statistics On and Off-Book for an Instruments (COB, Wholesales, RFC) 0
10.2. Regulatory Feed 49
10.2.1. Trade Cancellation 49
10.2.2. … Determine the Number of Repeating Sections in a Message 50
10.2.3. … Determine the Length of a Packet 50
10.2.4. … Determine the Length of a Message 50
10.2.5. … Manage a New Version of a Message if the Client Has not Implemented the New Fields 50
10.2.6. … Look for a Trade 50
10.3. … Manage BBO : Standard Feed 50
10.4. … Derive Implied Prices Volume from the Aggregated BBO : Standard Feed 50
11. MESSAGES 51
11.1. Referential messages 51
11.1.1. Channels Configuration (805) 51

11.2. Market Data messages 52
11.2.1. Technical messages 52
11.2.2. Referential messages 57
11.2.3. Referential messages 57
11.2.4. Application Messages 123
11.2.5. Market Update (1001) 123
11.2.6. Price Update (1003) 126
11.2.7. Full Trade Information (1004) 129
11.2.8. Market State Change (1005) 165
11.2.9. Statistics (1009) 172
11.3. Regulatory messages 176
11.3.1. RTS 1 Pre Trade Transparency (802) 176
11.3.2. RTS 1 Post Trade Transparency (803) 188
11.3.3. RTS 2 Post Trade Transparency (804) 207
11.4. Snapshot Messages 229
11.4.1. Technical messages in Snapshot channels 230
11.4.2. Snapshot Sequence behavior 230
12. FIELD DESCRIPTION 233
13. APPENDIX C: REVISION HISTORY 309
13.1. Change Summary 309

1. INTRODUCTION

The Euronext Stream Pro interface provides access to real-time market data for Euronext Markets. The interface offers access to :

- Market Data channels in the same format as Euronext Optiq Market Data Gateway (MDG).
- Market Data channels compliant with RTS1 and RTS2 regulations.

The feed has the following high-level features:

- Optimized latency
- TCP/IP network protocol
- Internet connectivity
- Kafka protocol based
- RTS1 and RTS2 Transparency obligations compliance (when applicable)
- EU and UK MiFID II compliance

This document provides detailed information about the features of the feed to support the development of client applications.

Please note that Euronext Stream Pro does not grant the Client any right to use, internally distribute and/or redistribute the Market Data accessed via the Service. Those rights and corresponding obligations are solely governed by the Euronext Data License and any relevant Other Euronext Agreement for Market Data entered into by the Client.

Disclaimer

This document is provided for discussion and information purposes only. The information, proposals, timelines, and assumptions contained herein are preliminary and remain subject to the completion of internal governance processes, management approvals, and, where applicable, the approval, review, or non-objection of relevant regulatory and supervisory authorities. Accordingly, the content of this document may be amended, supplemented, revised, delayed, or withdrawn without prior notice. Nothing contained in this document constitutes a commitment, representation, undertaking, or binding obligation on the part of any entity, and no reliance should be placed on it as the basis for any legal, regulatory, commercial, or operational decision. Any migration approach, implementation plan, or target date described herein remains indicative only and shall become effective solely upon receipt of all required approvals and the completion of the relevant decision-making processes.

2. EU and UK MiFID II

Markets in Financial Instruments Directive 2 (MiFID II) is a European Commission set of new regulations to reduce systemic risk and guarantee more transparency for clients. The laws and regulations of EU MiFID II will be effective as of January 3, 2018. It has been amended and transposed into the laws of the United Kingdom pursuant to the European Union (Withdrawal) Act 2018 and the European Union (Withdrawal Agreement) Act 2020, is referred to as "UK MiFID II" and has been effective since January 1, 2021. Euronext Stream Pro is EU and UK MiFID II compliant by offering:

- Market Data channel disaggregation
  - Each channel published by Euronext Stream Pro is disaggregated as follows: asset class, currency and country. Additionally, there are dedicated channels for pre-trade and post-trade.
- Higher Transparency
  - The Full Trade Information message (1004) delivered by Euronext Stream Pro will carry MMT Trade flags and other fields as required by EU and UK MiFID II.

3. ACCESS TO THE SERVICE

Clients willing to subscribe to the service or perform any changes to the list of channels they are subscribed to, should contact Euronext Connectivity Team at connectivity.support@euronext.com.

Clients access Market Data as follows:

- **Real-Time service**: Clients connect to Kafka Topics to receive Market Data messages of channels they are subscribed to in real-time
- **Snapshot service**: Clients connect to Kafka Topics to receive unsolicited Snapshots sent periodically, on dedicated channels they are subscribed to, to recover from packet loss or for intraday starts.
- **File service**: Clients connect to a SFTP server to download the latest XML SBE template released by Euronext. Clients can subscribe to an additional service to receive Standing Data, Timetables, Tick Tables and Pattern IDs files.

Connectivity to the Service:

Clients access the Kafka Stream application through an internet connectivity.
A unique endpoint enables clients to access Market Data channels of pEUA and PROD environments.
Using this endpoint, clients are able to pull Market Data messages from the channels they are subscribed to for pEUA and PROD environments.

Use of the Service:

Clients shall consume messages from the Kafka topic as part of Consumer Group defined and communicated by Euronext.
Messages must be processed sequentially, and offsets shall be committed per batch of messages with the following strategy:

- At least every 1 minutes;
- Maximum at 1 seconds (or after 100 000 messages, whichever occurs first);
- Only if the offset has changed compared to the last offset committed by the client;

This ensures visibility into consumption progress and provides a recovery point in case of failure.
Consumption shall start from the latest committed offset, unless otherwise agreed.
Clients are highly encouraged to consume data in real-time from start of day (see Timetable section) and to disconnect from Kafka Topics once they have consumed the data of the last trading session.
Clients can expect a maximum throughput of 20MBps, when consuming data from the Kafka topic(s). Kafka messages are delivered compressed to clients.
Consumption shall start from the latest committed offset, unless otherwise agreed.

Security for Service Access: Clients access the Kafka application using the combination of an API Key and a Secret Key provided by Euronext.
For security reasons, on a regular basis, Euronext will request clients for a rotation of the API Key and Secret Key. Clients have the possibility to request a rotation of their API Key(s) and Secret Key(s) at any time.

Access to Euronext Stream Pro and use of Market Data: An access to Euronext Stream Pro does not grant the Client any right to use, internally distribute and/or Redistribute the Information accessed via the platform. Those rights and corresponding obligations are solely governed by the Market Data Agreement with Euronext N.V..

4. FUTURE USE

In preparation for various functionalities expected to be implemented in the future on Optiq, a number of fields and values were added and flagged 'For Future Use'. Details of functionalities flagged in the specifications as for 'Future Use' are provided for information purposes only, and may change significantly until such time as the finalized specifications for the relevant service are communicated to clients. The effective use of fields and/or values will not be technically supported until the announced date for implementation of these functionalities.

Note: Fields and Values for future in the messages structures are represented in italic and in grey.

5. MARKET DATA CHANNELS

Euronext offers real-time and snapshot Market Data through different Kafka channels that clients can subscribe to.

Channels are split according to the following criteria:

- **Asset Class**: EU and UK MiFID II requirement
- **Country of issue**: EU and UK MiFID II requirement
- **Currency**: EU and UK MiFID II requirement
- **Real-time or Snapshot**: Real-time and snapshot messages are sent through different channels
- **Types of data**:
  - Full Order Book Market Update pack (FBMU) provides Market by Limit (full price limit depth) and BBO using the Market Update message.
    RTS1 and RTS2 formats available for clients subscription when applicable.
  - Best Bid and Offer pack (BBBO) will only provide the best limits when they are updated.
  - Reference Data and Full Trade Information pack (REFT) provides all instrument characteristics, scheduled phases, market administration messages and EU and UK MiFID II compliant trade messages.
  - RTS1 and RTS2 formats available for clients subscription when applicable.

5.1. Market Data Messages Overview

The following types of Market Data messages are carried in the channels available for clients subscription. The content available in each type of messages can be found on section 'Market Data messages' of this document.

Market Data messages	Channel Types
Start of Day (1101)	FBMU, BBBO, REFT
End of Day (1102)	FBMU, BBBO, REFT
Health Status (1103)	FBMU, BBBO, REFT
Technical Notification (1106)	REFT
Market Update (1001)	FBMU, BBBO
Price Update (1003)	FBMU, BBBO
Statistics (1009)	REFT
Standing data (1007)	REFT
Strategy Standing Data (1012)	REFT
Contract Standing Data (1013)	REFT

Market Data messages	Channel Types
Outright Standing Data (1014)	REFT
Market State Change (1005)	FBMU, BBBO, REFT
Timetable (1006)	REFT
Full Trade Information (1004)	REFT
RTS 1 Pre Trade Transparency (802)	FBMU
RTS 1 Post Trade Transparency (803)	REFT
RTS 2 Post Trade Transparency (804)	REFT

Clients can retrieve Market Data messages listed above within various Market Data channels, each being associated with a Kafka topic listed below.

5.2. Standard feed

5.2.1. Kafka Topics

Market Data messages are made available for costumers in dedicated Kafka topics.
The naming convention of Kafka topics is the following: *fsssepnnn* where:

- f: Family ID: defines the type of set of data to be provided in the Kafka topic.
  - 0: System (used for the Channels Configuration message)
  - 1: Euronext Market Data Gateway feeds
  - 2: RTS1 and RTS2 compliant feeds
- sss: for future use - spare digits
- e: environment ID

Environment	Real-Time Environment ID	Snapshot Environment ID
PROD	1	2
pEUA	5	6

- p: partition ID (machine number handling the activity on a an Asset Class)
- nnn: the Feed ID ; the Feed IDs to be taken into consideration are the ones related to the following Channel types, Feed Types and Channel Speed:

Channel Type	Feed Type
FBMU	Real Time
FBMU	Snapshot
BBBO / MIDP	Real Time
REFT	Real Time

For Market Data, the Kafka topic names are the concatenation of:

- 1 - Market Data Feed
- 000 - spare digits

- Environment ID - depending on the environment and on the market data type
- Partition ID - details are in the table below
- Feed ID - details are in the table below

Please find hereunder the feed IDs by asset class, subsegment and environment, where Market Data are available, to be able to find the Kafka topic names.
This list of channels described here may evolve and not be aligned with what is effectively available in Euronext Stream Pro. Clients can find the exact list of channels available within the Channels Configuration Kafka topic updated on a daily basis.

Market	Asset Class	Segment	Subsegment	Aggregator name	Partition ID	Feed ID			
						Channel Type			
						FBMU Real Time	FBMU Snapshot	BBBO / MIDP Real Time	REFT Real Time
Cash	Funds	ETF	Funds ETFs classic	etf	0 or 1	132	131	-	130
			Funds ETF Italy (IT)	etf-italy		054	053	051	050
			BoB ETF	bob-etf		137	136	-	-
			Funds Greece	etf-greece		117	116	-	099
	Bonds	FXI	BONDs FXI	fi	0	152	151	-	150
			Fixed Income Italy (MOT/extraMOT)	fix-italy-mot-xmot		044	043	041	040
			Fixed Income ETLX (Bond-X)	fi-it-etlx		062	061	058	060
			BONDs Norway - Nordic ABM	fi-nordic-abm		-	-	-	149
	Warrants	WAR	Warrants & Certificates Italy (SEDEX)	war-sedex	0 or 1	069	068	066	065
			Warrants & Certificates ETLX (Cert-X)	war-cert-x		024	023	021	020

Market	Asset Class	Segment	Subsegment	Aggregator name	Partition ID	Feed ID			
						Channel Type			
						FBMU Real Time	FBMU Snapshot	BBBO / MIDP Real Time	REFT Real Time
	Equities	EQU	EQUITIES FRance	equities-fr	0 or 1 or 2 or 3	112	111	-	110
			EQUITIES NetherLand	equities-nd		122	121	-	120
			EQUITIES BElgium	equities-be		102	101	-	100
			EQUITIES PorTugal	equities-po		107	106	-	105
			EQUITIES IrEland	equities-gb		167	166	-	165
			EQUITIES NOrway	equities-no		087	086	-	085
			EQUITIES ITaly	equities-it		077	076	126	075
			Equities ETLX	equities-it-etlx		034	033	-	030
			Equities Greece	equities-gr		3	2	-	1
			GEM	equities-it-bgem		097	083	082	081
			BoB (EQU) - all mkts	bob		139	138	-	-
	Block	BLK	TRADING AFTER HOURS ITALY	blk-ITA	0	072	-	128	070
Derivatives	Equity Derivatives	EQD	Equity Derivs IT	eq-opt-it	0 or 1 or 2	209	208	-	210
			Equity Derivatives Greece	eq-opt-gr	0 or 1 or 2	39	38	37	28
	Commodity Derivatives	CMO	Commodities power	power-derivs	0	214	214	212	211
	Index Derivatives	IDD	Index Options IT	idx-opt-it	0	219	218	-	215
			Index Derivatives Greece	idx-opt-gr	0	148	147	146	144

5.3. Regulatory feed

5.3.1. RTS1 Pre Trade Transparency

RTS1 Pre Trade Transparency compliant messages are delivered under specific market data channels, available for clients subscription, in real-time.

5.3.1.1. Kafka Topics

RTS1 Pre Trade Transparency messages are made available for costumers in dedicated RTS1 Pre Trade Transparency Kafka topics having the naming convention: *fsssepnnn* where:

- f: Family ID: defines the type of set of data to be provided in the Kafka topic.
  - 2: RTS1 and RTS2 compliant feeds
- sss: for future use - spare digits
- e: environment ID

Environment	Real-Time Environment ID
PROD	1
pEUA	5

- p: partition ID - details are in the table below
- nnn: the Feed ID - details are in the table below

Please find hereunder the feed IDs - Source : Channel Type is "FBMU" by asset class, subsegment and environment, where RTS1 Pre Trade Transparency data (Real Time) are available, to be able to find the Kafka topic names.
This list of channels described here may evolve and not be aligned with what is effectively available in Euronext Stream Pro. Clients can find the exact list of channels available within the Channels Configuration Kafka topic updated on a daily basis.

Asset Class	Segment	Subsegment	Aggregator name	Partition ID	Feed ID
Channel Type = FBMU; Feed Type = Real Time;					
Funds	ETF	Funds ETFs classic	etf	0 or 1	132
		Funds ETF Italy (IT)	etf-italy		054
		BoB ETF	bob-etf		137
		Funds Greece	etf-greece		117
Equities	EQU	EQUITIES FRance	equities-fr	0 or 1 or 2 or 3	112
		EQUITIES NetherLand	equities-nd		122
		EQUITIES BElgium	equities-be		102
		EQUITIES PorTugal	equities-po		107
		EQUITIES IrEland	equities-gb		167
		EQUITIES NOrway	equities-no		087
		EQUITIES ITaly	equities-it		077
		Equities Greece	equities-gr		3
		Equities ETLX	equities-it-etlx		034
		GEM	equities-it-bgem		097
		BoB (EQU) - all mkts	bob		139

5.3.2. RTS1 Post Trade Transparency

RTS 1 Post Trade Transparency compliant messages are delivered under specific market data channels, available for clients subscription, in real-time.

5.3.2.1. Kafka Topics

RTS1 Post Trade Transparency messages are made available for costumers in dedicated RTS1 Post Trade Transparency Kafka topics having the naming convention: *fsssepnnn* where:

- f: Family ID: defines the type of set of data to be provided in the Kafka topic.
  - 2: RTS1 and RTS2 compliant feeds
- sss: for future use - spare digits
- e: environment ID

Environment	Real-Time Environment ID
PROD	1
pEUA	5

- p: partition ID - details are in the table below
- nnn: the Feed ID - details are in the table below

Please find hereunder the feed IDs - Source : Channel Type is "REFT" by asset class, subsegment and environment, where RTS1 Post Trade Transparency data (Real Time) are available, to be able to find the Kafka topic names.
This list of channels described here may evolve and not be aligned with what is effectively available in Euronext Stream Pro. Clients can find the exact list of channels available within the Channels Configuration Kafka topic updated on a daily basis.

Asset Class	Segment	Subsegment	Aggregator name	Partition ID	Feed ID
Channel Type = REFT; Feed Type = Real Time					
Funds	ETF	Funds ETFs classic	etf	0	130
		Funds ETF Italy (IT)	etf-italy		050
		Funds Greece	etf-greece		117

Asset Class	Segment	Subsegment	Aggregator name	Partition ID	Feed ID
Channel Type = REFT; Feed Type = Real Time					
Equities	EQU	EQUITIES FRance	equities-fr	0 or 1 or 2 or 3	110
		EQUITIES NetherLand	equities-nd		120
		EQUITIES BElgium	equities-be		100
		EQUITIES PorTugal	equities-po		105
		EQUITIES IrEland	equities-gb		165
		EQUITIES NOrway	equities-no		085
		EQUITIES ITaly	equities-it		075
		Equities Greece	equities-gr		3
		Equities ETLX	equities-it-etlx		030
		GEM	equities-it-bgem		081

5.3.3. RTS2 Post Trade Transparency

RTS2 Post Trade Transparency compliant messages are delivered under specific market data channels, available for clients subscription, in real-time.

5.3.3.1. Kafka Topics

RTS2 Post Trade Transparency messages are made available for costumers in dedicated RTS2 Post Trade Transparency Kafka topics having the naming convention: *fsssepnnn* where:

- f: Family ID: defines the type of set of data to be provided in the Kafka topic.
  - 2: RTS1 and RTS2 compliant feeds
- sss: for future use - spare digits
- e: environment ID

Environment	Real-Time Environment ID
PROD	1
pEUA	5

- p: partition ID - details are in the table below
- nnn: the Feed ID - details are in the table below

Please find hereunder the feed IDs - Source : Channel Type is "REFT" by asset class, subsegment and environment, where RTS2 Post Trade Transparency data (Real Time) are available, to be able to find the Kafka topic names.

This list of channels described here may evolve and not be aligned with what is effectively available in Euronext Stream Pro. Clients can find the exact list of channels available within the Channels Configuration Kafka topic updated on a daily basis.

Asset Class	Segment	Subsegment	Aggregator name	Partition ID	Feed ID
Channel Type = REFT; Feed Type = Real Time					
Bonds	FXI	BONDs FXI	fi	0	150
		Fixed Income Italy (MOT/extraMOT)	fix-italy-mot-xmot		040
		Fixed Income ETLX (Bond-X)	fi-it-etlx		060
		BONDs Norway - Nordic ABM	fi-nordic-abm		149

6. MESSAGING PROTOCOL AND PUBLISHING MODEL

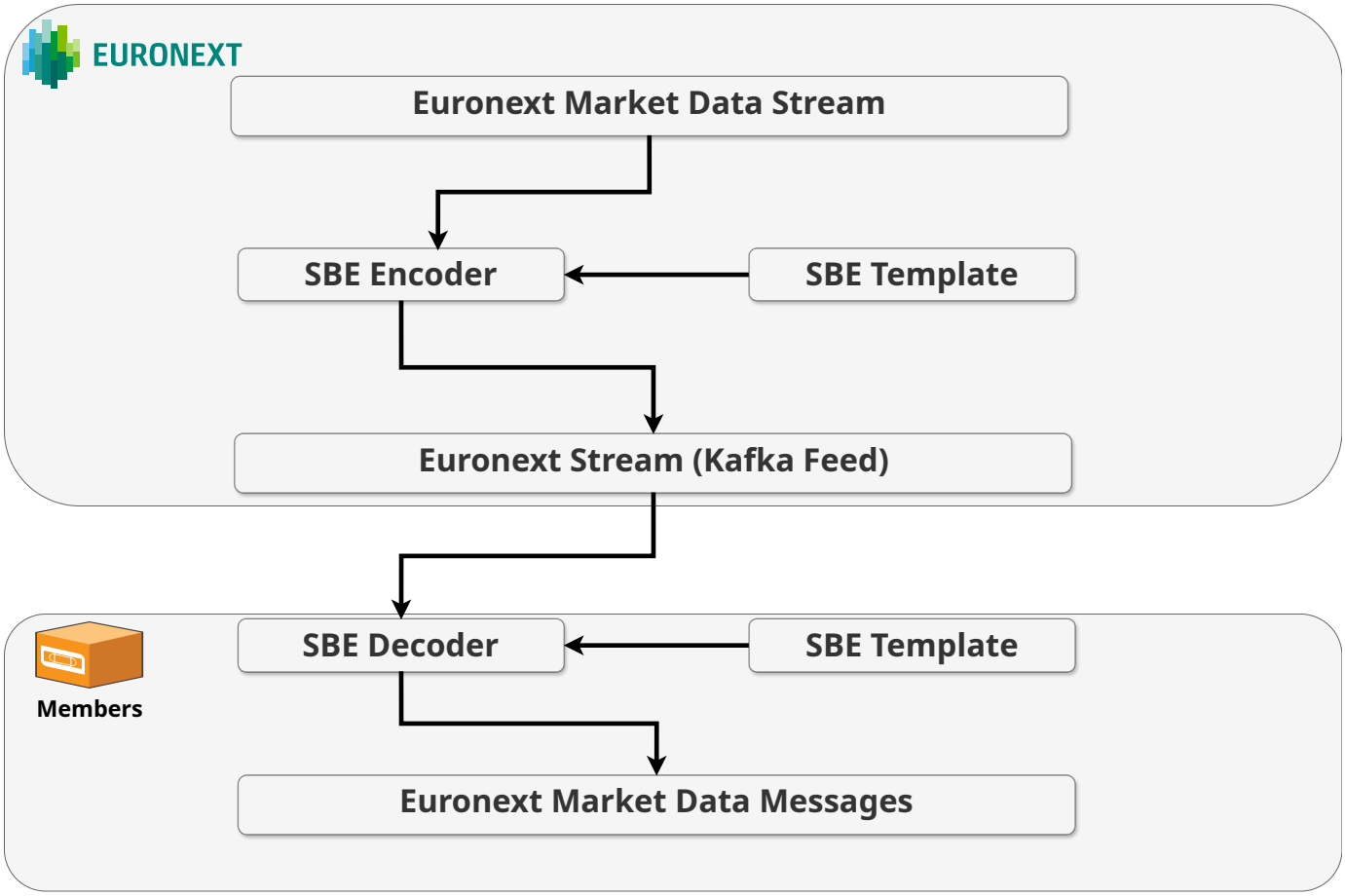
6.1. Overview

Real-time and Snapshot Market Data are message-based over the TCP/IP protocol with **SBE (Simple Binary Encoding)**. This binary encoding is optimized for low-latency encoding and decoding while keeping bandwidth utilization reasonably small and is used across all asset classes. TCP provides a reliable, connection-oriented transport, ensuring that all messages are delivered in order and without loss. Using the push-based publishing model, data will be published as soon as it is available.

Euronext Stream Pro messages will be sent within a Market Data Packet that will be broadcast through Kafka . A Market Data Packet will be composed of N complete messages. A single message will never spread across multiple packets.
The maximum length of a packet is 1400 bytes and does not include TCP/IP protocol fields. Each message is enriched with a "Frame" field followed by a SBE header. The "Frame" field contains the length of the message including the length of the "Frame" and "SBE header" fields. The following diagram shows the structure of a packet:

<table>
<tr><td colspan="11">KAFKA MESSAGE</td></tr>
<tr><td rowspan="2"></td><td colspan="10">PACKET</td></tr>
<tr><td rowspan="2">Market Data Packet Header</td><td colspan="8">1ST SBE MESSAGE</td><td>NEXT SBE MESSAGE(S)</td></tr>
<tr><td rowspan="2">Frame</td><td rowspan="2">SBE Header</td><td rowspan="2">Block</td><td colspan="5">Repeating Section 1</td><td>...</td></tr>
<tr><td>Repeating Section Header</td><td>Rep. Sec. 1.a</td><td>Rep. Sec. 1.b</td><td>...</td><td>Rep. Sec. 1.n</td><td>...</td></tr>
<tr><td>n bytes</td><td>16 bytes</td><td>2 bytes</td><td>8 bytes</td><td>n bytes</td><td>2 bytes</td><td>x_1 bytes</td><td>x_1 bytes</td><td>...</td><td>x_1 bytes</td><td>...</td></tr>
</table>

The Exchange provides SBE Template XML files that contain all message types supported by **Euronext Stream Pro**. Members' systems can decode SBE messages from **Euronext Stream Pro** using the schema and template files as below:



6.2. Market Data Packet Header

The packet header is described below:

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PktTime	Packet Time	Time when the packet is pushed to the clients (Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PktSeqNum	Packet Sequence Number	Each channel has its own PSN sequence. Starting from 1 at every MDG start and increasing by step of 1. In case of overflow (over 4.2 billons) Packet Flags will increase for bits 4-6. With this mechanism the PSN has 35 bits available.	Numerical ID	4	0..2^32-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PktFlags	Packet Flags	Used to flag information (Little-Endian): - Bit 0: Compression - 0 = body of the packet not compressed (the body is the packet without the packet header) - 1 = body of the packet compressed - Bit 1 to 3: will be set to 0 every morning and incremented for each restart of MDG in the same day (wrapping to 0 if the field overflows) - Bit 4 to 6: used if the Packet Sequence Number (PSN) goes over (2^32)-1. They are PSN high weight bits. - Bit 7: is set to 1 when in the packet there is a Start Of Snapshot (2101) message, 0 otherwise. - Bit 8: is set to 1 when in the packet there is an End Of Snapshot (2102) message, 0 otherwise. - Bit 9: is set to 1 when in the packet there is a Health Status (1103) message, Start Of Day (1101) message or End Of Day (1102) message, 0 otherwise. - Bit 10 to 15: for future use.	Numerical	2	0..2^16-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ChannelID	Channel ID	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).	Numerical	2	0..2^16-2	Mandatory

6.3. SBE Message Structure

A message is composed of the following parts:

SBE MESSAGE STRUCTURE								
Frame	SBE Header	Block	Repeating Section 1					...
			Repeating Section Header	Rep. Sec. 1.a	Rep. Sec. 1.b	...	Rep. Sec. 1.n	...
2 bytes	8 bytes	n bytes	2 bytes	x_1 bytes	x_1 bytes	...	x_1 bytes	...

The maximum length of a message is 1384 bytes (maximum packet length (1400 bytes) minus the packet header length (16 bytes)).

The SBE Header is defined as follows:

Field	Short Description	Format	Length	Values	Presence
Block Length	Length of the block. The Block is the message without the repeating sections.	Numerical	2	0..2^16-2	Mandatory
Template ID	Identifier of the message template. This is the message type of the Market Data messages.	Numerical ID	2	0..2^16-2	Mandatory
Schema ID	Identifier of the message schema that contains the template. Used to differentiate Exchange Specifications.	Numerical ID	2	0..2^16-2	Mandatory
Schema Version	Version of the message schema in which the message is defined. Used to add messages and/or modify some others.	Numerical ID	2	0..2^16-2	Mandatory

The Repeating Section Header is defined as follows:

Field	Description	Length	Values
Repeating section header	Defines how many times the repeating section is repeated and the length in bytes of a repeating section. It is set to "0" if there is no repeating section.	2 bytes (the first byte for the length and the second byte for the count)	From 0 to 254 for both

A Schema ID is composed of Template IDs (or message types) and each Template ID has its own Schema version (message version).

Please note that the SBE Header and Repeated Section Header must be present on the wire for each message (SBE Repeated Section Header only for messages that have a repeated section), but for readability purpose it is not represented in the message structures in this document.

6.4. SBE Backward And Forward Compatibility

The aim of backward and forward SBE compatibility is to allow the member to choose to update to the latest SBE version or remain in previous versions.

To do so, the main element is the SBE version provided in SBE Template file. This SBE version is in the attribute: "version". In addition, each change on message, field or possible value (for enumerated or bitmap) in the SBE Template file, are flagged with attributes:

- SinceVersion for additions;
- deprecated for removals;

Each of the above attributes is set to the value of the SBE version when the change occurred. As such their value cannot be greater than the SBE version. It is crucial for the member to check for each new SBE Template if the compatibility is insured and until which version in order to update if necessary. These compatibilities are not ensured for the following situations:

- New field added wherever, except if added at the end of the block or a repeated section;
- Existing field length changed;
- Field, message or possible value name changed;
- For enumerated field, if the value is changed (example: in field "EMM", value Not Applicable changes from 254 to 99);

The following describes the mechanism for each compatibility:

- New field compatibility: Consider SBE version is set to 5. If in a message a field has been added at the end of the block and before the repeated section with "sinceVersion = 5" then if the member has no interest in this new field can ignore it. To ignore it, member would be using the SBE Version 4 (or lower) that has not this new field. Therefore, the block length in the SBE header does not include the field added in version 5. Then SBE Decoder when processing the new message processes all fields inside the block length in SBE version 4 and ignores the new fields in version 5 to continue processing the message with the repeated section header. Same logic is used for field added at the end of the repeated section. The length of the repeated section is in the Repeated Section Header and it is not the same size between version 4 and 5.

- New possible value compatibility: If a new possible value is added in SBE version 5, it is flagged with "sinceVersion = 5". Whoever is not interested by this new possible value will potentially receive this new value but will have to define a specific behavior. For example, ignore it;

- New message compatibility: In case a new message is created and until the member wants to use it by updating the SBE version, this message ise ignored.

- Removals: The field or message or possible value are still sent with a consistent value in order to ensure the compatibility and are flagged with the attribute "deprecated";

Note: In case Euronext breaks the SBE compatibility, member is made aware in timely manner;

For the more in depth detailed explanation of Euronext implementation of the SBE protocol check SBE Template Introduction and Compatibility Rules.

7. EURONEXT STREAM PRO FEATURES

7.1. Start and End of Day

Start Of Day (1101) messages are sent on each channel once the Market Data source system starts. These messages will be sent periodically until another message is sent on any channel of an aggregator (please refer to The Market Data Sequence Number paragraph for aggregator description). After the Start of Day messages, the Health Status (1103) messages will be sent periodically. This mechanism guarantees that **Start Of Day** (1101) messages are the first messages sent by Euronext Stream Pro. At end of day, Euronext Stream Pro will stop sending messages (including Health Status (1103)) and will periodically send End Of Day (1102) messages during a specified period before shutting down.

7.2. Build the Book

7.2.1. Standard Feed

Optiq Market Data provides market by limits (with Market Update messages (1001)).

- For markets built using aggregated limits (RTS 1 Pre Trade Transparency (802)), clients have to order the limits by prices (only one price by line):
  - On an new/updated bid or ask, clients must add/update the current limit with the new limit.
    - This update can be on the limit: quantity and number of orders.
    - Trading phase correspond to the trading phase at the moment of the event.
  - On a limit deletion, clients will receive an update with quantity set to '0' and the price matching the limit to delete.

Clients should not process both the BBO and limits to construct the book. If Best Bid and Offer updates are sent as a part of the same message, then they should be processed as one update to the BBO and not individually. Otherwise, the order book might appear crossed.

7.2.2. Regulatory Feed

Optiq Market Data provides market by limits (with RTS 1 Pre Trade Transparency (802)).

- For markets built using aggregated limits (RTS 1 Pre Trade Transparency (802)), clients have to order the limits by prices (only one price by line):
  - On a new bid or ask, clients must add the new limit
  - On an updated bid or ask, clients must update the current limit with the new limit. This update can be on the limit: type, quantity or number of orders.
  - On a limit deletion, clients will receive an update with quantity set to '0' and the price matching the limit to delete.

7.3. Book Retransmission

The Book Retransmission is an automated process used to ensure continuity of the Market Data feed. It allows to retransmit at start of day the order books data following the previous trading day but also to resynchronize the Market Data feed in case of high availability event on Optiq platform (software recovery mechanism). This process consists of resubmitting the depth of the book on real-time channels. This book retransmission occurs:

- Every morning at the start of the day.
- Intraday in case of HA recovery event.

7.3.1. Clear the Book

Before any market retransmission, Euronext Stream Pro will send a clear book request. For the first clear book, at the beginning of the day, customers are expected to clear any stored information for any Market Data Update Type values received the previous day. For any intraday clear book request, customers are expected to clear only the Market Data Update Types related to the specific order book, listed below, and keep all other Market Data Update Type values unchanged:

- 1 - Best Bid (Cash and Derivatives)
- 2 - Best Offer (Cash and Derivatives)
- 3 - New Bid (Cash and Derivatives)
- 4 - New Offer (Cash and Derivatives)
- 5 - Updated Bid (Cash and Derivatives)
- 6 - Updated Offer (Cash and Derivatives)
- 14 - High Dynamic Collar (Cash Only)
- 15 - Low Dynamic Collar (Cash Only)
- 16 - New Bid RLP (Retail Liquidity Provider) (Cash Only)
- 17 - New Offer RLP (Retail Liquidity Provider) (Cash Only)
- 18 - Updated Bid RLP Retail Liquidity Provider) (Cash Only)
- 19 - Updated Offer RLP (Retail Liquidity Provider) (Cash Only)
- 58 - New Bid With Liquidity Provider (Cash Only)
- 59 - New Offer With Liquidity Provider (Cash Only)
- 60 - Updated Bid With Liquidity Provider (Cash Only)
- 61 - Updated Offer With Liquidity Provider (Cash Only)
- 63 - Low Static Collar
- 64 - High Static Collar
- 70 - Low LP Collar (Cash Only)
- 71 - High LP Collar (Cash Only)

7.3.2. Morning Book Retransmission

At the initialization of each new trading day the exchange uses the following broadcasting sequence:

1. Date of trading session in Start Of Day (1101)
   - Market Data Sequence Number set to 0
2. Trading patterns in Timetable (1006)
3. Instrument characteristics in Standing Data (1007)
4. Contract reference data in Contract Standing Data (1013)
5. Outright reference data in Outright Standing Data (1014)
6. Strategy reference data in Strategy Standing Data (1012)
7. Book state inaccessible in Market Status Change (1005)
   - Book state: 'Inaccessible'
   - Trading period: 'Opening'
   - Rebroadcast Indicator: 0
8. Clear limits in Market Update (1001)
   - Market Data Update Type: 254 – Clear Book
   - Rebroadcast Indicator: 0
9. Reference Price and Settlement in Price Update (1003)
   - Market Data Price Type: 12 = Adjusted Closing Price, 9 = Official YDSP
   - Rebroadcast Indicator: 1
10. BBO in Market Update (1001)
    - Market Data Update Type: 1 - Best Bid and 2 - Best Offer
    - Rebroadcast Indicator: 1
11. Full depth in Market Update (1001)

- Market Data Update Type: 3 – New Bid and 4 - New Offer
- Rebroadcast Indicator: 1

2. End of book retransmission in Technical Notification (1106)
   - Technical Notification Type: 1 – Instrument Book Retransmission End
3. Closed in Market Status Change (1005)
   - Book state: 'Closed'
   - Rebroadcast Indicator: 1

7.3.3. Intraday Book Retransmission

A **Market Update** (1001) message is sent for each instrument, respectively filled with *Market Data Update Type* = '254' (Clear Book). Then the full book depth will be resent with *Rebroadcast Indicator* set to '1'.
For **Market Update** (1001) messages: limits will be aggregated, and the *Market Data Update Type* field will be '5' (Updated Bid) or '6' (Updated Offer) or "Updated Bid/Offer RLP" etc. At the end of book retransmission a **Technical Notification** (1106) is sent to indicate the '1' (Instrument Book Retransmission End).

7.4. Snapshots

Snapshot is a service that delivers an image of the market data at a specific point in time, enabling clients to recover from packet loss or to initialize intraday connections. Currently, snapshot feeds are only available for the FBMU feed.

In the context of Euronext Stream Pro, the global recovery process works as follows:

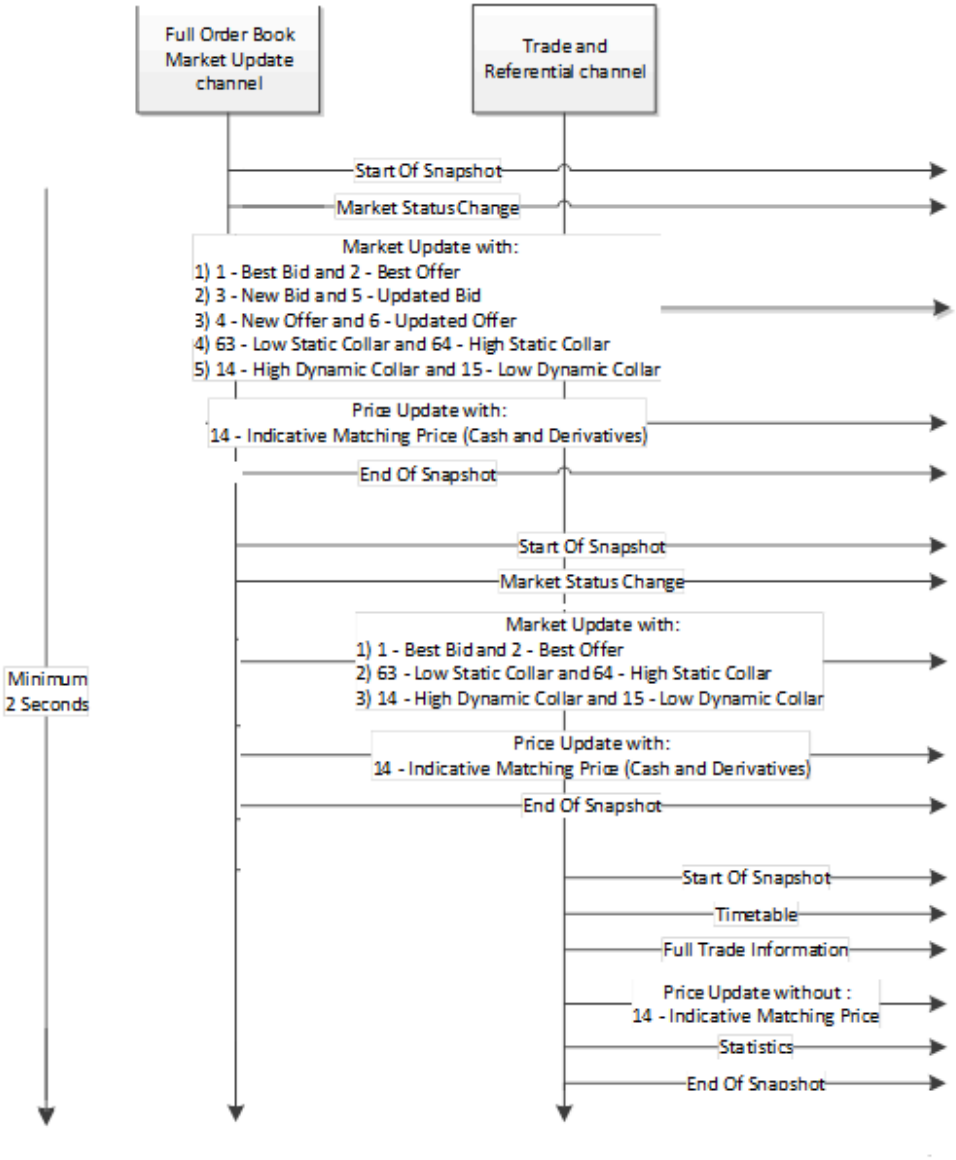
- Primary recovery relies on the Kafka retention period (see Data Lifecycle for details per channel Data Lifecycle).

- As long as the data falls within the retention window, there is no need to use the snapshot mechanism, because previous messages can always be retrieved from Kafka.

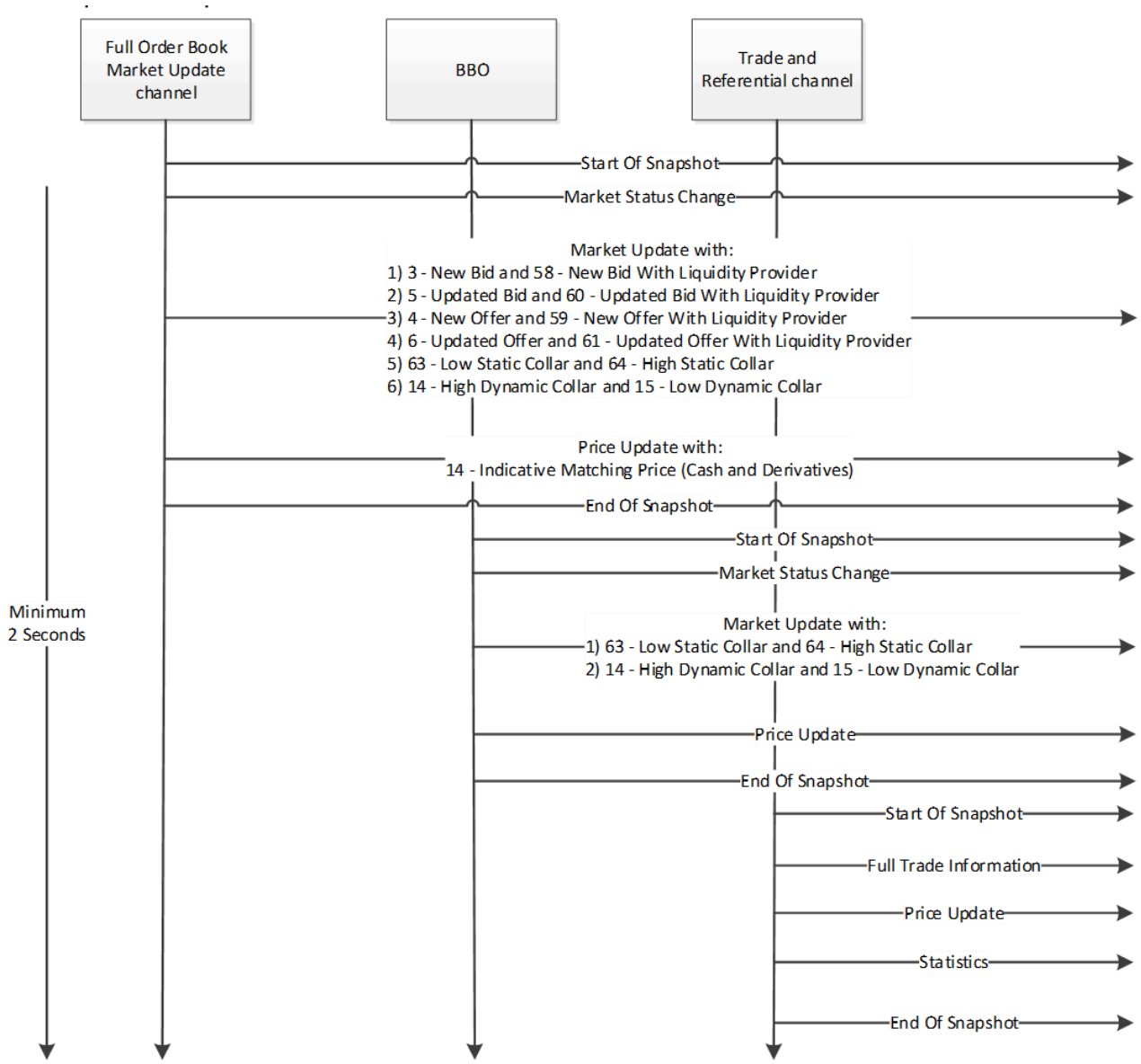
- For cases outside the retention window—such as during intraday connection or extended outages—the recovery process combines the snapshot feed (available for FBMU) with the retained data to ensure a complete and consistent reconstruction of the market state.

Real time channels giving the same information share the same snapshot channel. An image contains all instruments broadcasted on this channel.
An image sent in the snapshot is linked to real time with the Last *Market Data Sequence Number* from the real time channel.
This broadcasted image of all channels of an aggregator (see section on The Market Data Sequence Number) is a snapshot sequence and cannot be sent more than 1 every 2 seconds. The order of each channel images in a snapshot sequence is fixed for a day but can change from one day to another. They will use the same messages as real time messages with *Rebroadcast indicator* set to '1'.
Here are the snapshot sequences for Cash, Derivatives, and Best of Book (BoB) :

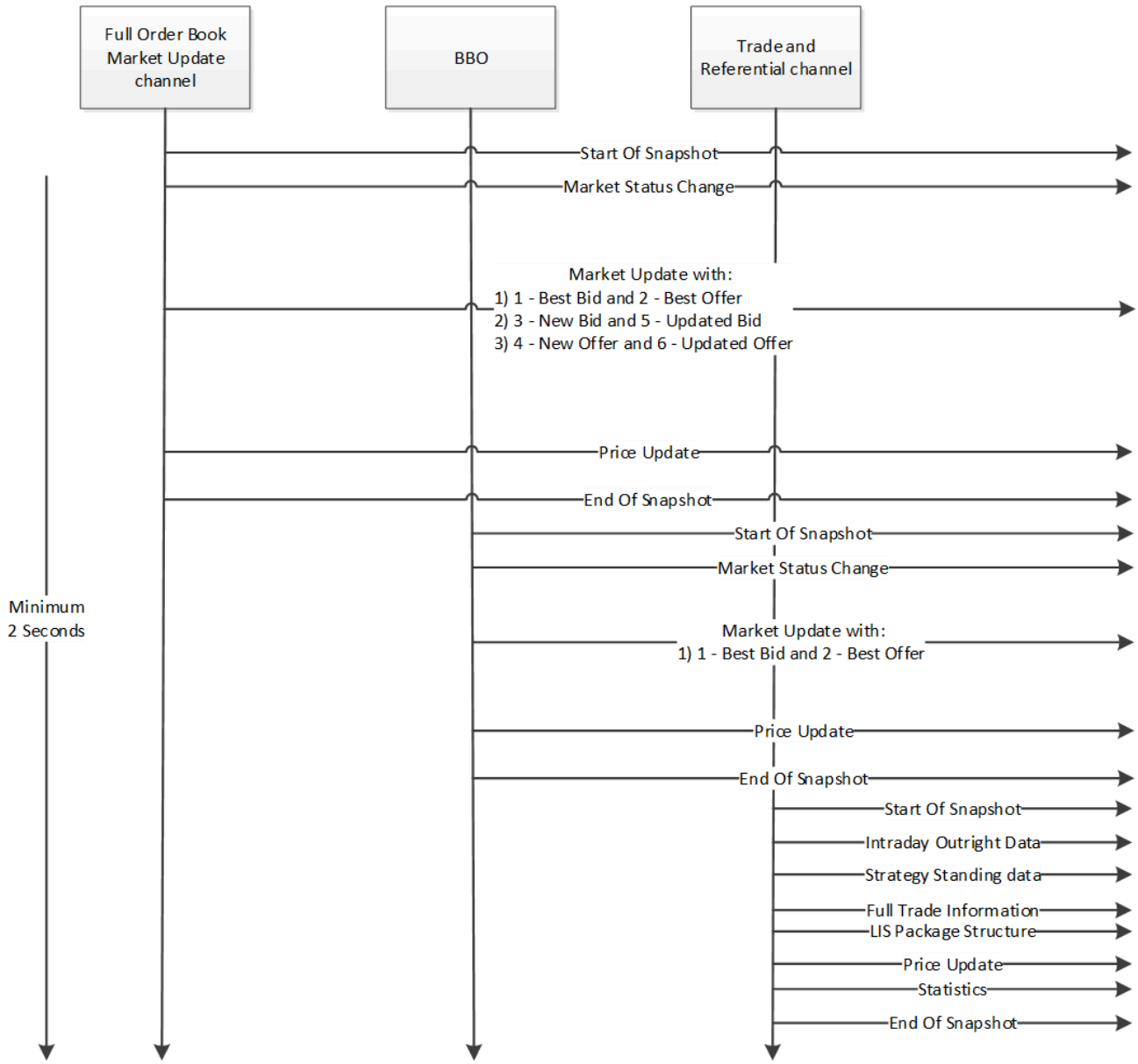
- Snapshot sequence for Equities, Fixed Income and Funds:



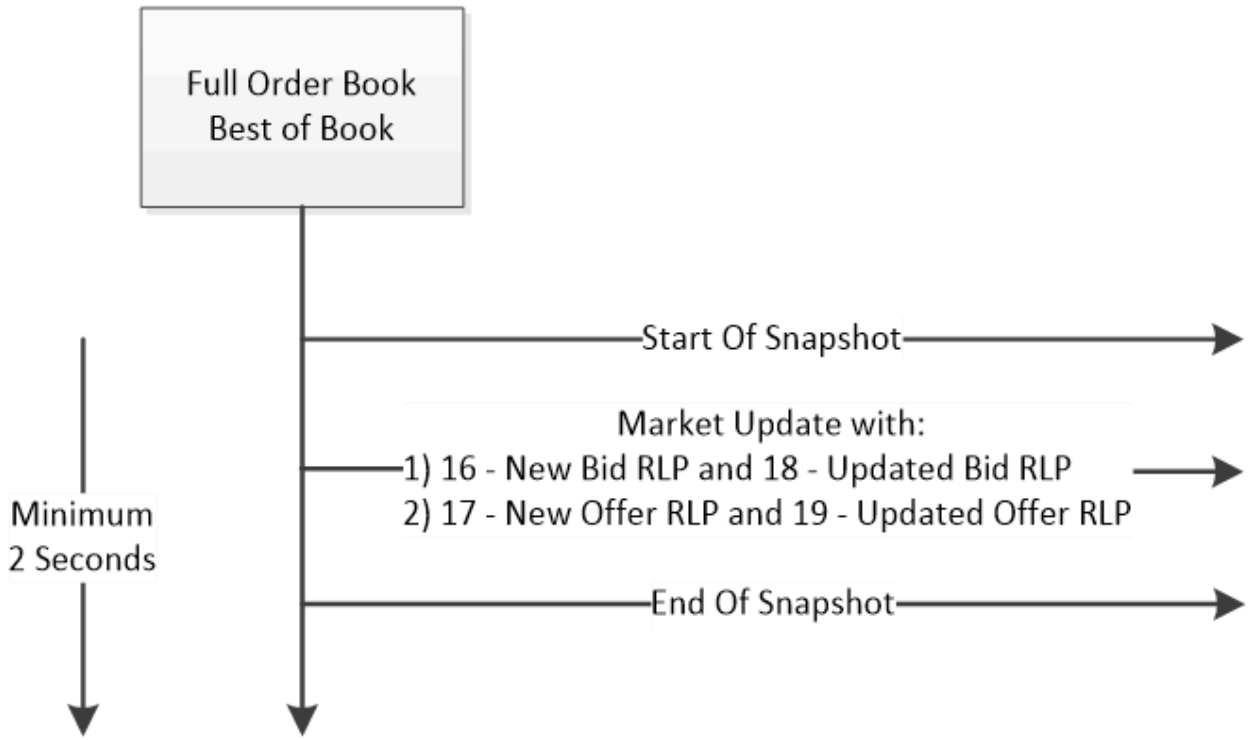
- Snapshot sequence for Warrants:



- Snapshot sequence for Equities Derivatives and Commodities:



- Snapshot Sequence for Equities Best of Book:

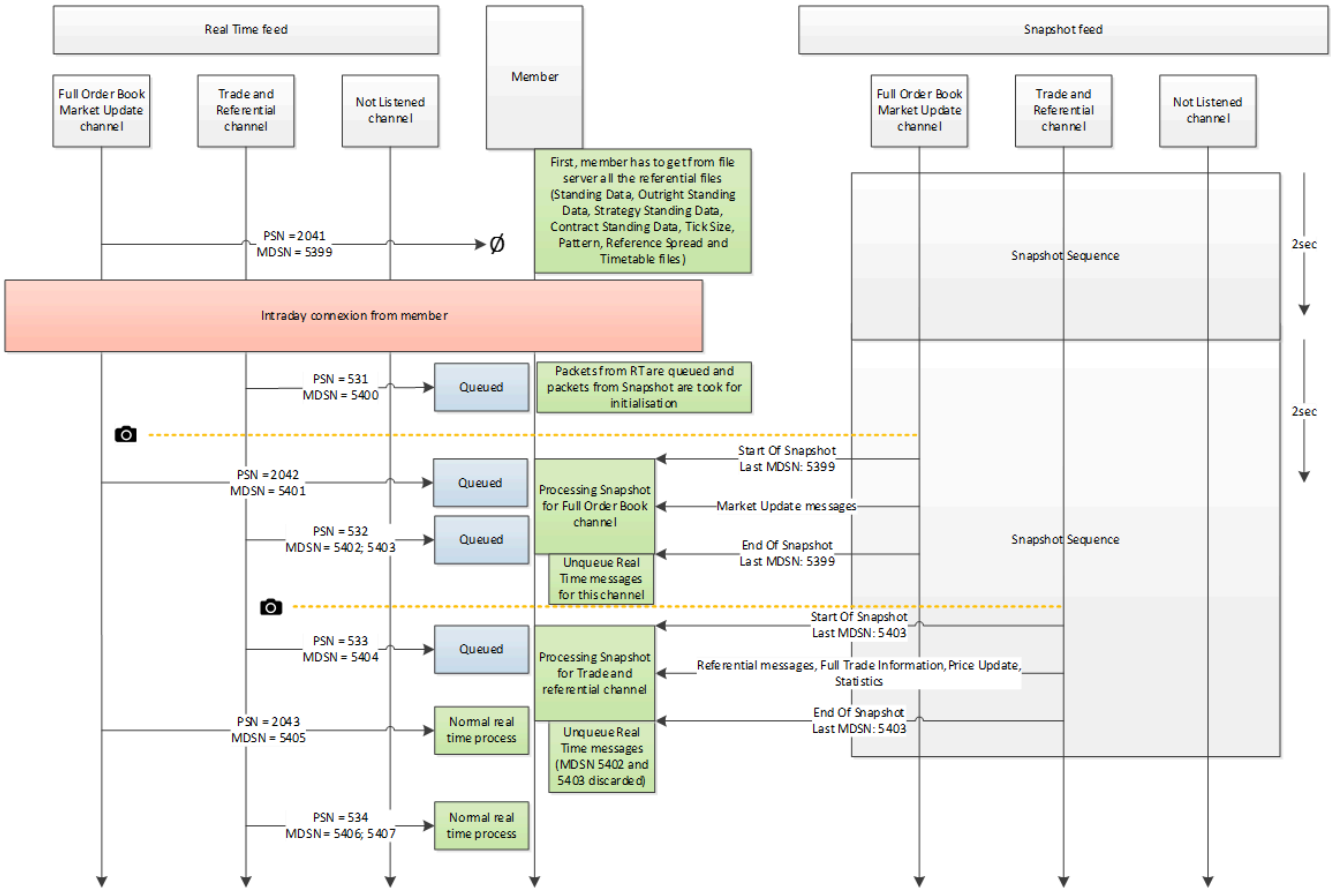


Both **Start Of Snapshot** (2101) and **End Of Snapshot** (2102) messages contain the last *Market Data Sequence Number* (MDSN) of the last real-time message taken into account by the snapshot (see Sequence Numbers and Snapshot Sequence behavior for explanations on the MDSN). This last MDSN has been sent on each channel speed.

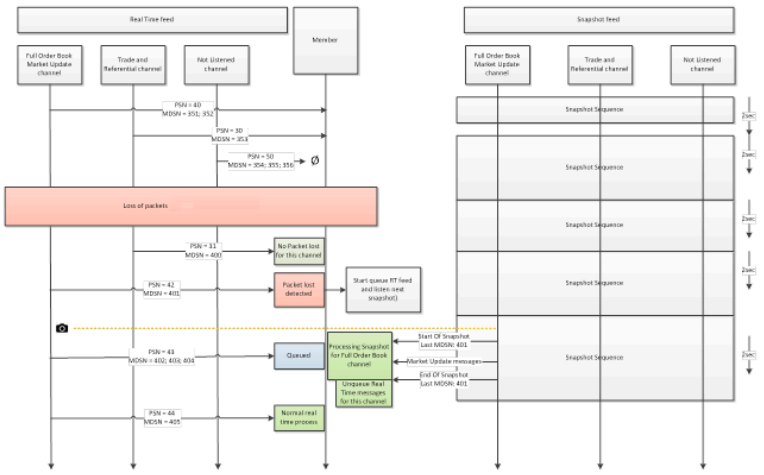
In the 2 following situations:
– Late connection to the exchange
– Loss of packets

Members have to process as follow:
– Clear all the market data sent on this channel.
– Listen to the real time channel and start queuing all messages.
– Identify the lowest MDSN from real time feed.
– Wait for a **Start Of Snapshot** with a Last *Market Data Sequence Number* that is higher or equal to the MDSN identified just before on real time. Otherwise the Snapshot might not contain all the missing messages.
– Listen to the entire snapshot image until the **End Of Snapshot**.
– Discard all the real time messages with a MDSN lower or equal than the Last *Market Data Sequence Number* of the Start or End Of Snapshot message.
– Integrate all the remaining real time messages into the snapshot image.
– Keep listening real time as normal.

If in the snapshot a packet is missing then use the next snapshot for this channel. It is important to note that since the Market Data Sequence Number of snapshot channels does not necessarily increment by 1, the sequence number in the start or end snapshot messages might belong to another channel and was in fact not actually lost. * Example of a late connection to the exchange:



- Example of a packet loss:



- How to use information type:
  Euronext Stream Pro offers another mechanism in the snapshot to resynchronize only for a subset of the information whatever the Symbol Index. This information is functionally gathered into information type:
  - For Market Update, the information types are BBO, Full Depth, Collars and Full Depth Best of Book (Please refer to the table below in this section to have all the Market Data Update Type for each Information Type)
  - For the other messages, every message type is in a single information type (ex: all the price update messages are in the information type "Price Update")

For example, if members are only interested into the information type BBO and they have lost a packet in the real-time and they have to use the snapshot to recover, they can detect if the lost packet was containing BBO information.

To do so, members have to look at the Market Data Sequence Number (MDSN) of snapshotted messages. If for one information type, the MDSN in a snapshot message is lower or equals to the MDSN of a message received in real time (for this information type), it means that no messages have been lost for this information type.

The following table provides the exact mapping between Market Data Update Type and Information Type.

MARKET DATA UPDATE TYPE	INFORMATION TYPE
1 - Best Bid (Cash and Derivatives)	BBO
2 - Best Offer (Cash and Derivatives)	
3 - New Bid (Cash and Derivatives)	Full Depth
4 - New Offer (Cash and Derivatives)	
5 - Updated Bid (Cash and Derivatives)	
6 - Updated Offer (Cash and Derivatives)	
58 - New Bid With Liquidity Provider (Cash Only)	
59 - New Offer With Liquidity Provider (Cash Only)	
60 - Updated Bid With Liquidity Provider (Cash Only)	
61 - Updated Offer With Liquidity Provider (Cash Only)	
14 - High Dynamic Collar (Cash Only)	Collars
15 - Low Dynamic Collar (Cash Only)	
63 - Low Static Collar	
64 - High Static Collar	
70 - Low LP Collar (Cash Only)	
71 - High LP Collar (Cash Only)	
91 - AQS Expansion Factor	
92 - Collar Expansion Factor	
93 - Collar Enabled	
94 - Collar Disabled	
98 - FSP Triggered	

16 - New Bid RLP (Retail Liquidity Provider) (Cash Only)	Full Depth Best of Book
18 - Updated Bid RLP (Retail Liquidity Provider) (Cash Only)	
19 - Updated Offer RLP (Retail Liquidity Provider) (Cash Only)	

Members that connect late just have to take the full snapshot and synchronize with real-time. Example 1: If members have the following from the real time:
MDSN for BBO = '98'
MDSN for Full Depth = '80'
MDSN for Collars = '45'

And if in snapshot the Last *Market Data Sequence Number* is '100' with:
MDSN for BBO = '100' (meaning all the messages where *Market Data Update Type* with a value that matches BBO Information Type have a MDSN equal to '100')
MDSN for Full Depth = '80'
MDSN for Collars = '45'

It means that members need to recover all the BBO Information Type but not Full Depth and Collars.

Example 2: If the last **Market Status Change** message sent had MDSN = '80', then all **Market Status Change** messages in snapshot have MDSN = '80'.
Example 3: If the last Best Bid sent has MDSN = '1000' in the real-time channel, then all **Market Update** message for Best Bid and Best Ask updates (types '1' and '2') will have MDSN = '1000' in the snapshot too.

7.5. Compression

Euronext Stream Pro uses LZ4 compression in block mode with no headers.It should be noted that a compressed market data packet can contain several different messages, which are all compressed into a single packet.
On compressed channels, it is possible to have compressed and uncompressed packets. The compression flag in the packet header defines if the packet is compressed or not. The maximum extracted packet size cannot be greater than 8192 bytes.

7.6. System Failures

- High Availability:
  The High Availability (HA) functionality is set up to ensure that there is no loss of service during an outage on the primary publisher, such as a hardware failure. Failover to a secondary publisher can be identified by the change of sequence in the Packet headers (the Packet Sequence Number restarts to '1' and bits between '1' and '3' in the Packet Flags field increase by '1'. Keep in mind that these 3 bits can overflow, and it will result with a '0' again). The HA failover is designed to be as transparent as possible. However, there are specific details that must be considered.
  When a market data source restarts and is not able to keep its sequential behavior, the system initiates a new start sequence for this source. The Market Data source system then sends an order book retransmission sequence, and a list of corrected trades asynchronously inside the real-time channel used for trades. These messages are flagged as a retransmission (Rebroadcast Indicator = '1').
  As the system is asynchronous, some trades might be lost in case of a matching engine failure.
  Therefore, the trade retransmission should be used to update the status of each trade that is resent, to complete trades not already taken into account, and even in certain cases, to indicate that some trades should be removed.
  Please refer to Book and Trades Retransmission to have all details on how retransmitted books and trades are.

In case of market data source restart:

- Clients have to use the Packet Flags field (bits 1 to 3) to maintain a unique Packet Sequence Number for the trading day.

- On real-time channels the Market Data Sequence Number (MDSN) is reset to '0' and first functional message that market data source receives gets MDSN 0 and higher.

- Messages that will be sent in snapshots, while there is no message to be resent in real time, will have a MDSN set to "0" (so several messages inside a snapshot can share the same MDSN).

- Clients need to take into account that the Last Market Data Sequence Number (LMDSN) in first Start and End Of Snapshot messages are set to '0' and not set to 'null' as at start-up of the market data source.

7.7. Trade Retransmission

Trade retransmission will only be used in case of HA event recovery and will be sent on the real-time channels. The retransmission will always start with the **Technical Notification** (1106) message with *Technical Notification Type* = 10 (Trade Retransmission Start) and contains the *Retransmission Start Time* and the *Retransmission End Time* fields.
These times define a time window: all trades previously received with an Event time included in this time window must be considered invalid. A new **Full Trade Information** (1004) message with the *Rebroadcast Indicator* field set to '1' will be sent. The trade retransmission ends with the **Technical Notification** (1106) message and *Technical Notification Type* = '11' (Trade Retransmission End).

Note: If for a time window that contains trade(s) on real-time feed but no **Full Trade Information** (1004) messages are rebroadcast in between the **Technical Notification** (1106) messages, then members have to remove the trade(s) received in real-time.

7.8. Limit Cancellation

7.8.1. Standard feed

In the Market Update message, if there is no more volume for a given price, the limit will be updated with an "Updated Bid" or "Updated Ask" with the quantity set to '0'. If the BBO has no more volume, then it will be updated with a "Best Bid" or "Best Offer" with quantity set to '0'. If the book side is empty, the BBO will be sent with Price set to null according to the SBE protocol and quantity '0'. It will be followed by a limit update with the price of the limit to update and quantity set to '0'.

7.8.2. Regulatory feed

In the RTS 1 Pre Trade Transparency (802), if there is no more volume for a given price, the limit will be updated with the Quantity set to '0'.

7.9. Health Status Mechanism

The **Health Status** (1103) messages will be broadcasted on all channels repeatedly during the day, from the time the **Standing Data** (1007) messages are broadcasted until the **End of Day** (1102) messages are sent.
The *Market Data Sequence Number* for this message will be the last *Market Data Sequence Number* of the message sent by the aggregator of this channel (please be advised that this message can have been sent on another channel managed by this aggregator). For aggregators and detailed description please refer to the section Market Data Sequence Number. For Snapshot, please refer to: Technical messages in Snapshot channels.

7.10. Production Timetable

The Timetable is an overview of the events during a trading day that impact market data activity. Clients should also refer to the **Timetable** (1006) message specifications for full details.

7.10.1. Euronext Cash and Derivatives Markets

Event	Time (CET) for Cash | Time (CET) for Derivatives	Comment
File Download (except for Indices)	2:00 am CET	Clients will connect via HTTPS to download: XML SBE templates, Standing Data files, Timetable files, Tick tables, Reference Spread, Feed configuration files and Pattern ID files
Broadcast start-up	2:00 am CET	Sending Start Of Day (1101) messages and frequently repeated (with Rebroadcast Indicator set to "1") until the beginning of the Standing Data emission in the morning.
Standing Data and Timetables in the feed (except for Indices and forex)	3:00 am CET	The Exchange will send Standing Data (1007) messages for each instrument and on all markets except Forex instrument it will be send by file, and ISE IBF, BF Instrument Reference (1201) messages for ISE IBF only, followed by the Timetable (1006) message for Cash markets only.
Book Retransmission	4:00 am CET	Retransmission of books and associated messages from previous day. This will contain Market Update (1001) or Order Update (1002) messages and for some instruments the Price Update (1003) messages.
Market Status Change	All along the trading session | All along the trading session	Follow the trading timetable as scheduled in the Timetable message (1006). Refer to Trading Day Schedule: Timetable Mechanism section for full details.
Closing and Daily Settlement	NA | Between 5:30 and 9:58 pm CET	
Broadcast close	11:00 pm CET	The market closes on the End Of Day message (1102) emission. It will be sent for 15 minutes with snapshot messages. No other messages will follow for a given trading Day.

8. DATA LIFECYCLE

Market data is disseminated in real time through Kafka topics, and each channel has a defined retention period that determines how long previous messages can be retrieved for recovery.

Retention periods per channel:

- FBMU (Real-time/Snapshot) / BBO / RTS1 Pre-Trade: 1 hour.
- REFT / RTS1 Post-Trade/ RTS2 Post-Trade: 1 trading day, cleared at the end of the day.

These retention windows are the foundation of the recovery process described in Snapshot. When data is within the retention window, recovery is possible directly from Kafka. When data is outside the retention window, the snapshot mechanism (FBMU Only) comes into play.

9. MESSAGE OVERVIEW

9.1. Technical Format Fields

The field formats contained in the messages will adhere to these rules:

- Binary data is in Intel byte order (Little-Endian).
- All integers are unsigned numeric or signed binary using two's complement method.
- All message fields are sent for every message. Only the field values will be broadcast (field names in this document are only for reference purpose).
- All field sizes are fixed and constant.
- Segmentation of messages across packets is not supported, so a message will never straddle a packet boundary.
- Even if it is not always mandatory to be able to process last message version (Schema Version), it is mandatory to check each update for important or regulatory updates.

NULL VALUES

- SBE allows optional fields with a null value. The applicable NULL value is defined in the SBE Template file. In message and field specifications, only the not null values are indicated in the "Values" column.

- All text fields (Text and Alphanumerical Id that have more than 1 character) have a specific null value that is not defined in the SBE Template. This null value is binary 0 (/0) for each character.

- All "Alphanumerical ID" and "Text" fields are alphanumeric based on UTF-8, left aligned and null padded (\0).

Format fields	Description	Null value
Alphanumerical ID	String type identifying an element, left aligned and completed with null padding (\0).	Each character is a UTF-8 null code point (\0)
Amount	Signed or unsigned numerical field representing the price multiplied by the quantity. See the description in Price, Quantity, Ratio And Amount Formats.	Null value defined in SBE Template
Bitmap	Array of bits, each bit specifying whether an optional value is present (set to "1") or not (set to "0") (in Little-Endian). E.g. For the Trade Qualifier bitmap field if its bit in position zero (0) is set to one (1) then it defines the trade as an Uncrossing Trade. At the same time bit in position one (1) can also be set to one (1) which will in this case indicates that this is also a First Traded Price.	No null value
Boolean	This field acts as an enumerated field with the possible values 0 (false), 1 (true) or null value.	Null value defined in SBE Template
Date	Date of an event (in number of days since 01/01/1970 UTC - 01/01/1970 is the day "0").	Null value defined in SBE Template
Decimal Places	Number of decimals associated to a numerical field. See the description in Price, Quantity, Ratio And Amount Formats](#price-quantity-ratio-and-amount-formats)	Null value defined in SBE Template
Enumerated	Information having a delimited set of possible values.	Null value defined in SBE Template Note: The null value here depends on the technical type which can be unsigned integer or character.

Format fields	Description	Null value
Epoch Time in Nanoseconds	UTC Timestamp indicating the number of nanoseconds since epoch (January the 1st 1970).	Null value defined in SBE Template
Integer Time in hhmmss	UTC Timestamp using an integer to define the time as hhmmss.	Null value defined in SBE Template
Intraday Time in Seconds	UTC Timestamp indicating the number of seconds since the beginning of the day.	Null value defined in SBE Template
Numerical	Generic numerical field on unsigned integer.	Null value defined in SBE Template
Numerical ID	Numerical field identifying an element.	Null value defined in SBE Template
Price	Signed numerical field representing a price. See the description in Price, Quantity, Ratio And Amount Formats.	Null value defined in SBE Template
Quantity	Unsigned numerical field representing a quantity of elements (for example a number of shares See the description in Price, Quantity, Ratio And Amount Formats.	Null value defined in SBE Template
Sequence	See the description in §5.3 - Sequence Numbers.	Null value defined in SBE Template
Signed Numerical	Generic numerical field on signed integer.	Null value defined in SBE Template
Text	Text in UTF-8, left aligned and completed with null padding (\0).	Each character is a UTF-8 null code point (\0)
Please find below format correspondence between **ESMA and Euronext fields formats**.		

ESMA Format			SBE format
Symbol	**Data Type**	**Definition**	**Symbol**
{ALPHANUM-n}	Up to n alphanumerical characters.	Free text field.	character [n]
{CURRENCYCODE_3}	3 alphanumerical characters	3-letter currency code, as defined by ISO 4217 currency codes.	character [3]
{DATE_TIME_FORMAT}	ISO 8601 date and time format	Please see here	character [27]
{DECIMAL-n/m}	Decimal number of up to **n** digits in total of which up to **m** digits can be fraction digits	Numerical field for both positive and negative values: ▪ decimal separator is '.' (full stop); ▪ negative numbers are prefixed with '-' (minus). Where applicable, values shall be rounded and not truncated.	character [n]
{ISIN}	12 alphanumerical characters	ISIN code, as defined in ISO 6166.	character [12]

ESMA Format			SBE format
Symbol	**Data Type**	**Definition**	**Symbol**
{MIC}	4 alphanumerical characters	Market identifier as defined in ISO 10383.	character [4]

9.2. Date and Time Conventions

Times and Timestamps are expressed in UTC (Universal Time, Coordinated) and are synchronized using Precision Time Protocol (PTP).

They are defined in number of nanoseconds since 01/01/1970 UTC based on Unix Epoch or number of seconds since the beginning of the day.

Phase Time and Scheduled Event Time for Cash markets are expressed in an unsigned integer 32 to define a time in hhmmss UTC. Thus, this time is in the range from 0 to 235 959. Each time 60 (seconds) is reached, it increments the hundreds by 1 and seconds are reset to 0. The same applies every 60 minutes (or for each increment of a second when we have 59 minutes and 59 seconds), system increments the 10 thousands by 1 and reset all the inferior figures to 0.

Example: if we have 25959 (2h 59m 59s), the next second will be 30000 (3h 0m 0s).

Dates are defined in number of days since 01/01/1970 UTC (01/01/1970 is the day "0").

Dates and Times formatted for **ESMA reporting** (EU MiFID II and onshored UK Regulation) are defined with a 27 bytes character string following **ISO 8601**:

YYYY-MM-DDThh:mm:ss.ddddddZ.

Where:

- "YYYY" is the year.
- "MM" is the month.
- "DD" is the day.
- "T" is a constant letter used as a separator between ""YYYY-MM-DD" and "hh:mm:ss.dddddZ".
- "hh" is the hour.
- "mm" is the minute.
- "ss.dddddd" is the second and its fraction of a second.
- "Z" is a constant letter standing for UTC time.

9.3. Sequence Numbers

The feed contains two sequence numbers:

9.3.1. The Packet Sequence Number (PSN)

The Packet Sequence Number (PSN) is part of the packet header and should be used for packet ordering. Each channel has its own PSN sequence.

9.3.2. The Market Data Sequence Number

Aggregators are internal components that are dealing with a set of channels. The Market Data Sequence Numbers are managed at the aggregator level. Each one of them has its own sequence, starting from 0 and incrementing by step of 1 along the day. Since clients may listen to only a subset of the channels managed by one aggregator, they will not see all the Market Data Sequence Numbers in the messages they get from the channels they listen to. Therefore, on one channel the Market Data Sequence Numbers will increment all along

the day but not necessarily by step of 1. The behavior of the Market Data Sequence Numbers for the following messages is different. Please refer to their message definition for further explanations:

- **Start Of Day** (1101)
- **End Of Day** (1102)
- **Health Status** (1103)
  Reminder: For gap detection: please use the Packet Sequence Number (PSN).

9.4. Price, Quantity, Ratio and Amount Formats

All prices must be processed with two values: the price value in an integer and its scale code. Each instrument must be linked to the associated Price / Index Level Decimals from the Standing Data message or file. Prices must be calculated according to the following formula:

Price = Integer/10^(Price/Index Level Decimals)

For example, a price of 27.56 can be represented by an Integer of 275600 and a Price / Index Level Decimals of 4. Only 2 prices are not using the generic field above: "Issue Price" and "Strike Price". Since these fields have decimals computed instrument per instrument, they have a dedicated decimal location field that are respectively: "Issue Price Decimals" and "Strike Price Decimals".

Note 1: The same mechanism is used for:

- All quantities that are calculated with Quantity Decimals
- All ratios and percentages with Ratio / Multiplier Decimals
- All amounts with Amount Decimals

Note 2: Prices, quantities and amounts for EU and UK MiFIDII do not follow this "Price / Index Level Decimals" behavior. The complete format is described in the Field Description.

9.5. Trading Day Schedule: Timetable Mechanism

A trading day (or business day) is a day when the Exchange is open and allows buying and selling financial instruments. A trading day cannot span several calendar days. Typical trading days are Monday through Friday. Non-trading days are the weekends and some holidays.

9.5.1. Trading Cycle

During the trading day, financial instruments are traded following a trading cycle, which is the sequencing of market transitions (up to 30) and market events scheduled at precise times within a defined duration.

- Market transition
  A market transition is the triggering of a new Market Phase. Market phases that can be scheduled in a trading cycle are the following:
  - 'Inaccessible': no access to the market, typically at the beginning of a trading day and between two trading days; Equivalent to a 'down' status of the trading chain;
  - 'Closed': the market is fully available for Market Operations, who can perform consistency checks and other operations; Market participants can modify and cancel their orders (no order creation) on Derivative markets and cancel only on Cash markets;
  - 'Call': the market is available to market participants and orders are collected without matching; some information is broadcast, such as the best bid/offer prices (BBO), the Indicative Matching Price (IMP);
  - 'Uncrossing': the matching engine applies an uncrossing algorithm were crossed orders (i.e. bid orders with prices higher than offer orders) are matched;
  - 'Continuous': entering orders are matched as soon as a counterpart can be found.
- Market Events
  Market Events provide specific information to market participants, such as the expiry time of an instrument. There are two types of market events:

- Market events explicitly configured within the trading cycle pattern;
- Market events triggered by Market Operations or the trading engine itself (out of scope).

- Link between a product and its Trading Cycle
  Each product (respectively a cash instrument or a derivative contract) is linked to a Trading Cycle indicating the sequence of market transitions and market events. The Trading Cycles are identified by a field provided in referential data: Pattern Identifier. It is available either in on the feed through respectively Standing Data (1007) and Contract Standing Data (1013) message or through Standing Data files. The timetables themselves are provided in a dedicated file - Timetable File (1006).

9.5.2. Broadcast Information

- Start of trading day
  At the beginning of the Trading Day and before traders start sending any orders, the Matching Engine generates and broadcasts:

  - A "Timetable" message for each trading cycle pattern indicating for each pattern ID the sequence of market phase transitions and market events to be triggered for the coming trading day;
  - A "Market Status Change" message for each Contract/Instrument which was in a Suspended status or whose order entry rejection flag is set to "0" (Order entry, modification and cancellation forbidden) to indicate to Market Participants that the Instrument cannot be traded.

- Throughout the trading day
  Throughout the trading day, the Matching Engine generates:

  - A "Timetable" message each time Market Operations modify the trading cycle of a contract;
  - A "Market Status Change" message at the time of the transition for a derivatives contract from one market phase into another one;
  - A "Market Status Change" message at the time of the transition for a derivatives instrument from one status into another one (in case the Derivatives instrument does not follow anymore the contract phase)
  - A "Market Status Change" message at the time of the transition for a cash instrument from one status into another one.
  - A "Market Status Change" message whenever market events are scheduled, triggered or cancelled.

9.6. Instrument Ticks

- Link between a product and its Tick Table:
  Each product (respectively a cash instrument or a derivative contract) is linked to a Tick table indicating for each price range the ticket applied in Optiq. The tick tables are identified by a field provided in referential data: Tick Size Identifier. It is available either in the feed through respectively Standing Data (1007) and Contract Standing Data (1013) messages, or through Standing Data files. The tables themselves are provided in dedicated files (respectively **Cash Tick Size Referential File** and **Derivatives Tick Size Referential File**).

Note: Settlement Tick Sizes and Exchange Delivery Settlement Prices Tick Sizes are still provided independently from the tick size in derivatives referential data, as indication of the parameters used for the computations of the settlements.

9.7. Instrument Identifiers

An instrument is identified by its **Symbol Index**, **ISIN** and/or the **AMR** (for the Derivatives) for all Optiq messages.

9.7.1. Symbol Index

The Symbol Index is assigned by the exchange and will not change over the lifetime of the instrument, nor used again after instrument expiration.

Any Corporate Action leading to a change of ISIN will lead to change of Symbol Index. These Corporate Actions are generally part of the mandatory reorganisation events; the most frequent ones being stock split, reverse stock split, change of name / denomination. However the ISIN change is not systematic and will be in any case communicated upfront through the Euronext Corporate Action notices.
The standard security identifier (for example ISIN), mnemonic, tick size, instrument name and other instrument characteristics are carried only in the **Standing Data message** (1007), **Outright Standing Data** (1014), **Strategy Standing Data** (1012), **Contract Standing Data** (1013) messages and in the Standing Data files on servers. As such, the client applications must link the Symbol Index which is sent in all messages, with other instrument characteristics present in the Standing Data messages or files.

9.7.2. Automated Market Reference (AMR)

The AMR Code remains in the referential data for the Derivatives to allow clients to map it to the Symbol Index used in trading in Optiq. The AMR Code is built from the following template and only applicable for Derivatives:

Instrument attribute	Description	Attribute length (char)	Example
Exchange code	Code used to identify the Market Place upon which the product is listed	1	P - Paris Equity J - Paris Index
Contract Type	Code to identify the type of contract	1	F- Futures O - Options
Contract Code	Code assigned to identify the contract	4	FCE - CAC40 Index TO1 - Total SA 1FIB - ITA Index Future FIB
Expiry	Expiry year and month Format for all contracts: YYMM - "YY" is the last number of the year - "MM" is the month	4	230421 – 2023, 21st April Expiry = 2304
Expiry Day code	Expiry day to be encoded : - Days from 1 to 9 : number 1 to 9 - Days from 10 to 31 : letters in alphabetic order : A, B, …, V	1	230421 – 2023, 21st April Expiry Day code = L
Strike Price number of decimals	'1' – '4': Strike price number of decimals '0': Future instrument (strike price not applicable) 'S': Special AMR used for instrument with strike price decimals > 4	1	1 2 3 4 0 S
Strike Price	Strike price of the option.	-For Strike Price greater or equal to 10000, the first char represents a multiple of 10000 (10 = A, 11 = B,…, 35 = Z), the last 4 chars are the price modulo 10000 left padded with '0' -For Special AMR (Strike Price number of decimals = 'S'), Strike Price is converted in base 36, left padded with 0.	5
Instrument Type	Code to identify type of Derivative Instrument	1	F - Futures C - Call P - Put

Examples:

Instrument description	Strike Price Denominator	AMR code
ITA Index Future FIB – 2023, March 17th - Milan Index	N/A	IF1FIB2303H000000F
TOTAL Call Option – 2025, April 18th - Strike 43€ - Paris Equity	100 – So Strike Price number of decimals is 2	POTO1 2504I204300C

The AMR code of a strategy has a different composition and is built from the following template:

Strategy Attributes	Description	Attribute Length (char)
Exchange Code	Code used to identify the market pace upon which the product is listed	1
Contract Type	Code to identify the type of contract	1
Contract Code	Code assigned to identify the contract	4
LegNumber	Number of legs of the strategy. Leg number to be encoded: - Legs from 1 to 9 : number 1 to 9 - Legs from 10 to 31 : letters in alphabetic order : A, B, …, W	1
StrategyCode	Code used to identify the type of the strategy	1
Filler	Value of the filler is '0000'	4
StrategyCreationNumber	Corresponds to the last 5 numbers of the symbol index	5
StrategyIdentifier	Value is 'S' to identify the strategy	1

10. HOW TO ...

10.1. Standard Feed

10.1.1. Trade and Quote Cancellation

The trade will be cancelled with all the details of the trade in:

- Market Update (1001) message with Market Data Update Type "50 – Trade Cancellation". It will not be possible from this message to make the link with the original trade.
- Full Trade Information (1004) with Trade Type "24 – Trade Cancellation" and MMT Modification Indicator "CANC – Trade Cancellation". All other fields will be set with original trade details including the MiFID Execution ID field which allows client to easily identify the trade cancelled for this Symbol Index.

10.1.2. ... Determine the Number of Repeating Sections in a Message

The number of repeating sections is defined in the second byte of the "Repeating Section Header" (see SBE Message Structure).

10.1.3. ... Determine the Length of a Packet

The length of the packet is set in the Kafka message. It includes the TCP header length.

10.1.4. ... Determine the Length of a Message

The length of a message (including the length of the "Frame" and "SBE header" fields) is in the field "Frame" (see Messaging Protocol and Publishing Model).

10.1.5. ... Manage a New Version of a Message if the Client Has not Implemented the New Fields

Please refer to the explanations in the paragraph Backward And Forward SBE compatibility

10.1.6. ... Look for a Trade

This is possible by checking in Full Trade Information message (1004) the MiFID Execution ID field. It is the association of Symbol Index, EMM and Execution ID completed with null on the right to complete until the 52 bytes of the field are filled.

10.1.7. ... Determine a Closing Price

Closing Price is determined depending on the Closing Price Type defined at the instrument level, this setting is defined by the Exchange and shared with members through the **CashStandingDataFile** (9007);

- Triggering of the computation of the closing price is broadcasted to the market through the *Market Status* Change *(1005) message with a dedicated* Scheduled Event* value '16' (Closing Price);
- Closing Price value is communicated through the **Price Update** (1003) message and flagged by a dedicated *Market Data Price Type* '33' (Closing Price);
- On top of the Market Data Price Type, members must also use the new *Price Qualifier* field to determine the exact source of the closing price value broadcasted in the Price field.

Example: if a given instrument has the *Closing Price Type* set to '1' (Last Traded Price) but there were no trades for that instrument during that trading day, then the closing price is set to the Last Adjusted Closing Price value. In this case, the **Price Update** (1003) message is sent with *Price* field set to "LACP" value, *Market Data Price* Type field set to '33' (Closing Price) and the *Price Qualifier* field set to '1' (Last Adjusted Closing Price);

10.1.8. … Determine the Option Underlying Expiry

If the Underlying Type is an Index or a Commodity (F or C), the field Underlying ISIN Code is populated at contract level. Additionally, underlying Expiry at Contract Level is set to null. The actual alternate underlying is populated at outright level:

- Index future expiry the underlying is an index
- Commodity future expiry the underlying is a commodity
  AMR and SymbolIndex of the future expiry is provided at the outright level. This will allow customers to look-up the AMR to find the underlying future expiry.

10.1.9. … Determine Round Lot with Quantity Notation

In order to determine the Round Lot, clients have to consider field Quantity Notation as follow:

- If Quantity Notation is equal to 'UNT' then Round Lot equals Lot Size.
- If Quantity Notation is equal to 'FMT' then Round Lot equals Par value
- If Quantity Notation is equal to '-'then Round Lot equals 1.

It is important for Par Value to apply the decimal field associated

10.1.10. … Use an Execution Summary Message

Execution Summary is a mechanism made available for Cash (Warrants and Block excluded) and Derivatives segments to provide a quick and efficient way for clients to make decisions on remaining state of the order book after an aggressive order execution. Execution Summary is published in Euronext Stream Pro using the Market Update (1001) messages, indicating the Total executed quantity (no matter how many price levels the aggressive order has executed against), and the Last (or deepest into the book) price that the aggressive order has executed against.

The sequencing of this broadcasting is the following:

- Execution summary:
  - Last price hit by the aggressive order
  - Total executed quantity
- Trades
- BBO
- Full depth of the book

Execution Summary is indicated using two Market Data Update Type values:

- '90' – Bid Execution Summary
- '97' – Offer Execution Summary

As the Execution Summary is always sent first following execution of a Trade upon reception of this message clients can anticipate the upcoming limit update on the resting side of the execution. Technically, Execution Summary is sent as soon as possible, i.e. the market data packet is sent immediately once the event received.

10.1.11. … Determine the Statistics On and Off-Book for an Instruments (COB, Wholesales, RFC)

10.1.11.1. Determine the Statistics On and Off-Book

Optiq Provides daily aggregated volume to the market through the dedicated **Statistics** (1009) messages. This section aims to describe how to reconcile the provided statistics with the trade published on Market Data through the **Full Trade Information** (1004) or **Market update** (1001) message.

- On Exchange On Book Update Type
  This Statistic is the aggregated volume executed on-book. It is computed on a per instrument symbol index basis and is equal to the sum of all trades disseminated on the Central Order Book during the day through both **Full Trade Information** (1004) and **Market Update** (1001) messages.

- On Exchange Off Book Update Type
  This statistic is the aggregated volume executed off-book. It is computed on a per Instrument level and is equal to the sum of all trades executed through either the Wholesale or the RFC facility during the day. Trades in case of Wholesales (Against Actual, Exchange for Swap or Large in Scale transaction) are published via **Full Trade Information** (1004) message only – not via **Market Update** (1001).
  It is equal to the sum of:
  - The RFC trades (dedicated trade type) disseminated following an RFC through both **Full Trade Information** (1004) or **Market Update** (1001) messages
  - The LIS, AA and EFS Trade volume disseminated through 1004 messages
  - The residual volume of a LIS Package Trade wholesale transaction to which this instrument contributes, disseminated through either the *Leg Last Traded Quantity* field in the **LIS Package Structure** (1016) or either computed by using the **Full Trade Information** (1004) – sent at contract level and indicating the *Instrument Symbol Index* in the dedicated repeating group.

This residual volume is computed as follows: volume of the wholesale transaction multiplied by leg weight as identified by the strategy definition in the related **LIS Package Trade** (1016) message:

- Residual Volume (i)=TransactionVolume X Leg Ratio (i),i representing the symbol index.

Example: in case of a LIS on a Butterfly on the CAC40 Option contract, with 3 options A, B and C, where B= A-2B+C (*), with a volume of 125 lots:

- SymbolIndex of Full Trade Information Contract
- Strategy Code of the Butterfly
- Volume executed: 125
- SymbolIndex of A, B and C instruments

The residual volume on each instrument is then equal respectively for A, B and C to 125, 250 and 125 resulting from strategy volume X leg ration, where each leg ratio is defined by (*).
The weights of each component are provided to the market via the dedicated LIS Package Structure (1016) message.
As a consequence, the Statistics (1009) message are published immediately after the CAC40 Option (1004) message disseminated for the LIS transaction, increasing accordingly the aggregated volumes.

- On and Off-book On Exchange Update Type
  This statistic is the aggregation of the two previous ones.

10.2. Regulatory Feed

10.2.1. Trade Cancellation

The trade will be cancelled with all the details of the trade in:

- RTS 1 Post Trade Transparency (803) with "MMT Modification Indicator" = 'CANC' in the Flags field.

- RTS 2 Post Trade Transparency (804) with "MMT Modification Indicator" = 'CANC' in the Flags field.

10.2.2. … Determine the Number of Repeating Sections in a Message

The number of repeating sections is defined in the second byte of the "Repeating Section Header" (see SBE Message Structure).

10.2.3. … Determine the Length of a Packet

The length of the packet is set in the Kafka message. It includes the TCP header length.

10.2.4. … Determine the Length of a Message

The length of a message (including the length of the "Frame" and "SBE header" fields) is in the field "Frame" (see Messaging Protocol and Publishing Model).

10.2.5. … Manage a New Version of a Message if the Client Has not Implemented the New Fields

Please refer to the explanations in the paragraph Backward And Forward SBE compatibility

10.2.6. … Look for a Trade

This is possible by checking in The RTS 1 Post Trade Transparency (803)/RTS 2 Post Trade Transparency (804) the MiFID Trade Unique Identifier field.

10.3. … Manage BBO : Standard Feed

Best Bid and Offer (BBO) updates are sent with a price and a quantity to indicate the best limit on bid or offer side. When the Best Bid or Best Offer changes, a new Best Bid or Best Offer update is sent out and replaces the previous sent Best Bid or Best Offer. If a side of the book becomes empty, then a Best Bid or Best Offer is sent with quantity set to 0 and price set to null to clear the Best Bid or Best offer.

10.4. … Derive Implied Prices Volume from the Aggregated BBO : Standard Feed

Implied price volumes are included in the Market data messages communicated for the associated price level. As implied are not considered as orders the associated Implied prices are displayed on the market only if they contribute to the Best Limit.

When an implied price contributes to a limit, the volume available on the market at that price increases without incrementing the number of orders. This logic allows client to distinguish volumes of implied prices vs. those of explicit orders. As such it is possible to have a Best Limit displayed with price and volume but with a number of orders equal to zero (when relying exclusively on implied prices).

Implied prices and volume are only provided at BBO in the messages with Market Update Type (1) and (2). The limit Market Update Type only include explicit volume.

11. MESSAGES

Please find below a table containing the correspondence between the Kafka Topic names and available messages:

Kafka Topic names mask	Environment	Available messages
0xxx1xxxx	PROD	Referential messages
0xxx3xxxx	pEUA	Referential messages
1xxx1xxxx	PROD	Market Data messages
1xxx3xxxx	pEUA	Market Data messages
2xxx1xxxx	PROD	Regulatory (RTS) messages
2xxx3xxxx	pEUA	Regulatory (RTS) messages

Euronext Stream Pro provides real-time messages for regulatory purposes in dedicated Kafka topics, under specific format which are described below.

11.1. Referential messages

11.1.1. Channels Configuration (805)

Euronext Stream Pro provides on daily basis Channels Configuration messages describing the content of each Kafka topic.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MessageName	Message Name	Name of the message.	Text	255	(Free Text)	Mandatory
SessionTradingDay	Session Trading Day	Date of the current trading session (in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Mandatory
KafkaTopicName	Kafka Topic Name	Identifies the name of Kafka topic where MD Stream pushes messages.	Alpha numerical ID	20	(See field description)	Mandatory
KafkaTopicContentLabel	Kafka Topic Content Label	Description of the content of the Kafka topic.	Text	255	(Free Text)	Mandatory
DataSetFamily	Data Set Family	Defines the type of set of data to be provided in the Kafka topic; for example: System, MDG Feed or Regulatory	Text	255	(Free Text)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Environment	Environment	Operating environment of the system	Enumerated	1	(See field description)	Optional
PartitionNumber	Partition Number	Identifies a Partition within an Optiq Segment	Numerical	1	0..2^8-2	Optional
OptiqSegment	Optiq Segment	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.	Enumerated	1	(See field description)	Optional
Subsegment	MDG Set Of Channels ID	Identifier of an MDG Set Of Channels.	Enumerated	1	(See field description)	Optional
ChannelType	Channel Type 2	Defines the channel.TO BE DELETED, IS JUST A WORKAROUND TO UNLOCK TRAIN261	Enumerated	1	(See field description)	Optional
EmitterType	Emitter Type	The Emitter Type defines whether an Emitter emits on Real Time or Snapshot Channels	Enumerated	1	(See field description)	Optional

11.2. Market Data messages

Euronext Stream Pro provides real-time Market Data messages in dedicated Kafka topics, under specific format which are described below.

11.2.1. Technical messages

The message specification format is as follow:

FIELD	DESCRIPTION	LENGTH
Block	The block is all the non-repeated fields.	Variable (in bytes)
Repeating section header	This is how many times the repeating section is repeated and the length of a repeating section. It will not be displayed in any below message. It is set to 0 if there is no repeating section.	2 bytes (1byte for the length, 1byte for the count)

FIELD	DESCRIPTION	LENGTH
Repeating section	All the fields that are repeated. All these fields are in bold and green table borders	Variable (in bytes)

All field lengths are in bytes. Field definition might not be exhaustive, please go to the Field Description section. Further details will be provided.

11.2.1.1. Start Of Day (1101)

Start Of Day (1101) messages are sent periodically until another Market Data message is sent.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
SessionTradingDay	Session Trading Day	Date of the current trading session (in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Mandatory

11.2.1.2. End Of Day (1102)

End Of Day (1102) messages are sent periodically at the end of day to inform that the system will shut down 15 minutes after the first End Of Day (1102).

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
SessionTradingDay	Session Trading Day	Date of the current trading session (in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Mandatory

11.2.1.3. Health Status (1103)

The Health Status messages are broadcasted on all channels repeatedly all along the day as soon as the Standing Data messages are broadcasted and until End of Day messages are broadcasted.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
EventTime	Event Time	(Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Mandatory

11.2.1.4. Technical Notification (1106)

Technical Notification message is used to notify the beginning of Start and End Retransmissions.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Optional
TechnicalNotificationType	Technical Notification Type	Indicates the technical notification sent.	Enumerated	1	(See field description)	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory
RetransmissionStartTime	Retransmission Start Time	Indicates when the retransmission starts. For trade retransmission, all the trades previously received by the clients that have an "Event time" strictly lower than this field are valid (Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
RetransmissionEndTime	Retransmission End Time	Indicates when the retransmission ends. For trade retransmission, all the trades previously received by the clients that have an "Event time" strictly higher than this field are valid (Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Optional
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Optional

11.2.2. Referential messages

11.2.3. Referential messages

11.2.3.1. Timetable (1006)

The Timetable message indicates the instrument trading patterns (state change sequence) for the current trading day.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				
PatternID	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
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Optional
Timetables length	Timetables length					Mandatory
Timetables occurrences	Timetables occurrences					Mandatory
PhaseTime	Phase Time	(Time in an integer on 4 bytes expressed as hhmmss).	Integer Time in hhmmss	8	0..2^64-2	Mandatory
PhaseId	Phase Id	Indicates the phase of the instrument.	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PhaseQualifier	Phase Qualifier	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 – Stressed Market Conditions: indicates stressed market conditions (0:	Bitmap	2	0..2^16-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		No ; 1: Yes) - bit in position 7 – Exceptional Market Conditions: indicates exceptional market conditions (0: No ; 1: Yes) - bit in position 9 - Quoting Period: It indicates a Call Phase during which only a specific Trading Firm can send its order(s) to the Trading System (0: No ; 1: Yes). - bit in position 10 - Execution Prevention Across All Firms: It indicates the Execution Prevention Across All Firms (0: No ; 1: Yes). For IPO operation, only an Assigned Broker Trading Firm (Account Type = 16) can send its Sell order(s) during the "Quoting Period" for example.				
TradingPeriod	Trading Period	Provides the current trading period.	Enumerated	1	(See field description)	Mandatory
OrderEntryQualifier	Order Entry Qualifier	Field indicating the state of the Order Entry for the current market state.	Enumerated	1	(See field description)	Optional
Session	Session	Current market session.	Enumerated	1	(See field description)	Mandatory
ScheduledEvent	Scheduled Event	Type of Scheduled Event. Notifies an event that will occur at the Scheduled Event Time.	Enumerated	1	(See field description)	Optional

11.2.3.2. Standing data (1007)

The Standing Data message provides instrument characteristics for Cash and Index products, valid for the current trading day.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory
OptiqSegment	Optiq Segment	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.	Enumerated	1	(See field description)	Mandatory
PartitionID	Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
FullInstrumentName	Full Instrument Name	Full Instrument Name.	Text	102	(Free Text)	Optional
InstrumentName	Instrument Name	Instrument Name	Text	18	(Free Text)	Mandatory
InstrumentTradingCode	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.	Alphanumerical ID	15	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
InstrumentGroupCode	Instrument Group Code	Instrument Group / Class Identifier.	Alphanumerical ID	2	(See field description)	Mandatory
ISINCode	ISIN Code	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.	Alphanumerical ID	12	(See field description)	Mandatory
PriceDecimals	Price / Index Level Decimals	Indicates the number of decimals for each Price / Index Level related to this Symbol Index	Decimal Places	1	0..2^8-2	Mandatory
QuantityDecimals	Quantity Decimals	Indicates the number of decimals for each Quantity related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
AmountDecimals	Amount Decimals	Indicates the number of decimals for each Amount related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
RatioDecimals	Ratio / Multiplier Decimals	Indicates the number of decimals for each Ratio / Multiplier related to this Symbol Index	Decimal Places	1	0..2^8-2	Mandatory
CFI	CFI	Classification code of a financial instrument defined by the ISO-10962:2015 standard.	Text	6	(Free Text)	Mandatory
InstrumentEventDate	Instrument Event Date	(in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
StrikePrice	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. 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.	Price	8	-2^63+1.. 2^63-1	Optional
DarkEligibility	Dark Eligibility	Indicates the Eligibility to dark. 0 is not eligible, 1 is eligible.	Boolean	1	0..2^8-2	Optional
DarkLISThreshold	Dark LIS Threshold	Defines the minimum amount, in trading currency, of an order to benefit from the LIS (Large In Scale) pre-transparency waiver (to be calculated with the Amount Decimals). It is not related to Dark project even mentioned in the name of the field.	Amount	8	0..2^64-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
DarkMinQuantity	Dark Minimum 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
DateOfLastTrade	Date Of Last Trade	(in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Optional
DepositaryList	Depositary List	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: - '00001' – Euroclear France - '00002' – CIK (Belgium) - '00003' – NECIGEF (the Netherlands) - '00004' – X/N (BoB service) - '00005' – VIF (non-fungible Belgian instruments) - '00006' – Euroclear Bank - '00007' – NIEC - '00008' – Physical - '00009' – Euronext Paris non Euroclear France - '00010' – Interbolsa - '00000' – No depository organization - 'Nulls' – Not significant	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MainDepositary	Main Depositary	Identifies the default (or main) depository organization of the instrument (between the possible 4 depositaries registered) used by priority for the settlement (for example: multi-listed instruments which have several depositories). For Cash Markets this data has to be treated in consideration of the data Depositary List used by the clearing house to determine the relevant system for settling trades. Valid values are the same as for "Depositary List". Valid values are: - '00000' - No depository organization - '00001' - Euroclear France - '00002' - Euroclear Belgium - '00003' - Euroclear Nederland - '00004' - X/N NBB (National Bank of Belgium) - '00005' - VIF (non-fungible Belgian instruments) - '00006' - Euroclear Bank - '00008' - Physical - '00009' - EURONEXT NON EUROCLEAR	Alpha numerical ID	5	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- '00010' - Interbolsa - '00012' - Monte Titoli - '00015' - SIS SegaInterSettle AG - '00016' - OESTERREICHISCHE KONTROLLBANK AG - '00017' - Vaerdipapircentralen (VP) - '00018' - Clearstream Banking A.G. - '00019' - CLEARSTREAM BANKING S.A. - '00021' - KELER - '00023' - Finnish Central Securities Depository Ltd - '00028' - IBERCLEAR CENTRAL BANK - '00030' - Euroclear UK - Ireland Limited - '00050' - VERDIPAPIRSENTRALEN, VPS - '00051' - STREDISKO CENNYCH PAPIRU - '00052' - Swedish Central Securities Depository Ltd - '00053' - WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET - 'Nulls' - Not significant				
FirstSettlementDate	First Settlement Date	(in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Optional
GuaranteeIndicator	Guarantee Indicator	Indicates if the trade is guaranteed or not (for clearing purpose)	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ICB	ICB	Identifies for a listed instrument, the economic subsector of the issuing company in the ICB (Industry Classification Benchmark) classification. Following announcement by FTSE Russell of the structural changes to the Industry Classification Benchmark (ICB) this field contains the "legacy" format of ICB. Until completion of the transition this field will be populated instead of or in parallel with the field 'ICB Code'.	Alphanumerical ID	16	(See field description)	Optional
IssuingCountry	Issuing Country	Issuing country. Provides the ISO 3166 (Alpha 3) code for the country of headquarter company that issued the instrument.	Alphanumerical ID	3	(See field description)	Optional
LastAdjustedClosingPrice	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). Not provided for European instruments.	Price	8	-2^63+1.. 2^63-1	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
LotSize	Lot Size deprecated	For Cash and Derivatives, it defines a multiple of the tradable quantity.	Quantity	8	0..2^64-2	Optional
MaturityDate	Maturity Date	On Cash, Maturity Date of the instrument (text formatted as YYYYMMDD). On Derivatives, Maturity ID of the instrument (text formmated as YYYYMM00).	Text	8	(Free Text)	Optional
MaximumDecimalsInQuantity	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

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MIC	MIC	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-	Alpha numerical ID	4	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MICList	MIC List	Identifies the Euronext markets on which an instrument is listed by its MIC (Market Identification Code). 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: - The first MIC is the same than the "Market Identification Code (MIC) of the listed instrument - The others MIC indicate the other listing places	Alpha numerical ID	20	(See field description)	Optional
CountryOfExchange	Country Of Exchange	Country of exchange is the Country associated to the MIC following ISO 3166 Alpha-3.	Alpha numerical ID	3	(See field description)	Optional
Mnemonic	Mnemonic	Mnemonic code of the instrument. This field is not populated for every instrument. As of 2022, this field should no longer be used, in favor of the Long Mnemonic created to handle Borsa Italiana's Mnemonics of length 6.	Alpha numerical ID	5	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
UnderlyingMIC	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.	Alpha numerical ID	4	(See field description)	Optional
UnderlyingISINCode	Underlying ISIN Code	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.	Alpha numerical ID	12	(See field description)	Optional
TradingCurrency	Trading Currency	Code of the currency (ISO 4217-3A).	Alpha numerical ID	3	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
CurrencyCoefficient	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). 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. 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).	Numerical	4	0..2^32-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingCurrencyIndicator	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. 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'.	Enumerated	1	(See field description)	Optional
StrikeCurrencyIndicator	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. 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'.	Enumerated	1	(See field description)	Optional
NumberInstrumentCirculating	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

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ParValue	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
QuantityNotation	Quantity Notation	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	Text	3	(Free Text)	Optional
InstUnitExp	Instrument Unit Expression deprecated	Unit in which the instrument is quoted.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
SettlementDelay	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. This is generally a standard period for Euronext Cash markets. Permitted Values - 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).	Alphanumerical ID	2	(See field description)	Optional
StrikeCurrency	Strike Currency	Code of the strike currency (ISO 4217-3A).	Alphanumerical ID	3	(See field description)	Optional
TaxCode	Tax Code	Tax deduction code to which the instrument belongs.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TypeOfCorporate Event	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. This data has to be treated in consideration of the date of the event included into the header of the message. Valid values are: "00" – No specific event "01" – Dividend payment in cash or in stocks "02" – Interest payment (for securities which the price is not in % of the nominal) "03" – Interest payment (for securities which the price is in % of the nominal "04" – Split "05" – Bonus (i.e. attribution) "06" – Subscription "07" – Share allocation	Alpha numerical ID	2	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		"08" – Share swap "09" – Reverse split "10" – Merger "11" – Final Fix Income redemption "12" – Capital amortization "13" – Draw announcement (Belgian Fix Income only) "14" – Block trade of controlling interest "15" – Optional corporate events(dividend option) "16" – Complex corporate event "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) "18" – Ex event (event with a detachment/adjustment on the security's price "22" - Luxembourg Stock Exchange corporate event				
TypeOfMarketAdmission	Type Of Market Admission	Indicates the type of market to which an instrument has been listed.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
RepoIndicator	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
IssuePrice	Issue Price	(to be calculated with Issue Price Decimals).	Price	8	-2^63+1.. 2^63-1	Optional
NominalCurrency	Nominal Currency	Code of the nominal currency (ISO 4217-3A).	Alphanumerical ID	3	(See field description)	Optional
IssuePriceDecimals	Issue Price Decimals	Indicates the number of decimals for Issue Price related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
StrikePriceDecimals	Strike Price Decimals	Indicates the number of decimals for Strike Price related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
LiquidInstrumentIndicator	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
MarketOfReferenceMIC	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

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ICBCode	ICB Code	Identifies for a listed instrument, the economic subsector of the issuing company in the ICB (Industry Classification Benchmark) classification. Following announcement by FTSE Russell of the structural changes to the Industry Classification Benchmark (ICB) this field contains the "new" format of ICB. Until completion of the transition this field will be provided in parallel with the field 'ICB'.	Alphanumerical ID	8	(See field description)	Optional
ThresholdLISPostTrade60mn	Threshold LIS Post Trade 60mn	Defines the amount, in trading curreny, of an order to benefit from the Trade Deferred publication to 60 min (to be calculated with the Amount Decimals). It is not a LIS Threshold even mentioned in the name of the field.	Amount	8	0..2^64-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ThresholdLISPostTrade120mn	Threshold LIS Post Trade 120mn	Defines the amount, in trading curreny, of an order to benefit from the Trade Deferred publication to 120 min (to be calculated with the Amount Decimals). It is not a LIS Threshold even mentioned in the name of the field.	Amount	8	0..2^64-2	Optional
ThresholdLISPostTradeEOD	Threshold LIS Post Trade EOD	Defines the amount, in trading curreny, of an order to benefit from the Trade Deferred publication to EOD (to be calculated with the Amount Decimals). It is not a LIS Threshold even mentioned in the name of the field.	Amount	8	0..2^64-2	Optional
LongMnemonic	Long Mnemonic	Mnemonic code of the instrument. This field is not populated for every instrument. Introduced to comply with Borsa Italiana's Mnemonic of length 6.	Alphanumerical ID	6	(See field description)	Optional
MaxOrderAmountCall	Max Order Amount Call	Maximum order amount during a call phase, adjusted by the Pool Factor.	Amount	8	0..2^64-2	Optional
MaxOrderAmountContinuous	Max Order Amount Continuous	Maximum order amount during a continuous phase, adjusted by the Pool Factor.	Amount	8	0..2^64-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MaxOrderQuantityCall	Max Order Quantity Call	Maximum order quantity during a call phase, adjusted by the Pool Factor.	Quantity	8	0..2^64-2	Optional
MaxOrderQuantityContinuous	Max Order Quantity Continuous	Maximum order quantity during a continuous phase, adjusted by the Pool Factor.	Quantity	8	0..2^64-2	Optional
PoolFactor	Pool Factor	Allows to calculate how much of the original loans have yet to be repaid. Internally: Pool Factor is used to adjust Max Order Amount Call, Max Order Amount Continuous, Max Order Quantity Call and Max Order Quantity Continuous.	Numerical	4	0..2^32-2	Optional
MiFIDInstrumentCategory	MiFID Instrument Category	Indicates to which MiFID instrument categorization the instrument belongs to.	Enumerated	1	(See field description)	Optional
EMMPatternReplength	EMMPatternReplength					Mandatory
EMMPatternRepoccurrences	EMMPatternRepoccurrences					Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				
PatternID	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
TickSizeIndexID	Tick Size Index ID	ID of the tick size table available in the Tick Table file.	Numerical ID	2	0..2^16-2	Optional
MarketModel	Market Model	Market Model identifier.	Enumerated	1	(See field description)	Optional
LotSize	Lot Size	For Cash and Derivatives, it defines a multiple of the tradable quantity.	Quantity	8	0..2^64-2	Optional
InstUnitExp	Instrument Unit Expression	Unit in which the instrument is quoted.	Enumerated	1	(See field description)	Optional
Anonymous	Anonymous	Indicates if the Market Data notifications are to be anonymous or not. (0 = No ; 1 = Yes)	Boolean	1	(See field description)	Optional

11.2.3.3. Contract Standing Data (1013)

The Contract Standing Data message provides the characteristics of Derivatives contracts and the underlyings. Contract Standing Data will be sent first, followed by the Outright Standing Data and Strategy Standing Data.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OptiqSegment	Optiq Segment	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.	Enumerated	1	(See field description)	Mandatory
PartitionID	Partition ID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	2	0..2^16-2	Mandatory
ContractEventDate	Contract Event Date	(in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Optional
ExchangeCode	Exchange Code	Indicates the Market Place.	Enumerated	1	(See field description)	Mandatory
ExerStyle	Exercise Style	Type of exercise of a Cash (Shares, Bonds for now) or Derivatives instrument	Enumerated	1	(See field description)	Optional
ContractName	Contract Name	Contract Name	Text	60	(Free Text)	Mandatory
ContractType	Contract Type	Generic Contract Type.	Enumerated		(See field description)	Optional
UnderlyingType	Underlying Type	Defines the instrument type of the underlying.	Enumerated		(See field description)	Mandatory
PriceDecimals	Price / Index Level Decimals	Indicates the number of decimals for each Price / Index Level related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
QuantityDecimals	Quantity Decimals	Indicates the number of decimals for each Quantity related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
AmountDecimals	Amount Decimals	Indicates the number of decimals for each Amount related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional
RatioDecimals	Ratio / Multiplier Decimals	Indicates the number of decimals for each Ratio / Multiplier related to this Symbol Index	Decimal Places	1	0..2^8-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MainDepositary	Main Depositary	Identifies the default (or main) depository organization of the instrument (between the possible 4 depositaries registered) used by priority for the settlement (for example: multi-listed instruments which have several depositories). For Cash Markets this data has to be treated in consideration of the data Depositary List used by the clearing house to determine the relevant system for settling trades. Valid values are the same as for "Depositary List". Valid values are: - '00000' - No depository organization - '00001' - Euroclear France - '00002' - Euroclear Belgium - '00003' - Euroclear Nederland - '00004' - X/N NBB (National Bank of Belgium) - '00005' - VIF (non-fungible Belgian instruments) - '00006' - Euroclear Bank - '00008' - Physical - '00009' - EURONEXT NON EUROCLEAR	Alpha numerical ID	5	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- '00010' - Interbolsa - '00012' - Monte Titoli - '00015' - SIS SegaInterSettle AG - '00016' - OESTERREICHISCHE KONTROLLBANK AG - '00017' - Vaerdipapircentralen (VP) - '00018' - Clearstream Banking A.G. - '00019' - CLEARSTREAM BANKING S.A. - '00021' - KELER - '00023' - Finnish Central Securities Depository Ltd - '00028' - IBERCLEAR CENTRAL BANK - '00030' - Euroclear UK - Ireland Limited - '00050' - VERDIPAPIRSENTRALEN, VPS - '00051' - STREDISKO CENNYCH PAPIRU - '00052' - Swedish Central Securities Depository Ltd - '00053' - WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET - 'Nulls' - Not significant				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MIC	MIC	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-	Alpha numerical ID	4	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF				
CountryOfExchange	Country Of Exchange	Country of exchange is the Country associated to the MIC following ISO 3166 Alpha-3.	Alphanumerical ID	3	(See field description)	Mandatory
ProductCode	Product Code	Physical alphanumerical product code.	Alphanumerical ID	4	(See field description)	Mandatory
UnderlyingMIC	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

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
UnderlyingISINCode	Underlying ISIN Code	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.	Alphanumerical ID	12	(See field description)	Optional
UnderlyingExpiry	Underlying Expiry	Expiry Date of the underlying (in number of days since the 1st of January 1970).	unsigned integer 32	4	0..2^32-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OrderTypeRules	Order Type Rules deprecated	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) - 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)-->	Bitmap	2	0..2^16-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
SettlementMethod	Settlement Method	Settlement method - "C" = Cash Settlement - "P" = Physical Settlement - "O" = Optional - Blank/null for exchanges "C", "G", "D", "H" containing Underlying instruments	Alphanumerical ID	1	(See field description)	Optional
TradingCurrency	Trading Currency	Code of the currency (ISO 4217-3A).	Alphanumerical ID	3	(See field description)	Mandatory
StrikePriceDecimalsRatio	Strike Price Decimals Ratio	Value used , in particular 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. The maximum number of decimals is 5. 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.	Numerical	1	0..2^8-2	Optional
MMProtections	MM Protections	Indicates allowed MM Protection type on the contract.(0: Disabled ; 1: Enabled)	Bitmap	1	0..2^8-2	Mandatory
ContractTradingType	Contract Trading Type	Contract Trading Type.	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
InstUnitExp	Instrument Unit Expression	Unit in which the instrument is quoted.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
UnderlyingSubtype	Underlying Subtype	Defined the underlying sub-type associated to the underlying type. Underlying Type "Stock" accepts following Underlying Subtypes: Basket, Dividend, ETF and Share Underlying Type "Index" accepts: Dividend Index, Equity Index, TRF Index and Volatility Index Underlying Type "Future" accepts: Future on Commodities Underlying Type "Exchange rate" accepts: FX Cross Rates (FXCR), FX Emerging Markets (FXEM) and FX Majors (FXMJ) 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)	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		and Polypropylene (POLY) Underlying Type "Interest Rate" accepts: Bonds Basket				
MotherStockISIN	Mother Stock ISIN	ISIN Code of the index underlying of the TRF contract.	Text	12	(Free Text)	Optional
SettlementTickSize	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
EDSPTickSize	EDSP Tick Size	Specific Tick Size value applicable for EDSP. It's calculated using the PriceDecimals.	Price	8	0..2^64-2	Optional
UnderlyingSymbolIndex	Underlying Symbol Index	Identifies the Symbol Index of the underlying of the instrument.	Numerical ID	4	0..2^32-2	Optional
TradingPolicy	Trading Policy	Trading Policy enabling to allocate a given incoming volume to orders.	Enumerated	1	(See field description)	Optional
ReferenceSpreadTableID	Reference Spread Table ID	ID of the Reference Spread Table.	Numerical ID	2	0..2^16-2	Optional
DerivativesMarketModel	Derivatives Market Model	Type of synthetic quote applied to the contract	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingUnit	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. The Trading Unit field does not support decimals, so it should be replaced by the Lot Multiplier in the future.	Quantity	8	0..2^64-2	Optional
ReferencePriceOriginInOpeningCall	Reference Price Origin	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.	Enumerated	1	(See field description)	Optional
ReferencePriceOriginInContinuous	Reference Price Origin	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ReferencePriceOriginInTradingInterruption	Reference Price Origin	For Derivatives, it is the rules to obtain the DCRP. Derivatives authorized values are : 4,5,6,7.	Enumerated	1	(See field description)	Optional
CollarExpansionFactor	Collar Expansion Factor	Numerical coefficient applied in collar calculation.	Numerical ID	1	0..2^8-2	Optional
MIFIDIILiquidFlag	MIFID II Liquid Flag deprecated	Defines if a contract is to be considered as liquid under MIFID II Regulation.	Boolean	1	0..2^8-2	Mandatory
PricingAlgorithm	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	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
LotMultiplier	Lot Multiplier	Amount of underlying instrument per unit of a derivative contract (to be calculated with the Ratio / Multiplier 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. The Lot Multiplier is used instead of Trading Unit, because the Lot Multiplier supports the decimals. The Lot Multiplier is optional because of the Underlying presence in the Standing Data. However it must be filled for any other instrument.	Numerical	8	0..2^64-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
QuantityNotation	Quantity Notation	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	Text	3	(Free Text)	Optional
ContractEMMProperties length	ContractEMMProperties length					Mandatory
ContractEMMProperties occurrences	ContractEMMProperties occurrences					Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				
TickSizeIndexID	Tick Size Index ID	ID of the tick size table available in the Tick Table file.	Numerical ID	2	0..2^16-2	Optional
PatternID	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
LotSize	Lot Size	For Cash and Derivatives, it defines a multiple of the tradable quantity.	Quantity	8	0..2^64-2	Optional
StrategyAuthorized	Strategy Authorized	Provides strategy types authorized for contract. Bit 2, Bit 23, Bit 42 are not used and will always be set to 0.	Bitmap	8	0..2^64-2	Optional
DynamicCollarLogic	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	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
CollarMaxUnhaltNb	Collar Max Unhalt Nb	Maximum number of automatic attempts to unhalt system performs if Dynamic Collar Logic enables unhalting. For Derivatives, It is used for Trade Price Validation (TPV).	Numerical	1	0..2^8-2	Optional
CollarUnhaltDelay	Collar Unhalt Delay	Delay (in seconds) of automatic unhalt if Dynamic Collar Logic enables unhalting. For Derivatives, it is used for Trade Price Validation (TPV).	unsigned integer 32	4	0..2^32-2	Optional

11.2.3.4. Outright Standing Data (1014)

The Outright Standing Data message provides characteristics of Derivatives instruments, valid for the current trading day.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory
ContractSymbolIndex	Contract Symbol Index	Exchange identification code of the Contract. The correspondence of the Contract Symbol Index and its characteristics is provided in the standing data messages and associated files. Symbol Index is valid for the life of the Contract.	Numerical ID	4	0..2^32-2	Mandatory
InstrumentEventDate	Instrument Event Date	(in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ISINCode	ISIN Code	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.	Alphanumerical ID	12	(See field description)	Mandatory
CFI	CFI	Classification code of a financial instrument defined by the ISO-10962:2015 standard.	Text	6	(Free Text)	Optional
MaturityDate	Maturity Date	On Cash, Maturity Date of the instrument (text formatted as YYYYMMDD). On Derivatives, Maturity ID of the instrument (text formmated as YYYYMM00).	Text	8	(Free Text)	Mandatory
LotSize	Lot Size deprecated	For Cash and Derivatives, it defines a multiple of the tradable quantity.	Quantity	8	0..2^64-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
StrikePrice	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. 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.	Price	8	-2^63+1.. 2^63-1	Optional
LastTradingDate	Last Trading Date	(in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Optional
DaysToExpiry	Days To Expiry	Number of Business days until the Last Trading Day of the Expiry.	Numerical	2	0..2^16-2	Optional
DerivativesInstrumentTradingCode	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.	Alpha numerical ID	18	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
DerivativesInstrumentType	Derivatives Instrument Type	Indicates the type of derivative instrument	Enumerated	1	(See field description)	Optional
ExpiryCycleType	Expiry Cycle Type	Defines the expiry cycle type	Enumerated	1	(See field description)	Optional
UnderlyingDerivativesInstrumentTradingCode	Underlying Derivatives Instrument Trading Code	Is the underlying of the Derivatives Instrument Trading Code.	Alphanumerical ID	18	(See field description)	Optional
UnderlyingSymbolIndex	Underlying Symbol Index	Identifies the Symbol Index of the underlying of the instrument.	Numerical ID	4	0..2^32-2	Optional
TradingUnit	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. The Trading Unit field does not support decimals, so it should be replaced by the Lot Multiplier in the future.	Quantity	8	0..2^64-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
LotMultiplier	Lot Multiplier	Amount of underlying instrument per unit of a derivative contract (to be calculated with the Ratio / Multiplier 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. The Lot Multiplier is used instead of Trading Unit, because the Lot Multiplier supports the decimals. The Lot Multiplier is optional because of the Underlying presence in the Standing Data. However it must be filled for any other instrument.	Numerical	8	0..2^64-2	Optional
ExpirationDate	Expiration Date	(in number of days since the 1st of January 1970).	unsigned integer 16	2	0..2^16-2	Optional
OutrightRep length	OutrightRep length					Mandatory
OutrightRep occurrences	OutrightRep occurrences					Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				

11.2.3.5. Strategy Standing Data (1012)

The Strategy Standing Data message provides the main characteristics of active strategies.
The repeating section provides the details of each leg.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory
DerivativesInstrumentTradingCode	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.	Alphanumerical ID	18	(See field description)	Mandatory
ExchangeCode	Exchange Code	Indicates the Market Place.	Enumerated	1	(See field description)	Mandatory
MaturityDate	Maturity Date	On Cash, Maturity Date of the instrument (text formatted as YYYYMMDD). On Derivatives, Maturity ID of the instrument (text formmated as YYYYMM00).	Text	8	(Free Text)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
StrategyCode	Strategy Code	Exchange-recognized strategy code	Alphanumerical ID	1	(See field description)	Mandatory
ContractSymbolIndex	Contract Symbol Index	Exchange identification code of the Contract. The correspondence of the Contract Symbol Index and its characteristics is provided in the standing data messages and associated files. Symbol Index is valid for the life of the Contract.	Numerical ID	4	0..2^32-2	Mandatory
CFI	CFI	Classification code of a financial instrument defined by the ISO-10962:2015 standard.	Text	6	(Free Text)	Optional
StrategyStandingDatarep1 length	StrategyStandingDatarep1 length					Mandatory
StrategyStandingDatarep1 occurrences	StrategyStandingDatarep1 occurrences					Mandatory
LegSymbolIndex	Leg Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory
LegPrice	Leg Price	Price of corresponding strategy leg (to be calculated with the Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
LegRatio	Leg Ratio	Ratio of lots for the leg. For contingent trades, the delta. ■ For Contracts (Future or Option), it is the leg ratio, with the maximum value being 99999. If the value submitted by a customer is higher, it will be changed by the system to the maximum value (99999). ■ For Underlyings (Cash or Future), the delta is used with special rules: For the Underlying leg of volatility strategies, this should be the delta represented directly as an integer value of the percentage, without division or decimals (e.g.: a delta of 65% should be represented by 65), with the maximum value being 9999 (9999%). If the value submitted by a customer is higher, it will be changed by the system to the maximum value (9999). For Conversion Reversal Strategies (Type = 'R'), the delta is always set to 100.	Numerical	4	0..2^32-2	Mandatory
LegBuySell	Leg Buy or Sell	Leg Side.	Enumerated	1	(See field description)	Mandatory

11.2.4. Application Messages

11.2.5. Market Update (1001)

The Market Update Message provides valuable data to the market in order to build the limits for the order book depth (COB and BoB), publish trade prices and collars:

- Best limits (BBO)
- Full depth limits
- Clear Book
- Short trade
- Requests
- Collars
- Request For Cross (RFC)
- Best of Book (BoB) full depth limits
- Execution Summary

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				
EventTime	Event Time	(Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Mandatory
Updates length	Updates length					Mandatory
Updates occurrences	Updates occurrences					Mandatory
UpdateType	Market Data Update Type	Type of market data update.	Enumerated	1	(See field description)	Mandatory
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory
NumberOfOrders	Number Of Orders	Number of orders at the current price limit.	Numerical	2	0..2^16-2	Optional
Price	Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	-2^63+1.. 2^63-1	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Quantity	Quantity	Number of traded or ordered units (to be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Optional

11.2.6. Price Update (1003)

The Price Update message provides reference prices.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				
EventTime	Event Time	(Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Mandatory
Prices length	Prices length					Mandatory
Prices occurrences	Prices occurrences					Mandatory
PriceType	Market Data Price Type	Type of price update (note: 1 to 9 are settlement price type).	Enumerated	1	(See field description)	Mandatory
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory
Price	Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Quantity	Quantity	Number of traded or ordered units (to be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Optional
ImbalanceQty	Imbalance Quantity	Imbalance volume quantity if Uncrossing occurs at this moment. This volume includes hidden quantity (to be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Optional
ImbalanceQtySide	Imbalance Quantity Side	Side of the imbalance volume if the Uncrossing occurs at this moment.	Enumerated	1	(See field description)	Optional
PriceQualifier	Price Qualifier	Represents a qualifier of the type of update being communicated to the market.	Enumerated	1	(See field description)	Optional

11.2.7. Full Trade Information (1004)

The Full Trade Information (1004) Message is a trade summary sent to the Market (EU and UK MiFID II compliant). Simultaneously, a short trade message is sent via the Market Update (1001) message for all markets, except for the specific case of Wholesale LIS Package.

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				
EventTime	Event Time	(Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Mandatory
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingDateTime	Trading Date Time	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.	Text	27	(Free Text)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PublicationDateTime	Publication Date Time	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.dddddddZ. 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.	Text	27	(Free Text)	Optional
TradeType	Trade Type	Type of trade.	Enumerated	1	(See field description)	Mandatory
MifidInstrumentIdType	MiFID Instrument ID Type	Code type used to identify the financial instrument. Possible values: - 'ISIN' = ISIN code, where ISIN is available. - 'OTHR' = other identifier.	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MifidInstrumentID	MiFID Instrument ID	Code used to identify the financial instrument. This code has to be processed with the MiFID Instrument ID Type. For CTPs, this field is always equal to the instrument's ISIN.	Alphanumerical ID	12	(See field description)	Optional
MifidExecutionID	MiFID Execution ID	MiFID Transaction Identification Code is a unique ID of the Execution per instrument, day and EMM. The value in the field is a concatenation of the Execution ID (10 char) and an identifier of the instruments [ISIN code (12 char) or Symbol Index (10 char)]. In most cases the identifier of the instrument is the 12 character ISIN code. For derivatives, in cases when the trade occurs on an instrument for which the ISIN code is not populated (e.g. Strategies) the Symbol Index of the instrument is used instead.	Alphanumerical ID	52	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MifidPrice	MiFID Price	Traded price of the transaction excluding, where applicable, commission and accrued interest. Where price is reported in monetary terms, it shall be provided in the major currency unit. Where price is not applicable the field shall not be populated. Possible values: - For price expressed as monetary value: maximum of 18 digits with a maximum of 13 decimals. - For price expressed as percentage or yield: maximum of 11 digits with a maximum of 10 decimals. - For price expressed as basis points: maximum of 18 digits with a maximum of 17 decimals. Note 1: Decimal separator is '.' (full stop). Note 2: Negative numbers are prefixed with '-' (minus). Note 3: Where applicable, values shall be rounded and not truncated. Note 4: Price expressed as basis points is only relevant for CTP.	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MifidQuantity	MiFID Quantity	Number of units of the financial instrument. The nominal or monetary value of the financial instrument. Possible values: - For quantity expressed as number of units: maximum of 18 digits with a maximum of 17 decimals. - For quantity expressed as monetary or nominal value: maximum of 18 digits with a maximum of 5 decimals. Note 1: Decimal separator is '.' (full stop).	Text	20	(Free Text)	Mandatory
MifidPriceNotation	MiFID Price Notation	Indication as to whether the price is expressed in monetary value, in percentage or in yield. Possible values: 'MONE' – Monetary value 'PERC' – Percentage 'YIEL' – Yield 'BAPO' – Basis points.	Text	4	(Free Text)	Optional
MifidCurrency	MiFID Currency	Currency in which the price is expressed (applicable if the price is expressed as monetary value) following ISO 4217 standard.	Alpha numerical ID	3	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MiFIDQtyinMsrmtUnitNotation	MiFID Qty in Measurement Unit Notation	Indication of measurement units in which the quantity in measurement unit is expressed. Possible values: 'TOCD' – tonnes of carbon dioxide equivalent 'TONE' – metric tonnes 'MWHO' – megawatt hours 'MBTU' – one million British thermal unit 'THMS' – therms 'DAYS' – days 'FFEU' – Forty-Foot Equivalent Unit Or {ALPHANUM-25} otherwise.	Text	25	(Free Text)	Optional
MifidQuantityMeasurementUnit	MiFID Quantity Measurement Unit	The equivalent amount of commodity or emission allowance traded expressed in measurement unit Possible values: - For quantity expressed as number of units: maximum of 18 digits with a maximum of 17 decimals. Note: Decimal separator is '.' (full stop).	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MiFIDNotionalAmount	MiFID Notional Amount	Nominal amount or notional amount. The Possible values have maximum of 18 digits with a maximum of 5 decimals. The decimal separator is '.' (full stop). For example: - For spread bets, the notional amount shall be the monetary value wagered per point movement in the underlying financial instrument. - For credit default swaps, it shall be the notional amount for which the protection is acquired or disposed of.	Text	20	(Free Text)	Optional
NotionalCurrency	Notional Currency	Currency in which the notional is denominated following ISO 4217 standard.	Alpha numerical ID	3	(See field description)	Optional
MiFIDClearingFlag	MiFID Clearing Flag	Code to identify whether the transaction will be cleared. - 'true': Transaction to be cleared. - 'false': Transaction not to be cleared.	Text	5	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTMarketMechanism	MMT Market Mechanism	Defines the fundamental functional market mechanism that has facilitated the trade following MMT level 1. This field is technically optional for backward compatibility but is functionally mandatory.	Enumerated	1	(See field description)	Optional
MMTTradingMode	MMT Trading Mode	Differentiates transactions by defining the trading mode under which the trade was executed following MMT level 2. This field is technically optional for backward compatibility but is functionally mandatory.	Enumerated		(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTTransactionCategory	MMT Transaction Category	Defines the transaction category following MMT level 3.1. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'D': Dark Trade - 'RPRI': Trade that has Received Price Improvement - 'TPAC': Package Trade (excluding Exchange for Physicals) - 'XFPH': Exchange for Physicals Trade - '-': None apply (a standard trade for the Market Mechanism and Trading Mode)	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTNegotiationIndicator	MMT Negotiation Indicator	Defines the negotiation indicator or pre-trade transparency waiver following MMT level 3.2. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'N': Negotiated Trade - 'NLIQ': Negotiated Trade in Liquid Financial Instruments - 'OILQ': Negotiated Trade in Illiquid Financial Instruments - 'PRIC': Negotiated Trade Subject to Conditions Other Than The Current Market Price - 'ILQD': Pre-Trade Transparency Waiver for illiquid instrument on an Side - '-': No Negotiated Trade	Text	4	(Free Text)	Optional
MMTAgencyCrossTradeIndicator	MMT Agency Cross Trade Indicator	Defines the agency cross trade indicator following MMT level 3.3. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'ACTX': Agency Cross Trade - '-': No Agency Cross Trade	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTModificationIndicator	MMT Modification Indicator	Defines the modification indicator following MMT level 3.4. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'CANC': Trade Cancellation - 'AMND': Trade Amendment - '-': New Trade	Text	4	(Free Text)	Optional
MMTBenchmarkIndicator	MMT Benchmark Indicator	Defines the benchmark indicator or the reference price indicator following MMT level 3.5. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'BENC': Benchmark Trade - 'RFPT': Reference Price Trade - '-': No Benchmark or Reference Price Trade	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTSpecialDividendIndicator	MMT Special Dividend Indicator	Defines the special dividend indicator following MMT level 3.6. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'SDIV': Special Dividend Trade - '-': No Special Dividend Trade	Text	4	(Free Text)	Optional
MMTOffBookAutomatedIndicator	MMT Off Book Automated Indicator	Defines the off book automated indicator following MMT level 3.7. This field is technically optional for backward compatibility but is functionally mandatory.	Enumerated		(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTContributiontoPrice	MMT Contribution to Price	Defines the contribution to price or the price discovery process following MMT level 3.8. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - '-': Plain-Vanilla Trade - 'NPFT': Non-Price Forming Trade (formerly known as the Technical Trade) - 'PNDG': Price is Currently Not Available but Pending - 'NOAP': Price Is Not Applicable	Text	4	(Free Text)	Optional
MMTAlgorithmicIndicator	MMT Algorithmic Indicator	Defines the algorithmic indicator following MMT level 3.9. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'ALGO': Algorithmic Trade - '-': No Algorithmic Trade	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTPublicationMode	MMT Publication Mode	Defines the publication mode or post-trade deferral reason following MMT level 4.1. Possible values: - '-': Immediate Publication - 'NIPM': Non-Immediate Publication - 'LRGS': Non-Immediate Publication: Deferral for "Large in Scale"	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTPostTradeDeferral	MMT Post Trade Deferral	Defines the post trade deferral or enrichment type following MMT level 4.2. This field is technically optional for backward compatibility but is functionally mandatory. Possible values for the original trade: - 'LMTF': Limited Details Trade - 'DATF': Daily Aggregated Trade - 'VOLO': Volume Omission Trade - 'FWAF': Four Weeks Aggregation Trade - 'IDAF': Indefinite Aggregation Trade - 'VOLW': Volume Omission Trade, Eligible for Subsequent Enrichment in Aggregated Form Possible values for the subsequent enrichment trade: - 'FULF': Full Details of Earlier "Limited Details Trade (LMTF)" - 'FULA': Full Details of Earlier "Daily Aggregated Trade (DATF)" - 'FULV': Full Details of Earlier "Volume Omission Trade (VOLO)" - 'FULJ': Full Details of Earlier "Four Weeks Aggregation Trade (FWAF)" - 'COAF': Full Details in Aggregated Form of Earlier	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		"Volume Omission Trade, Eligible for Subsequent Enrichment in Aggregated Form (VOLW)" Possible values if neither apply: - '-': Not Applicable / No Relevant Deferral or Enrichment Type				
MMTDuplicativeIndicator	MMT Duplicative Indicator deprecated	Not used anymore (since APA decommissioning). Defines the duplicative indicator following MMT level 5. ted since APA decommissioning) Possible values: - 'DUPL': Duplicative Trade Report (reported to more than one APA) - '-': Unique Trade Report	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradeQualifier	Trade Qualifier	Trade Qualifier. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions. ■ bit in position 0 - Uncrossing Trade: indicates whether the trade occurred during an Uncrossing, or not. (0: No; 1: Yes) ■ bit in position 1 - First Trade Price: indicates whether the price of the trade is the first trade price of the day, or not. (0: No; 1: Yes) Please note that there can be multiple Trades with the "First Trade Price" flag set to Yes. ■ bit in position 2 - Passive Order: indicates whether the corresponding order was passive, or not. (0: No; 1: Yes) ■ bit in position 3 - Aggressive Order: indicates whether the corresponding order was aggressive, or not. (0: No; 1:	Bitmap	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		Yes) ■ bit in position 4 - Trade Creation by Market Operations: indicates whether the trade results from a creation by Market Operations, or not. (0: No; 1: Yes) - For future use ■ bit in position 5 - NAV Trade expressed in bps: indicates whether the trade results from a NAV trade expressed in basis point on the ETF Access platform. (0: No; 1: Yes) ■ bit in position 6 - NAV Trade expressed in price currency: indicates whether the trade is a NAV trade expressed in price currency. This trade is always an update from a previous NAV trade expressed in basis point on the ETF Access platform. (0: No; 1: Yes) ■ bit in position 7 - Deferred Publication: indicates whether the trade publication is deferred or immediate. (0: Immediate Publication; 1: Deferred Publication) If all bits are set to 0, then it means that				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		no Trade Qualifier applies. For the Market Data feed: The values Passive Order and Aggressive Order always qualify the Buy order.				
TransactionType	Transaction Type	Transaction type or publication type.	Enumerated	1	(See field description)	Optional
EffectiveDateIndicator	Effective Date Indicator	Indicates if the trade is introduced on the trading session day or earlier.	Enumerated	1	(See field description)	Optional
BlockTradeCode	Block Trade Code	Indicates if trade relates to a block or a negotiated deal following MiFID rules.	Enumerated		(See field description)	Optional
TradeReference	Trade Reference	Reference of the trade reported to the Exchange.	Alphanumerical ID	30	(See field description)	Optional
OriginalReportTimestamp	Original Report Timestamp	(Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Optional
TransparencyIndicator	Transparency Indicator	Used to define the transparency of the trade.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
CurrencyCoefficient	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). 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. 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).	Numerical	4	0..2^32-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PriceMultiplier	Price Multiplier	Number of units of the financial instrument that are contained in a trading lot. Price multiplier coefficient for instrument unit price.	Numerical	4	0..2^32-2	Optional
PriceMultiplierDecimals	Price Multiplier Decimals	Number of decimals for the field Price Multiplier.	Numerical	1	0..2^8-2	Optional
Venue	Venue	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.	Alphanumerical ID	11	(See field description)	Mandatory
StartTimeVwap	Start Time Vwap	(Number of seconds since the beginning of the day).	Intraday Time in Seconds	4	0..2^32-2	Optional
EndTimeVwap	End Time Vwap	(Number of seconds since the beginning of the day).	Intraday Time in Seconds	4	0..2^32-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MiFIDEmissionAllowanceType	MiFID Emission Allowance Type deprecated	This field is only applicable for emission allowances. Possible values: - 'EUAE' – European Union Allowances (EUA) - 'CERE' - Certified Emission Reductions (CER) - 'ERUE' - Emission Reduction Units (ERU) - 'EUAA' - European Union Aviation Allowances (EUAA) - 'OTHR' – Other (for derivatives only)	Text	4	(Free Text)	Optional
MarketOfReferenceMIC	Market Of Reference MIC deprecated	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

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EvaluatedPrice	Evaluated Price	This field is used for the Total Return Future (TRF) and Market On Close (MOC) contracts to provide the trade price calculated against provisional (a.k.a. preliminary) or final price of the underlying index or stock, while Last Traded Price provides price in Spread (in basis or index points). The value in field Trade Type allows to identify if the trade message contains provisional or final price.	Price	8	-2^63+1.. 2^63-1	Optional
MessagePriceNotation	Message Price Notation	This field provides the type of price notation used per message. For TRF and MOC products the value "Price" is used for TAM trading mode, the values "Spread in basis points" and "Spread" are used for TAIC trading mode.	Enumerated	1	(See field description)	Optional
SettlementDate	Settlement Date	Settlement date is the date when a trade is final, and the buyer must make payment to the seller while the seller delivers the assets to the buyer.	unsigned integer 16	2	0..2^16-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
RepoSettlementDate	Repo Settlement Date	Repo Settlement date is the date when the Repo-Seller gets the assets back from the Repo-Buyer. Used in case of a Repo (Repurchase Agreement) trade.	unsigned integer 16	2	0..2^16-2	Optional
TradeUniqueIdentifier	Trade Unique Identifier	Alphanumerical code unique, consistent and persistent per ISO10383 segment MIC and per trading day assigned by the trading venue to a transaction. Trade Unique Identifier (TUI) is a field aimed at identifying an individual transaction and used as Trading Venue Transaction Identification Code (TVTIC). This is a unique transaction identification code generated by trading venues and disseminated to both the buying and the selling parties, in accordance with Article 12 of the Commission Delegated Regulation (EU) 2017/580 Regulatory Technical Standards (RTS).	Alphanumerical ID	16	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MissingPrice	Missing Price	Defines the reason why Price is not available. Possible values: - 'PNDG': Price is Currently Not Available but Pending - 'NOAP': Price Is Not Applicable	Text	4	(Free Text)	Optional
MMTPreTradeTransparencyWaiverRelatedtoSizeandScale	MMT Pre-Trade Transparency Waiver Related to Size and Scale	Defines the pre-trade transparency waiver related to the size following MMT level 3.10. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'SIZE': Pre-Trade Transparency Waiver for Above Standard Market Size on an SI (for RTS 1 only) - '-': No Application of a Pre-Trade Transparency Waiver for Above Standard Market Size on an SI	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTPortfolioTransactionIndicator	MMT Portfolio Transaction Indicator	Defines if the transaction is part of a portfolio trade following MMT level 3.11. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'PORT': Portfolio Trade - '-': Not a Portfolio Trade	Text	4	(Free Text)	Optional
MMTContingentTransactionIndicator	MMT Contingent Transaction Indicator	Defines a transaction where all the components of the trade are meant to be executed as a single lot following MMT level 3.12. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'CONT': Contingent Trade - '-': Not a Contingent Trade	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMTPublicationModeIlliquid	MMT Publication Mode Illiquid	Defines if the post-trade deferral is due to liquidity reason following MMT level 4.3. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'ILQD': Non-Immediate Publication: Deferral for "Illiquid Instrument" - '-': No Application of Deferral for "Illiquid Instrument"	Text	4	(Free Text)	Optional
MMTPublicationModeSizeSpecific	MMT Publication Mode Size Specific	Defines if the post-trade deferral is due to size specific reason following MMT level 4.4. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'SIZE': Non-Immediate Publication: Deferral for "Size Specific" - '-': No Application of Deferral for "Size Specific"	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
VenueofPublication	MIC	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-	Alpha numerical ID	4	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF				
PostTradeDeferralFlags	Post Trade Deferral Flags	Indicates which deferral type was applied for transaction on Bonds instrument. Possible values for the original trade: - 'MLF1': Medium Liquid Flag - 'MIF2': Medium Illiquid Flag - 'LLF3': Large Liquid Flag - 'LIF4': Large Illiquid Flag - 'VLF5': Very Large Liquid Flag - 'VIF5': Very Large Illiquid Flag	Text	4	(Free Text)	Optional
CommercialFullTradeInfo length	CommercialFullTradeInfo length					Mandatory
CommercialFullTradeInfo occurrences	CommercialFullTradeInfo occurrences					Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
FirmID	Firm ID	Identifier of the member firm that sends the message. It is provided by the Exchange upon the registration of the Firm by the Membership department. When linked to Regulatory Master Firm ID technical field, it refers to the possibility of grouping Firms belonging to the same Legal Entity (at the moment used only in RTS8 context).	Alphanumerical ID	8	(See field description)	Mandatory
AccountType	Account Type	Indicates the account type for which the order is entered. For example, an order can be entered for a client account, a house account or a liquidity provider account. For Cross orders it specifies the account type for which the buy side of a cross order is entered. - Non-LP clients are not allowed to use the type '6' (Liquidity Provider). - Only members acting as Retail Member Organizations (RMO) can send '4' (RO) orders on behalf of their retail clients.	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OrderSide	Order Side	Indicates the side of the order. Please note that the value Cross is used only for the Order Entry, it will never be populated in the Market Data feed.	Enumerated	1	(See field description)	Mandatory

11.2.8. Market State Change (1005)

The Market Status Change message provides market participants with all market events and/or market phase transitions occurring at the instrument level for cash markets, and both contract and instrument levels on derivatives markets.
The Market Status Change message informs the market of the following changes on the instrument or contract:

- Book State
- Instrument State
- Status Reason
- Phase Qualifier
- Trading Period
- Trading Side
- Order Entry Qualifier
- Session
- Price Limits
- Scheduled Event

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	EMM	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.				
MarketStates length	MarketStates length					Mandatory
MarketStates occurrences	MarketStates occurrences					Mandatory
ChangeType	Market Data Change Type	Type of scheduled change.	Enumerated	1	(See field description)	Mandatory
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory
EventTime	Event Time	(Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Mandatory
BookState	Book State	Indicates the state of the book resulting of the current timetable phase, current contractmarket/instrument state and current contract/trading group state.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
StatusReason	Status Reason	Provides the reason for Book State changes.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PhaseQualifier	Phase Qualifier	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 – Stressed Market Conditions: indicates stressed market conditions (0:	Bitmap	2	0..2^16-2	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		No ; 1: Yes) - bit in position 7 – Exceptional Market Conditions: indicates exceptional market conditions (0: No ; 1: Yes) - bit in position 9 - Quoting Period: It indicates a Call Phase during which only a specific Trading Firm can send its order(s) to the Trading System (0: No ; 1: Yes). - bit in position 10 - Execution Prevention Across All Firms: It indicates the Execution Prevention Across All Firms (0: No ; 1: Yes). For IPO operation, only an Assigned Broker Trading Firm (Account Type = 16) can send its Sell order(s) during the "Quoting Period" for example.				
TradingPeriod	Trading Period	Provides the current trading period.	Enumerated	1	(See field description)	Optional
TradingSide	Trading Side	Indicates the Trading Side.	Enumerated	1	(See field description)	Optional
PriceLimits	Price Limits deprecated	Indicates the Price Limits mode.	Enumerated	1	(See field description)	Optional
QuoteSpreadMultiplier	Quote Spread Multiplier deprecated	Indicates the Quote Spread Multiplier.	Enumerated	1	(See field description)	Optional
OrderEntryQualifier	Order Entry Qualifier	Field indicating the state of the Order Entry for the current market state.	Enumerated	1	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Session	Session	Current market session.	Enumerated	1	(See field description)	Mandatory
ScheduledEvent	Scheduled Event	Type of Scheduled Event. Notifies an event that will occur at the Scheduled Event Time.	Enumerated	1	(See field description)	Optional
ScheduledEventTime	Scheduled Event Time	Scheduled Time for the event to happen (time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Optional
InstrumentState	Instrument State	Indicates the state of the instrument.	Enumerated	1	(See field description)	Optional
TradingPhase	Trading Phase	Trading Phase according to ESMA during which the event occurs. Currently used to generate the canonical message that will be used to send the message for RTS 1 and CTP reporting.	Enumerated	1	(See field description)	Optional

11.2.9. Statistics (1009)

This message provides statistics on prices and volumes on an instrument which comprises the following: * High and Low Prices * Percentage Variation Previous Close * Percentage Variation Previous NAV * Last Traded Price * Variation Last Price * Open Price * Trade Count * Cumulative quantities

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MDSeqNum	Market Data Sequence Number	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.	Sequence	8	0..2^64-2	Mandatory
RebroadcastIndicator	Rebroadcast Indicator	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.	Numerical ID	1	0..2^8-2	Mandatory
SymbolIndex	Symbol Index	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.	Numerical ID	4	0..2^32-2	Mandatory
NewStats length	NewStats length					Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
NewStats occurrences	NewStats occurrences					Mandatory
StatsUpdateType	Stats Update Type	Indicates the type of published statistics update.	Enumerated	1	(See field description)	Mandatory

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
StatsUpdateValue	Stats Update Value	Indicates the value of the published statistics update. This field has to be calculated with a scale code field depending on the "Stats Update Type" as follow: - Price / Index Level Decimals for "Stats Update Type": "5 - Daily High", "6 - Daily Low", "7 - Yearly High", "8 - Yearly Low", "9 - Lifetime High", "10 - Lifetime Low", "15 - Open Price" and "17 - Last Trade Price" - Quantity Decimals for "Stats Update Type": "19 - Off Book Cumulative Quantity", "21 - On Book Auction Cumulative Quantity", "22 - On book Continuous Cumulative Quantity" and "23 - On and Off Book Cumulative Quantity" - Ratio / Multiplier Decimals for "Stats Update Type": "14 - Variation Last Price" and "18 - Percent Variation Previous Close" "16 - Trade Count" has no scale code.	Signed Numerical	8	-2^63+1.. 2^63-1	Optional

11.3. Regulatory messages

Euronext Stream Pro provides real-time messages for regulatory purposes in dedicated Kafka topics, under specific format which are described below.

11.3.1. RTS 1 Pre Trade Transparency (802)

RTS 1 Pre Trade Transparency is a message generated to meet Euronext's transparency obligations. The message is real-time message, and it is available to customers who request the subscription to RTS 1 compliant feed.

RTS 1 Pre Trade Transparency includes:

- Order limits on Shares except Trading After Hours including Best Of Book (BOB)
- Order limits on ETF including Best Of Book (BOB)

So, the related asset classes are:

- Equities
- Funds

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
UpdateDateAndTime	Trading Date And Time	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.ddddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.	Text	28	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
InstrumentIdentificationCode	MiFID Instrument ID	Code used to identify the financial instrument. This code has to be processed with the MiFID Instrument ID Type. For CTPs, this field is always equal to the instrument's ISIN.	Alphanumerical ID	12	(See field description)	Optional
Side	MiFID Side	ESMA definition: The side of the order or quote. For periodic auction trading system, this field is not mandatory. The allowed values for this field are 'BUYI' and 'SELL'.	Text	4	(Free Text)	Optional
MarketMaker	MiFID Market Maker	ESMA definition: 'Market Maker' means a person who holds himself out on the financial markets on a continuous basis as being willing to deal on own account by buying and selling financial instruments against that person's proprietary capital at prices defined by that person. It must have LEI format as defined in ISO 17442. The value of this field is set to SBE Null in RTS messages.	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Price	MiFID Price	Traded price of the transaction excluding, where applicable, commission and accrued interest. Where price is reported in monetary terms, it shall be provided in the major currency unit. Where price is not applicable the field shall not be populated. Possible values: - For price expressed as monetary value: maximum of 18 digits with a maximum of 13 decimals. - For price expressed as percentage or yield: maximum of 11 digits with a maximum of 10 decimals. - For price expressed as basis points: maximum of 18 digits with a maximum of 17 decimals. Note 1: Decimal separator is '.' (full stop). Note 2: Negative numbers are prefixed with '-' (minus). Note 3: Where applicable, values shall be rounded and not truncated. Note 4: Price expressed as basis points is only relevant for CTP.	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PriceCurrency	MiFID Currency	Currency in which the price is expressed (applicable if the price is expressed as monetary value) following ISO 4217 standard.	Alpha numerical ID	3	(See field description)	Optional
PriceNotation	MiFID Price Notation	Indication as to whether the price is expressed in monetary value, in percentage or in yield. Possible values: 'MONE' – Monetary value 'PERC' – Percentage 'YIEL' – Yield 'BAPO' – Basis points.	Text	4	(Free Text)	Optional
Quantity	MiFID Quantity	Number of units of the financial instrument. The nominal or monetary value of the financial instrument. Possible values: - For quantity expressed as number of units: maximum of 18 digits with a maximum of 17 decimals. - For quantity expressed as monetary or nominal value: maximum of 18 digits with a maximum of 5 decimals. Note 1: Decimal separator is '.' (full stop).	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
QuantityCurrency	MiFID Currency	Currency in which the price is expressed (applicable if the price is expressed as monetary value) following ISO 4217 standard.	Alpha numerical ID	3	(See field description)	Optional
AggregatedNumberOfOrdersAndQuotes	MiFID Number Of Orders	The number of aggregated orders or quotes from members or participants.	Text	18	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Venue	MIC	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-	Alpha numerical ID	4	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingSystemType	MiFID Trading System Type	When in a message used to communicate transactions (orders, trades, etc), it identifies the type of trading system on which the transaction was executed. In other cases, it identifies the type of trading system the information covered by the message relates to. When the field 'Venue of execution' is populated with 'SINT' or 'XOFF', this field shall not be populated. Hybrid trading systems, as per MiFID II definition, combines different trading systems (two or more) at the same time or if the system has a price determination process which is of a different nature than that applicable to the types of system covered by other values. Within Euronext, - RFQ (Request for Quote) and RFC (Request for Cross) are Hybrid trading systems because they match with 2 types of system defined by MiFID II (Quote-driven trading system and Continuous	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		auction order book trading system). - RFE on Warrants model (Request for Execution) is a Hybrid trading system as it does not match any of the 5 types of system defined by MiFID II because the price determination process is of a different nature than that applicable to the types of system covered by first five rows. The expected values: - 'CLOB': Central Limit Order Book Trading Systems - 'QDTS': Quote Driven Trading Systems - 'PATS': Periodic Auction Trading Systems - 'RFQT': Request For Quote Trading Systems - 'VOIC': Voice Trading Systems - 'HYBR': Hybrid Trading Systems - 'OTHR': For Any Other Trading Systems				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingPhase	MiFID Trading Phase	Trading Phase according to ESMA during which the event occurs. The expected values: - 'UDUC': Undefined Auction - 'SOAU': Scheduled Opening Auction - 'SCAU': Scheduled Closing Auction - 'SIAU': Scheduled Intraday Auction - 'UAUC': Unscheduled Auction - 'ODAU': On Demand Auction - 'COTR': Continuous Trading - 'MACT': At Market Close Trading - 'OMST': Out of Main Session Trading - 'OTSP': Other - 'TROE': Trade Reporting (On Exchange) - 'TROF': Trade Reporting (Off Exchange) - 'TRSI': Trade Reporting (Systemtic Internaliser) - 'CLSD': Closed	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PublicationDateAndTime	Publication Date And Time	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. 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.ddddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.	Text	28	(Free Text)	Optional

11.3.2. RTS 1 Post Trade Transparency (803)

RTS 1 Post Trade Transparency is a message generated to meet Euronext's transparency obligations. The message is real-time message, and it is available to customers who request the subscription to RTS 1 and RTS 2 compliant feed.

RTS 1 includes trades on Equity Instrument following MiFID definition.

So, the related asset classes are:

- Equities
- Funds

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingDateAndTime	Trading Date And Time	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.dddddddZ. - 'hh' is the hour. - 'mm' is the minute. - 'ss.ddddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.	Text	28	(Free Text)	Optional
InstrumentIdentificationCode	MiFID Instrument ID	Code used to identify the financial instrument. This code has to be processed with the MiFID Instrument ID Type. For CTPs, this field is always equal to the instrument's ISIN.	Alphanumerical ID	12	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Price	MiFID Price	Traded price of the transaction excluding, where applicable, commission and accrued interest. Where price is reported in monetary terms, it shall be provided in the major currency unit. Where price is not applicable the field shall not be populated. Possible values: - For price expressed as monetary value: maximum of 18 digits with a maximum of 13 decimals. - For price expressed as percentage or yield: maximum of 11 digits with a maximum of 10 decimals. - For price expressed as basis points: maximum of 18 digits with a maximum of 17 decimals. Note 1: Decimal separator is '.' (full stop). Note 2: Negative numbers are prefixed with '-' (minus). Note 3: Where applicable, values shall be rounded and not truncated. Note 4: Price expressed as basis points is only relevant for CTP.	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MissingPrice	Missing Price	Defines the reason why Price is not available. Possible values: - 'PNDG': Price is Currently Not Available but Pending - 'NOAP': Price Is Not Applicable	Text	4	(Free Text)	Optional
PriceCurrency	MiFID Currency	Currency in which the price is expressed (applicable if the price is expressed as monetary value) following ISO 4217 standard.	Alpha numerical ID	3	(See field description)	Optional
PriceNotation	MiFID Price Notation	Indication as to whether the price is expressed in monetary value, in percentage or in yield. Possible values: 'MONE' – Monetary value 'PERC' – Percentage 'YIEL' – Yield 'BAPO' – Basis points.	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Quantity	MiFID Quantity	Number of units of the financial instrument. The nominal or monetary value of the financial instrument. Possible values: - For quantity expressed as number of units: maximum of 18 digits with a maximum of 17 decimals. - For quantity expressed as monetary or nominal value: maximum of 18 digits with a maximum of 5 decimals. Note 1: Decimal separator is '.' (full stop).	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
VenueOfExecution	MiFID Venue	When in a message used to communicate transactions (orders, trades, etc), it is the identification of the venue where the transaction was executed. In other cases, it identifies the venue the information covered by the message relates to. For CTP, when related to transactions, if the transaction is executed on an organised trading platform outside of the EU then in addition to 'XOFF' also the population of the field 'Thirdcountry trading venue of execution' is required. For non CTP matters: - Use the ISO 10383 segment MIC for transactions executed on an EU trading venue. Where the segment MIC does not exist, use the operating MIC. - Use 'SINT' for financial instruments admitted to trading or traded on a trading venue, where the transaction on that financial instrument is executed on a Systematic Internaliser. - Use MIC code	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		'XOFF' for financial instruments admitted to trading or traded on a trading venue, where the transaction on that financial instrument is neither executed on an EU trading venue nor executed by a systematic internaliser. Possible values: {MIC} – EU trading venues or 'SINT' — systematic internaliser 'XOFF' — otherwise				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ThirdCountryTradingVenueExecution	MIC	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-	Alpha numerical ID	4	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingSystemType	MiFID Trading System Type	When in a message used to communicate transactions (orders, trades, etc), it identifies the type of trading system on which the transaction was executed. In other cases, it identifies the type of trading system the information covered by the message relates to. When the field 'Venue of execution' is populated with 'SINT' or 'XOFF', this field shall not be populated. Hybrid trading systems, as per MiFID II definition, combines different trading systems (two or more) at the same time or if the system has a price determination process which is of a different nature than that applicable to the types of system covered by other values. Within Euronext, - RFQ (Request for Quote) and RFC (Request for Cross) are Hybrid trading systems because they match with 2 types of system defined by MiFID II (Quote-driven trading system and Continuous	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		auction order book trading system). - RFE on Warrants model (Request for Execution) is a Hybrid trading system as it does not match any of the 5 types of system defined by MiFID II because the price determination process is of a different nature than that applicable to the types of system covered by first five rows. The expected values: - 'CLOB': Central Limit Order Book Trading Systems - 'QDTS': Quote Driven Trading Systems - 'PATS': Periodic Auction Trading Systems - 'RFQT': Request For Quote Trading Systems - 'VOIC': Voice Trading Systems - 'HYBR': Hybrid Trading Systems - 'OTHR': For Any Other Trading Systems				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PublicationDateAndTime	Publication Date And Time	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. 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.ddddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.	Text	28	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
VenueOfPublication	MIC	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-	Alpha numerical ID	4	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF				
TransactionIdentificationCode	MiFID Trade Unique Identifier	ESMA Definition: Alphanumerical code assigned by trading venues (pursuant to Article 12 of Commission Delegated Regulation (EU) 2017/5801) and APAs and used in any subsequent reference to the specific trade.	Text	52	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Flags	MiFID Post Trade Flags	Post Trade flags that includes the values of: For CTP Bond: - MMT Benchmark Indicator = 'BENC' or 'RFPT' - MMT Contribution to Price = 'NPFT' - MMT Contingent Transaction Indicator = 'CONT' - MMT Publication Mode = 'LRGS' - MMT Negotiation Indicator = 'NLIQ' or 'OLIQ' - MMT Algorithmic Indicator = 'PRIC' or 'ALGO' - MMT Modification Indicator = 'CANC' or 'AMND' - Post Trade Deferral Flags = 'MLF1' or 'MIF2' or 'LLF3' or 'LIF4' or 'VLF5'or 'VIF5' For CTP Equities: - MMT Benchmark Indicator = 'BENC' or 'RFPT' - MMT Contribution to Price = 'NPFT' - MMT Contingent Transaction Indicator = 'CONT' - MMT Publication Mode = 'LRGS' - MMT Negotiation Indicator = 'NLIQ' or 'OLIQ' - MMT Algorithmic	Text	100	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		Indicator = 'PRIC' or 'ALGO' - MMT Modification Indicator = 'CANC' or 'AMND' Flags field is populated with the list of all applicable flags seperated by comma (,). If none of the flags is populated, then Null is provided.				

11.3.3. RTS 2 Post Trade Transparency (804)

RTS 2 Post Trade Transparency is a message generated to meet Euronext's transparency obligations. The message is real-time message, and it is available to customers who request the subscription to RTS 1 and RTS 2 compliant feed.

RTS 2 includes trades on non-Equity Instrument following MiFID definition.

So, the realted asset class is:

- Bonds

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingDateAndTime	Trading Date And Time	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.dddddddZ. - 'hh' is the hour. - 'mm' is the minute. - 'ss.ddddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.	Text	28	(Free Text)	Optional
InstrumentIdentificationCode	MiFID Instrument ID	Code used to identify the financial instrument. This code has to be processed with the MiFID Instrument ID Type. For CTPs, this field is always equal to the instrument's ISIN.	Alphanumerical ID	12	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Price	MiFID Price	Traded price of the transaction excluding, where applicable, commission and accrued interest. Where price is reported in monetary terms, it shall be provided in the major currency unit. Where price is not applicable the field shall not be populated. Possible values: - For price expressed as monetary value: maximum of 18 digits with a maximum of 13 decimals. - For price expressed as percentage or yield: maximum of 11 digits with a maximum of 10 decimals. - For price expressed as basis points: maximum of 18 digits with a maximum of 17 decimals. Note 1: Decimal separator is '.' (full stop). Note 2: Negative numbers are prefixed with '-' (minus). Note 3: Where applicable, values shall be rounded and not truncated. Note 4: Price expressed as basis points is only relevant for CTP.	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MissingPrice	Missing Price	Defines the reason why Price is not available. Possible values: - 'PNDG': Price is Currently Not Available but Pending - 'NOAP': Price Is Not Applicable	Text	4	(Free Text)	Optional
PriceCurrency	MiFID Currency	Currency in which the price is expressed (applicable if the price is expressed as monetary value) following ISO 4217 standard.	Alpha numerical ID	3	(See field description)	Optional
PriceNotation	MiFID Price Notation	Indication as to whether the price is expressed in monetary value, in percentage or in yield. Possible values: 'MONE' – Monetary value 'PERC' – Percentage 'YIEL' – Yield 'BAPO' – Basis points.	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Quantity	MiFID Quantity	Number of units of the financial instrument. The nominal or monetary value of the financial instrument. Possible values: - For quantity expressed as number of units: maximum of 18 digits with a maximum of 17 decimals. - For quantity expressed as monetary or nominal value: maximum of 18 digits with a maximum of 5 decimals. Note 1: Decimal separator is '.' (full stop).	Text	20	(Free Text)	Optional
QuantityInMeasurementUnit	MiFID Quantity Measurement Unit	The equivalent amount of commodity or emission allowance traded expressed in measurement unit Possible values: - For quantity expressed as number of units: maximum of 18 digits with a maximum of 17 decimals. Note: Decimal separator is '.' (full stop).	Text	20	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
NotationOfTheQuantityInMeasurementUnit	MiFID Qty in Measurement Unit Notation 2	Indication of the notation in which the quantity in measurement unit is expressed. Possible values: 'TOCD' – tonnes of carbon dioxide equivalent, for any contract related to emission allowances 'TONE' – metric tonnes 'MWHO' – megawatt hours 'MBTU' – one million British thermal unit 'THMS' – therms 'DAYS' – days Or {ALPHANUM-4} otherwise. This field is created in addition to 'MiFID Qty in Measurement Unit Notation' because the latter has a format which does not fit the ESMA expectations. The length moves from 25 to 4.	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
NotionalAmount	MiFID Notional Amount	Nominal amount or notional amount. The Possible values have maximum of 18 digits with a maximum of 5 decimals. The decimal separator is '.' (full stop). For example: - For spread bets, the notional amount shall be the monetary value wagered per point movement in the underlying financial instrument. - For credit default swaps, it shall be the notional amount for which the protection is acquired or disposed of.	Text	20	(Free Text)	Optional
NotionalCurrency	Notional Currency	Currency in which the notional is denominated following ISO 4217 standard.	Alpha numerical ID	3	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
VenueOfExecution	MiFID Venue	When in a message used to communicate transactions (orders, trades, etc), it is the identification of the venue where the transaction was executed. In other cases, it identifies the venue the information covered by the message relates to. For CTP, when related to transactions, if the transaction is executed on an organised trading platform outside of the EU then in addition to 'XOFF' also the population of the field 'Thirdcountry trading venue of execution' is required. For non CTP matters: - Use the ISO 10383 segment MIC for transactions executed on an EU trading venue. Where the segment MIC does not exist, use the operating MIC. - Use 'SINT' for financial instruments admitted to trading or traded on a trading venue, where the transaction on that financial instrument is executed on a Systematic Internaliser. - Use MIC code	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		'XOFF' for financial instruments admitted to trading or traded on a trading venue, where the transaction on that financial instrument is neither executed on an EU trading venue nor executed by a systematic internaliser. Possible values: {MIC} – EU trading venues or 'SINT' — systematic internaliser 'XOFF' — otherwise				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ThirdCountryTradingVenueExecution	MIC	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-	Alpha numerical ID	4	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
PublicationDateAndTime	Publication Date And Time	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. 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.ddddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.	Text	28	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
VenueOfPublication	MIC	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-	Alpha numerical ID	4	(See field description)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		- 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF				
TransactionIdentificationCode	MiFID Trade Unique Identifier	ESMA Definition: Alphanumerical code assigned by trading venues (pursuant to Article 12 of Commission Delegated Regulation (EU) 2017/5801) and APAs and used in any subsequent reference to the specific trade.	Text	52	(Free Text)	Optional
TransactionToBeCleared	MiFID Clearing Flag	Code to identify whether the transaction will be cleared. - 'true': Transaction to be cleared. - 'false': Transaction not to be cleared.	Text	5	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Flags	MiFID Post Trade Flags	Post Trade flags that includes the values of: For CTP Bond: - MMT Benchmark Indicator = 'BENC' or 'RFPT' - MMT Contribution to Price = 'NPFT' - MMT Contingent Transaction Indicator = 'CONT' - MMT Publication Mode = 'LRGS' - MMT Negotiation Indicator = 'NLIQ' or 'OLIQ' - MMT Algorithmic Indicator = 'PRIC' or 'ALGO' - MMT Modification Indicator = 'CANC' or 'AMND' - Post Trade Deferral Flags = 'MLF1' or 'MIF2' or 'LLF3' or 'LIF4' or 'VLF5'or 'VIF5' For CTP Equities: - MMT Benchmark Indicator = 'BENC' or 'RFPT' - MMT Contribution to Price = 'NPFT' - MMT Contingent Transaction Indicator = 'CONT' - MMT Publication Mode = 'LRGS' - MMT Negotiation Indicator = 'NLIQ' or 'OLIQ' - MMT Algorithmic	Text	100	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		Indicator = 'PRIC' or 'ALGO' - MMT Modification Indicator = 'CANC' or 'AMND' Flags field is populated with the list of all applicable flags seperated by comma (,). If none of the flags is populated, then Null is provided.				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
TradingSystem	MiFID Trading System Type	When in a message used to communicate transactions (orders, trades, etc), it identifies the type of trading system on which the transaction was executed. In other cases, it identifies the type of trading system the information covered by the message relates to. When the field 'Venue of execution' is populated with 'SINT' or 'XOFF', this field shall not be populated. Hybrid trading systems, as per MiFID II definition, combines different trading systems (two or more) at the same time or if the system has a price determination process which is of a different nature than that applicable to the types of system covered by other values. Within Euronext, - RFQ (Request for Quote) and RFC (Request for Cross) are Hybrid trading systems because they match with 2 types of system defined by MiFID II (Quote-driven trading system and Continuous	Text	4	(Free Text)	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
		auction order book trading system). - RFE on Warrants model (Request for Execution) is a Hybrid trading system as it does not match any of the 5 types of system defined by MiFID II because the price determination process is of a different nature than that applicable to the types of system covered by first five rows. The expected values: - 'CLOB': Central Limit Order Book Trading Systems - 'QDTS': Quote Driven Trading Systems - 'PATS': Periodic Auction Trading Systems - 'RFQT': Request For Quote Trading Systems - 'VOIC': Voice Trading Systems - 'HYBR': Hybrid Trading Systems - 'OTHR': For Any Other Trading Systems				

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
NumberOfTransactions	MiFID Number Of Transactions	ESMA definition: This field should be populated with the number of transactions executed when deferred publication of details of several transactions in an aggregated form is required under Article 11(3) (b) of MiFIR. This field is always equal to SBE NULL. This field is created to fit ESMA expected format.	Text	20	(Free Text)	Optional

11.4. Snapshot Messages

The Snapshot mechanism uses the same messages as the real-time feed. When used for the snapshot, the messages have the field "Rebroadcast Indicator" set to "1".

Message	Purpose	Sending rules
Start Of Snapshot (2101)	Defines the start of a snapshot sequence on all channels	This is the first message of a snapshot sequence. It contains the last Market Data Sequence Number from real-time that is contained in this snapshot sequence.
End Of Snapshot (2102)	Defines the end of a snapshot sequence on all channels	This is the last message of a snapshot sequence. It contains the last Market Data Sequence Number from real-time that is contained in this snapshot sequence.
Outright Standing Data (1014)	Provides all the characteristics of instruments	Only intraday instrument creation will be snapshotted. For all other standing data please refer to the file servers.
Strategy Standing Data (1012)	Provides all the characteristics of strategy instruments	Only intraday instrument creation will be snapshotted. For all other standing data please refer to the file servers.
Timetable (1006)	Provides all the scheduled events for the instruments	Only intraday modifications will be snapshotted. Otherwise, use the file servers to retrieve data.
Market Status Change (1005)	Notifies of a market status change along with its reason	Only the last applicable Market Status Change per Symbol Index and EMM will be sent.
Market Update (1001) for BBO (with Market Data Update Type set to "1" or "2" only)	Provides the Best Bid and the Best Offer for each instrument	Only the last Best Bid and the last Best Offer will be resent.
Market Update (1001)	Allows clients to rebuild the book with full depth	Only for market by limits.

Message	Purpose	Sending rules
Price Update (1003)	Provides all last updated reference prices	Only last Price Update, for each Market Data Price Type, will be sent.
Full Trade Information (1004)	Provides Trade reporting for last trades	Only last 50 intraday trades and if they are not older than 15 minutes, for the whole instrument set on a given channel will be resent.
Statistics (1009)	Provides full statistics per instruments	"Only last statistics will be sent. Clients might receive, in snapshot, statistics for an instrument in more than one packet."

Any message that is not in the above table will not be disseminated using the Snapshot mechanism.

11.4.1. Technical messages in Snapshot channels

Start of Day, Health Status and End of Day are also sent on the snapshot channels. They are not part of the Snapshot Sequence and should be processed separately by the clients. Customers need to take into account that they can also be sent between a Start of Snapshot and an End of snapshot messages.

In the Health Status, still on the snapshot channels, the Market Data Sequence Number is the MDSN of the last message sent by the aggregator of this channel.

11.4.2. Snapshot Sequence behavior

The snapshot sequences start as soon as Euronext Stream Pro is ready to broadcast messages (and not after the first real-time message is sent on the real-time channels) and stops only when Euronext Stream Pro stops.
So, Start of Day, Health Status and End of Day messages will be sent along with the snapshots at the beginning of the day, during the day and at the end of the day respectively. At the beginning of the day the snapshots will contain only Start of Snapshot and End of Snapshot messages with no snapshotted messages in between and the Market Data Sequence Number in Start of Snapshot and End of Snapshot will be set to null.
The minimum period between two snapshot sequences for a given channel is set to 2 seconds all along the day.
The snapshot sequence provides messages for all instruments of the channel at the same time, as opposed to instrument by instrument.

11.4.2.1. Start Of Snapshot (2101)

Message Description

Provides the Market Data Sequence Number of the last real-time message processed for this snapshot. Last Market Data Sequence Number is set to null at the beginning of the day until another message than Start Of Day (1101) is broadcasted.

Message Sending Rules:

Start Of Snapshot message is always the first message of a snapshot sequence, and indicates the beginning of a snapshot sequence.

Message Structure

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
LastMDSeqNum	Last Market Data Sequence Number	Indicates the Market Data Message Sequence Number of the last real-time message processed for this snapshot.	Sequence	8	0..2^64-2	Optional
SnapshotTime	Snapshot Time	Indicates the time when snapshot generation has respectively started/ended in the Start Of Snapshot/End Of Snapshot message (Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Mandatory

11.4.2.2. End Of Snapshot (2102)

Message Description

The End Of Snapshot message indicates the end of a snapshot sequence. It provides the Market Data Sequence Number of the last real time message processed for this snapshot. It also indicates that processing queued messages from the real-time feed with a higher Market Data Sequence member is now possible.

Message Sending Rules: End Of Snapshot message is always the last message of a snapshot sequence.

Message Structure

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
LastMDSeqNum	Last Market Data Sequence Number	Indicates the Market Data Message Sequence Number of the last real-time message processed for this snapshot.	Sequence	8	0..2^64-2	Optional

TECHNICAL FIELD	FUNCTIONAL FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
SnapshotTime	Snapshot Time	Indicates the time when snapshot generation has respectively started/ended in the Start Of Snapshot/End Of Snapshot message (Time in number of nanoseconds since 01/01/1970 UTC).	unsigned integer 64	8	0..2^64-2	Mandatory

12. FIELD DESCRIPTION

A

Account Type

FIELD NAME	ACCOUNT TYPE
Description	Indicates the account type for which the order is entered. For example, an order can be entered for a client account, a house account or a liquidity provider account. For Cross orders it specifies the account type for which the buy side of a cross order is entered. - Non-LP clients are not allowed to use the type '6' (Liquidity Provider). - Only members acting as Retail Member Organizations (RMO) can send '4' (RO) orders on behalf of their retail clients.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Client 2 = House 4 = RO 5 = Assigned Broker 6 = Liquidity Provider 7 = Related Party 8 = Structured Product Market Maker 9 = Managed Client 10 = Foreign 11 = Managed Foreign 12 = Liquidity Contract 13 = Undertaking for Collective Investment 14 = Omega Client 15 = Ceres Client
Conditions	It is mandatory for every NewOrder (01) messages. In CancelReplace (06) message, if provided the value is ignored. For ETF Access platform, the field is mandatory in Quote Request (10).
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

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)
Used In	Standing Data (1007) Contract Standing Data (1013)
Used For	Cash and Derivatives

Anonymous

FIELD NAME	ANONYMOUS
Description	Indicates if the Market Data notifications are to be anonymous or not. (0 = No ; 1 = Yes)
Format	Boolean (unsigned integer 8)
Possible Values	0 = No 1 = Yes
Used In	Standing Data (1007)

FIELD NAME	ANONYMOUS
Used For	Cash

B

Block Trade Code

FIELD NAME	BLOCK TRADE CODE
Description	Indicates if trade relates to a block or a negotiated deal following MiFID rules.
Format	Enumerated (character)
Possible Values	B = Block Trade N = Regular trade or Negotiated deal - = Undefined
Used In	Full Trade Information (1004)
Used For	Cash

Book State

FIELD NAME	BOOK STATE
Description	Indicates the state of the book resulting of the current timetable phase, current contractmarket/instrument state and current contract/trading group state.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Inaccessible 2 = Closed 3 = Call 4 = Uncrossing 5 = Continuous 6 = Halted 7 = Continuous Uncrossing 8 = Suspended 9 = Reserved 10 = Random Uncrossing Period 99 = Any
Used In	Market Status Change (1005)
Used For	Cash and Derivatives

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	Standing Data (1007) Outright Standing Data (1014) Strategy Standing Data (1012)
Used 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)
Used In	Market Data Packet Header
Used For	Cash and Derivatives

Channel Type 2

FIELD NAME	CHANNEL TYPE 2
Description	Defines the channel.TO BE DELETED, IS JUST A WORKAROUND TO UNLOCK TRAIN261
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Full Order Book Order Update message 2 = Full Order Book Market Update message 3 = Indices and referential channel 4 = Trades and referential channel 5 = Best Bid and Best Offer channel 6 = APA SI Quotes channel 7 = APA Trade Publication channel 8 = Synapse Trades channel 9 = Block channel
Used In	Channels Configuration (805)
Used For	Cash and Derivatives

Collar Expansion Factor

FIELD NAME	COLLAR EXPANSION FACTOR
Description	Numerical coefficient applied in collar calculation.
Format	Numerical ID (unsigned integer 8)
Used In	Contract Standing Data (1013)

Collar Max Unhalt Nb

FIELD NAME	COLLAR MAX UNHALT NB
Description	Maximum number of automatic attempts to unhalt system performs if Dynamic Collar Logic enables unhalting. For Derivatives, It is used for Trade Price Validation (TPV).
Format	Numerical (unsigned integer 8)
Used In	Contract Standing Data (1013)

Collar Unhalt Delay

FIELD NAME	COLLAR UNHALT DELAY
Description	Delay (in seconds) of automatic unhalt if Dynamic Collar Logic enables unhalting. For Derivatives, it is used for Trade Price Validation (TPV).

FIELD NAME	COLLAR UNHALT DELAY
Format	Time (unsigned integer 32)
Used In	Contract Standing Data (1013)

Contract Event Date

FIELD NAME	CONTRACT EVENT DATE
Description	(in number of days since the 1st of January 1970).
Format	Date (unsigned integer 16)
Used In	Contract Standing Data (1013)
Used For	Derivatives

Contract Name

FIELD NAME	CONTRACT NAME
Description	Contract Name
Format	Text (character)
Length	60
Used In	Contract Standing Data (1013)
Used For	Derivatives

Contract Symbol Index

FIELD NAME	CONTRACT SYMBOL INDEX
Description	Exchange identification code of the Contract. The correspondence of the Contract Symbol Index and its characteristics is provided in the standing data messages and associated files. Symbol Index is valid for the life of the Contract.
Format	Numerical ID (unsigned integer 32)
Used In	Outright Standing Data (1014) Strategy Standing Data (1012)
Used For	Derivatives

Contract Trading Type

FIELD NAME	CONTRACT TRADING TYPE
Description	Contract Trading Type.
Format	Enumerated (unsigned integer 8)
Possible Values	0 = Not Applicable 1 = Traded as an outright 2 = Not traded but listed in contract data Traders may subscribe to 3 = Traded as a simple intercommodity spread 4 = Traded as an intercommodity spread
Used In	Contract Standing Data (1013)
Used For	Derivatives

Contract Type

FIELD NAME	CONTRACT TYPE
Description	Generic Contract Type.
Format	Enumerated (character)
Possible Values	F = Future O = Option U = Underlying
Used In	Contract Standing Data (1013)
Used 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	Standing Data (1007) Contract Standing Data (1013)
Used For	Cash and Derivatives

Currency Coefficient

FIELD NAME	CURRENCY COEFFICIENT
Description	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). 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. 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).
Format	Numerical (unsigned integer 32)
Used In	Standing Data (1007) Full Trade Information (1004)
Used 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)
Used In	Standing Data (1007)
Used For	Cash

Dark LIS Threshold

FIELD NAME	DARK LIS THRESHOLD
Description	Defines the minimum amount, in trading currency, of an order to benefit from the LIS (Large In Scale) pre-transparency waiver (to be calculated with the Amount Decimals). It is not related to Dark project even mentioned in the name of the field.
Format	Amount (unsigned integer 64)
Used In	Standing Data (1007)
Used For	Cash

Dark Minimum 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)
Used In	Standing Data (1007)
Used For	Cash

Data Set Family

FIELD NAME	DATA SET FAMILY
Description	Defines the type of set of data to be provided in the Kafka topic; for example: System, MDG Feed or Regulatory
Format	Text (character)
Length	255
Used In	Channels Configuration (805)
Used For	Cash and Derivatives

Date Of Last Trade

FIELD NAME	DATE OF LAST TRADE
Description	(in number of days since the 1st of January 1970).
Format	Date (unsigned integer 16)
Used In	Standing Data (1007)
Used For	Cash

Days To Expiry

FIELD NAME	DAYS TO EXPIRY
Description	Number of Business days until the Last Trading Day of the Expiry.
Format	Numerical (unsigned integer 16)
Used In	Outright Standing Data (1014)

Depositary List

FIELD NAME	DEPOSITARY LIST
Description	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: - '00001' – Euroclear France - '00002' – CIK (Belgium) - '00003' – NECIGEF (the Netherlands) - '00004' – X/N (BoB service) - '00005' – VIF (non-fungible Belgian instruments) - '00006' – Euroclear Bank - '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	Standing Data (1007)
Used 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	Outright Standing Data (1014) Strategy Standing Data (1012)
Used For	Cash and Derivatives

Derivatives Instrument Type

FIELD NAME	DERIVATIVES INSTRUMENT TYPE
Description	Indicates the type of derivative instrument
Format	Enumerated (unsigned integer 8)
Possible Values	0 = CallOption 1 = PutOption 2 = Strategy 3 = IndividualFuture 4 = Underlying 9 = N/A
Used In	Outright Standing Data (1014)
Used For	Derivatives

Derivatives Market Model

FIELD NAME	DERIVATIVES MARKET MODEL
Description	Type of synthetic quote applied to the contract
Format	Enumerated (unsigned integer 8)
Possible Values	0 = NoSyntheticQuote 1 = SpontaneousImpliedMatching 2 = EventDrivenImpliedMatching

FIELD NAME	DERIVATIVES MARKET MODEL
Used In	Contract Standing Data (1013)
Used For	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)
Possible Values	0 = Not Active 2 = No Halt with Reject 3 = Halt with Acceptation
Conditions	The fields Collar Max Unhalt Nb and Collar Unhalt Delay provide the parameters for management of Trade Price Validation when it is activated. For Derivatives: Value "2" (No reservation with Reject) - is not currently in use
Used In	Contract Standing Data (1013)

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)
Used In	Contract Standing Data (1013)
Used For	Derivatives

Effective Date Indicator

FIELD NAME	EFFECTIVE DATE INDICATOR
Description	Indicates if the trade is introduced on the trading session day or earlier.
Format	Enumerated (unsigned integer 8)
Possible Values	0 = Seller declaration is received on the cur trading session day 1 = Seller declaration received before the cur trading session day
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

Emitter Type

FIELD NAME	EMITTER TYPE
Description	The Emitter Type defines whether an Emitter emits on Real Time or Snapshot Channels
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Real Time 2 = Snapshot

FIELD NAME	EMITTER TYPE
Used In	Channels Configuration (805)

EMM

FIELD NAME	EMM
Description	Defines the Exchange Market Mechanism applied on each platform. On Optiq Derivatives, one Symbol Index (ISIN/MIC/Currency) may have several order books (i.e. COB, Wholesale, RFC), each one identified by a dedicated Exchange Market Mechanism. The EMM represents an order book for a Symbol Index. It is specified in the order entry message in addition to the Symbol Index to route the message to the right order book. In the Reject (07) message: ■ 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. In the Mass Cancel (13) message, it is mandatory when Symbol Index is provided and optional when Instrument Group Code is provided.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Cash and Derivative Central Order Book 2 = NAV Trading Facility 4 = Derivatives Wholesales 5 = Cash On Exchange Off book 6 = Euronext off exchange trade reports 7 = Derivatives On Exchange Off book 8 = ETF MTF NAV Central Order Book 9 = Listed-not traded 10 = Buy In 11 = Odd Lot 14 = Quote Advertisement 15 = Delta Neutral Contingency Leg 17 = ERS 99 = Not Applicable
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. 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. In the Mass Cancel (13) message, it is mandatory when Symbol Index is provided and optional when Instrument Group Code is provided. In the Quotes (08), MM Sign-in (47) and MM Protection Request (62) messages the only possible value is '1' = Cash and Derivative Central Order Book (COB).
Used In	Timetable (1006) Standing Data (1007) Contract Standing Data (1013) Outright Standing Data (1014) Strategy Standing Data (1012) Market Update (1001) Price Update (1003) Full Trade Information (1004) Market Status Change (1005)
Used For	Cash and Derivatives

End Time Vwap

FIELD NAME	END TIME VWAP
Description	(Number of seconds since the beginning of the day).
Format	Intraday Time in Seconds (unsigned integer 32)
Conditions	For Declaration Entry (40) message, it is mandatory for declarations when Operation Type = '5'.

FIELD NAME	END TIME VWAP
Used In	Full Trade Information (1004)
Used For	Cash

Environment

FIELD NAME	ENVIRONMENT
Description	Operating environment of the system
Format	Enumerated (unsigned integer 8)
Possible Values	1 = PROD 2 = vEUA 3 = pEUA 4 = QAINT
Used In	Channels Configuration (805)

Evaluated Price

FIELD NAME	EVALUATED PRICE
Description	This field is used for the Total Return Future (TRF) and Market On Close (MOC) contracts to provide the trade price calculated against provisional (a.k.a. preliminary) or final price of the underlying index or stock, while Last Traded Price provides price in Spread (in basis or index points). The value in field Trade Type allows to identify if the trade message contains provisional or final price.
Format	Price (signed integer 64)
Conditions	Used only for Total Return Future and Market On Close Future trading
Used In	Full Trade Information (1004)
Used For	Derivatives

Event Time

FIELD NAME	EVENT TIME
Description	(Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Used In	Health Status (1103) Market Update (1001) Price Update (1003) Full Trade Information (1004) Market Status Change (1005)
Used For	Cash and Derivatives

Exchange Code

FIELD NAME	EXCHANGE CODE
Description	Indicates the Market Place.
Format	Enumerated (character)
Length	1

FIELD NAME	EXCHANGE CODE
Possible Values	A = Amsterdam Equity Derivatives B = Brussels Equity Derivatives 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 N = Oslo Index Derivatives O = Oslo Equity Derivatives L = Oslo Cash Underlying U = Milan Cash Underlying I = Milan Index Derivatives E = Milan Equity Derivatives T = Milan Interest Rate Derivatives V = Euronext Amsterdam - Other Commodities X = Athens Equity Derivatives Q = Athens Index Derivatives W = Athens Cash Underlying
Used In	Contract Standing Data (1013) Strategy Standing Data (1012)
Used For	Derivatives

Exercise Style

FIELD NAME	EXERCISE STYLE
Description	Type of exercise of a Cash (Shares, Bonds for now) or Derivatives instrument
Format	Enumerated (unsigned integer 8)
Possible Values	0 = European 1 = American 2 = Asian 3 = Bermudan 4 = Other 5 = Periodic
Used In	Contract Standing Data (1013)
Used For	Cash and Derivatives

Expiration Date

FIELD NAME	EXPIRATION DATE
Description	(in number of days since the 1st of January 1970).
Format	Date (unsigned integer 16)
Used In	Outright Standing Data (1014)
Used For	Cash and Derivatives

Expiry Cycle Type

FIELD NAME	EXPIRY CYCLE TYPE
Description	Defines the expiry cycle type
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Daily 2 = Weekly 3 = Monthly 4 = Quarterly 5 = Half-Yearly 6 = Yearly
Used In	Outright Standing Data (1014)
Used For	Derivatives

F

Firm ID

FIELD NAME	FIRM ID
Description	Identifier of the member firm that sends the message. It is provided by the Exchange upon the registration of the Firm by the Membership department. When linked to Regulatory Master Firm ID technical field, it refers to the possibility of grouping Firms belonging to the same Legal Entity (at the moment used only in RTS8 context).
Format	Alphanumerical ID (character)
Length	8
Conditions	In inbound messages it is the ID of the firm that sent the message. In outbound messages it is the ID of the firm to which the message is sent.
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

First Settlement Date

FIELD NAME	FIRST SETTLEMENT DATE
Description	(in number of days since the 1st of January 1970).
Format	Date (unsigned integer 16)
Used In	Standing Data (1007)
Used For	Cash

Full Instrument Name

FIELD NAME	FULL INSTRUMENT NAME
Description	Full Instrument Name.
Format	Text (character)
Length	102
Used In	Standing Data (1007)
Used 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)
Possible Values	0 = This instrument is not guaranteed 1 = This instrument is guaranteed 2 = This instrument is not clearable 8 = Guaranteed Cleared Borrowing Lending Service
Used In	Standing Data (1007)
Used For	TCS

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. Following announcement by FTSE Russell of the structural changes to the Industry Classification Benchmark (ICB) this field contains the "legacy" format of ICB. Until completion of the transition this field will be populated instead of or in parallel with the field 'ICB Code'.
Format	Alphanumerical ID (character)
Length	16
Used In	Standing Data (1007)
Used 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. Following announcement by FTSE Russell of the structural changes to the Industry Classification Benchmark (ICB) this field contains the "new" format of ICB. Until completion of the transition this field will be provided in parallel with the field 'ICB'.
Format	Alphanumerical ID (character)
Length	8
Used In	Standing Data (1007)
Used For	Cash

Imbalance Quantity

FIELD NAME	IMBALANCE QUANTITY
Description	Imbalance volume quantity if Uncrossing occurs at this moment. This volume includes hidden quantity (to be calculated with Quantity Decimals).
Format	Quantity (unsigned integer 64)

FIELD NAME	IMBALANCE QUANTITY
Used In	Price Update (1003)
Used For	Cash

Imbalance Quantity Side

FIELD NAME	IMBALANCE QUANTITY SIDE
Description	Side of the imbalance volume if the Uncrossing occurs at this moment.
Format	Enumerated (unsigned integer 8)
Possible Values	0 = No imbalance 1 = Buy 2 = Sell
Used In	Price Update (1003)
Used For	Cash

Instrument Event Date

FIELD NAME	INSTRUMENT EVENT DATE
Description	(in number of days since the 1st of January 1970).
Format	Date (unsigned integer 16)
Used In	Standing Data (1007) Outright Standing Data (1014)
Used For	Cash and Derivatives

Instrument Group Code

FIELD NAME	INSTRUMENT GROUP CODE
Description	Instrument Group / Class Identifier.
Format	Alphanumerical ID (character)
Length	2
Used In	Standing Data (1007)
Used For	Cash

Instrument Name

FIELD NAME	INSTRUMENT NAME
Description	Instrument Name
Format	Text (character)
Length	18
Used In	Standing Data (1007)
Used For	Cash

Instrument State

FIELD NAME	INSTRUMENT STATE
Description	Indicates the state of the instrument.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Scheduled 2 = Suspended due to Underlying 3 = Suspended KOBI 4 = Suspended KOBE 5 = Suspended New Listing 6 = Suspended by MO 7 = Suspended Technical 8 = Reserved Dynamic Collars 9 = Reserved Static Collars 10 = Reserved Waiting For LP 11 = Reserved LP Limit 12 = Instrument Deletion 13 = Suspended Waiting for BBO 14 = Suspended Waiting for Tradable State 15 = Random Uncrossing Period 16 = Expired 17 = Uncrossing 18 = Reserved due to Leg 19 = Suspended due to Leg 20 = Reserved Waiting for Valid Assigned Broker Price 21 = Reserved Future Limit Interruption Protection 22 = Suspended Waiting For Market Operations 23 = Trading Ended 24 = Reserved Waiting for Assigned Broker 25 = Reserved Waiting Number of Securities is Fulfilled 26 = Suspended due to Failover 27 = Closed due to Restricted Session
Used In	Market Status Change (1005)
Used For	Cash and Derivatives

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	Alphanumerical ID (character)
Length	15
Used In	Standing Data (1007)
Used For	Cash and Derivatives

Instrument Unit Expression

FIELD NAME	INSTRUMENT UNIT EXPRESSION
Description	Unit in which the instrument is quoted.
Format	Enumerated (unsigned integer 8)

FIELD NAME	INSTRUMENT UNIT EXPRESSION
Possible Values	1 = Units 2 = Percentage of Nominal Excluding Accrued Interest Clean 3 = Basis Points 4 = Percentage Mixed 5 = Percentage of Nominal Including Accrued Interest Dirty 6 = Percentage of Par Value 7 = Yield 8 = Kilograms 9 = Ounces
Used In	Standing Data (1007) Contract Standing Data (1013)
Used For	Cash and Derivatives

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	Alphanumerical 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	Standing Data (1007) Outright Standing Data (1014)
Used For	Cash and Derivatives

Issue Price

FIELD NAME	ISSUE PRICE
Description	(to be calculated with Issue Price Decimals).
Format	Price (signed integer 64)
Used In	Standing Data (1007)
Used For	Cash

Issue Price Decimals

FIELD NAME	ISSUE PRICE DECIMALS
Description	Indicates the number of decimals for Issue Price related to this Symbol Index
Format	Decimal Places (unsigned integer 8)
Used In	Standing Data (1007)
Used 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	Standing Data (1007)
Used For	Cash

K

Kafka Topic Content Label

FIELD NAME	KAFKA TOPIC CONTENT LABEL
Description	Description of the content of the Kafka topic.
Format	Text (character)
Length	255
Used In	Channels Configuration (805)
Used For	Cash and Derivatives

Kafka Topic Name

FIELD NAME	KAFKA TOPIC NAME
Description	Identifies the name of Kafka topic where MD Stream pushes messages.
Format	Alphanumerical ID (character)
Length	20
Used In	Channels Configuration (805)
Used For	Cash and Derivatives

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)
Used In	Standing Data (1007)
Used For	Cash

Last Market Data Sequence Number

FIELD NAME	LAST MARKET DATA SEQUENCE NUMBER
Description	Indicates the Market Data Message Sequence Number of the last real-time message processed for this snapshot.
Format	Sequence (unsigned integer 64)
Used In	Start Of Snapshot (2101) End Of Snapshot (2102)
Used For	Cash and Derivatives

Last Trading Date

FIELD NAME	LAST TRADING DATE
Description	(in number of days since the 1st of January 1970).
Format	Date (unsigned integer 16)
Used In	Outright Standing Data (1014)
Used For	Cash and Derivatives

Leg Buy or Sell

FIELD NAME	LEG BUY OR SELL
Description	Leg Side.
Format	Enumerated (character)
Length	1
Possible Values	B = Buy S = Sell
Used In	Strategy Standing Data (1012)
Used 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)
Conditions	The field is used to provide the price of the Underlying leg in a submission of a Delta-neutral strategy using the Security Definition Request (60) message. In all other cases of submission of the Security Definition Request (60) messages this field should be populated with the Null value.
Used In	Strategy Standing Data (1012)
Used For	Derivatives

Leg Ratio

FIELD NAME	LEG RATIO
Description	Ratio of lots for the leg. For contingent trades, the delta. ■ For Contracts (Future or Option), it is the leg ratio, with the maximum value being 99999. If the value submitted by a customer is higher, it will be changed by the system to the maximum value (99999). ■ For Underlyings (Cash or Future), the delta is used with special rules: For the Underlying leg of volatility strategies, this should be the delta represented directly as an integer value of the percentage, without division or decimals (e.g.: a delta of 65% should be represented by 65), with the maximum value being 9999 (9999%). If the value submitted by a customer is higher, it will be changed by the system to the maximum value (9999). For Conversion Reversal Strategies (Type = 'R'), the delta is always set to 100.
Format	Numerical (unsigned integer 32)
Conditions	For New Wholesale Order (64) only populated for strategies.
Used In	Strategy Standing Data (1012)
Used 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)
Used In	Strategy Standing Data (1012)
Used For	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)
Used In	Standing Data (1007)

Long Mnemonic

FIELD NAME	LONG MNEMONIC
Description	Mnemonic code of the instrument. This field is not populated for every instrument. Introduced to comply with Borsa Italiana's Mnemonic of length 6.
Format	Alphanumerical ID (character)
Length	6
Used In	Standing Data (1007)
Used For	Cash and Derivatives

Lot Multiplier

FIELD NAME	LOT MULTIPLIER
Description	Amount of underlying instrument per unit of a derivative contract (to be calculated with the Ratio / Multiplier 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. The Lot Multiplier is used instead of Trading Unit, because the Lot Multiplier supports the decimals. The Lot Multiplier is optional because of the Underlying presence in the Standing Data. However it must be filled for any other instrument.
Format	Numerical (unsigned integer 64)
Used In	Contract Standing Data (1013) Outright Standing Data (1014)
Used For	Derivatives

Lot Size

FIELD NAME	LOT SIZE
Description	For Cash and Derivatives, it defines a multiple of the tradable quantity.
Format	Quantity (unsigned integer 64)
Used In	Standing Data (1007) Contract Standing Data (1013) Outright Standing Data (1014)
Used For	Cash and Derivatives

M

Main Depositary

FIELD NAME	MAIN DEPOSITARY
Description	Identifies the default (or main) depository organization of the instrument (between the possible 4 depositaries registered) used by priority for the settlement (for example: multi-listed instruments which have several depositories). For Cash Markets this data has to be treated in consideration of the data Depositary List used by the clearing house to determine the relevant system for settling trades. Valid values are the same as for "Depositary List". Valid values are: - '00000' - No depository organization - '00001' - Euroclear France - '00002' - Euroclear Belgium - '00003' - Euroclear Nederland - '00004' - X/N NBB (National Bank of Belgium) - '00005' - VIF (non-fungible Belgian instruments) - '00006' - Euroclear Bank - '00008' - Physical - '00009' - EURONEXT NON EUROCLEAR - '00010' - Interbolsa - '00012' - Monte Titoli - '00015' - SIS SegaInterSettle AG - '00016' - OESTERREICHISCHE KONTROLLBANK AG - '00017' - Vaerdipapircentralen (VP) - '00018' - Clearstream Banking A.G. - '00019' - CLEARSTREAM BANKING S.A. - '00021' - KELER - '00023' - Finnish Central Securities Depository Ltd - '00028' - IBERCLEAR CENTRAL BANK - '00030' - Euroclear UK - Ireland Limited - '00050' - VERDIPAPIRSENTRALEN, VPS - '00051' - STREDISKO CENNYCH PAPIRU - '00052' - Swedish Central Securities Depository Ltd - '00053' - WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET - 'Nulls' - Not significant
Format	Alphanumerical ID (character)
Length	5
Used In	Standing Data (1007) Contract Standing Data (1013)
Used For	Cash and Derivatives

Market Data Change Type

FIELD NAME	MARKET DATA CHANGE TYPE
Description	Type of scheduled change.
Format	Enumerated (unsigned integer 8)
Possible Values	0 = Status Changes 1 = Scheduled Event Notification 2 = Status Change and Scheduled Event Notification
Used In	Market Status Change (1005)
Used For	Cash and Derivatives

Market Data Price Type

FIELD NAME	MARKET DATA PRICE TYPE
Description	Type of price update (note: 1 to 9 are settlement price type).
Format	Enumerated (unsigned integer 8)

FIELD NAME	MARKET DATA PRICE TYPE
Possible Values	2 = Official Daily 4 = Official Market Close 6 = Official Expiry 7 = Provisional Intraday 8 = Official Intraday 9 = Official YDSP 10 = NAV for the instruments eligible to the NAV Trading Facility 12 = Adjusted Closing Price 13 = Subscription Price 14 = Indicative Matching Price 19 = Min Price Out of Session Trades 20 = Max Price Out of Session Trades 21 = Min Price Out of Session Block Trades 22 = Max Price Out of Session Block Trades 23 = Valuation Price 24 = Fund Subscription 25 = Fund Redemption 26 = Uncrossing Price 27 = Last Traded Price 28 = AIP 30 = Net Asset Value 31 = External Reference Price 32 = Volume Weighted Average Price 33 = Closing Price 34 = Life Time Lowest Price 35 = Life Time Highest Price 36 = Daily Lowest Price 37 = Daily Highest Price 38 = Breached Dynamic Collar 39 = Breached Static Collar 40 = Trading At Last Price 41 = Life Time Contract Highest Price 42 = Life Time Contract Lowest Price
Used In	Price Update (1003)
Used For	Cash and Derivatives

Market Data Sequence Number

FIELD NAME	MARKET DATA SEQUENCE NUMBER
Description	Assigned by MDG for each message. Each channel has its own Market Data Sequence Number sequence. This sequence will always increment but not by 1 during the day, except for "Health Status" messages that will contain the Market Data Sequence Number of the last message (that is not a "Health Status" message) sent on the channel.
Format	Sequence (unsigned integer 64)
Used In	Start Of Day (1101) End Of Day (1102) Health Status (1103) Technical Notification (1106) Timetable (1006) Standing Data (1007) Contract Standing Data (1013) Outright Standing Data (1014) Strategy Standing Data (1012) Market Update (1001) Price Update (1003) Full Trade Information (1004) Market Status Change (1005) Statistics (1009)
Used For	Cash and Derivatives

Market Data Update Type

FIELD NAME	MARKET DATA UPDATE TYPE
Description	Type of market data update.
Format	Enumerated (unsigned integer 8)

FIELD NAME	MARKET DATA UPDATE TYPE
Possible Values	1 = Best Bid 2 = Best Offer 3 = New Bid 4 = New Offer 5 = Updated Bid 6 = Updated Offer 7 = Total Traded Volume 8 = Implied Bid 9 = Implied Offer 10 = Request for Quote 11 = Request for Quote Bid 12 = Request for Size 13 = Request for Quote Offer 14 = High Dynamic Collar 15 = Low Dynamic Collar 16 = New Bid RLP 17 = New Offer RLP 18 = Updated Bid RLP 19 = Updated Offer RLP 20 = AVD Trade 24 = Conventional Trade 25 = Request for Cross RFC Queued 26 = Request for Cross RFC 27 = Large in Scale LiS Trade 28 = Basis Trade 29 = Large in Scale LiS Package Trade 30 = Guaranteed Cross Trade 31 = Against Actual Trade 32 = Asset Allocation Trade 34 = Exchange for Swap Trade 35 = Dark Trade 36 = Exchange for Physical Trade Cash Leg 37 = Strategy Leg Conventional Trade 38 = Strategy Leg Large in Scale LiS Trade 39 = Strategy Leg Basis Trade 40 = Strategy Leg Guaranteed Cross Trade 41 = Strategy Leg Against Actual Trade 42 = Strategy Leg Asset Allocation Trade 44 = Strategy Leg Exchange For Swap Trade 45 = Strategy Leg Exchange For Physical Trade 46 = BoB Trade 48 = AtomX Trade 50 = Trade Cancellation 51 = Out of Market Trade 52 = Delta Neutral Trade Underlying Cash Leg 53 = Delta Neutral Trade Underlying Future Leg 54 = Euronext Fund Service Trade 55 = Secondary Listing Trade 56 = Request for Cross Trade 57 = Request for Cross Strategy Leg Trade 58 = New Bid With Liquidity Provider 59 = New Offer With Liquidity Provider 60 = Updated Bid With Liquidity Provider 61 = Updated Offer With Liquidity Provider 63 = Low Static Collar 64 = High Static Collar 65 = Market VWAP Operation Trade 66 = Request for Size Bid 67 = Request for Size Offer 70 = Low LP Collar 71 = High LP Collar 72 = ETF MTF NAV Trade price in bp 73 = ETF MTF NAV Dark Trade price in bp 74 = New Bid on Wholesale RFC 75 = New Offer on Wholesale RFC 76 = Updated Bid on Wholesale RFC 77 = Updated Offer on Wholesale RFC 78 = Clear Wholesale RFC 79 = Guaranteed Cross Negotiated deal NLIQ

FIELD NAME	MARKET DATA UPDATE TYPE
	80 = Guaranteed Cross Negotiated deal OILQ 81 = Large in Scale Trade 82 = Large in Scale Trade in basis points 83 = Large in Scale Package Trade in basis points 84 = Strategy Leg Large in Scale Trade in basis points 85 = Volume Weighted Average Price 86 = New Bid RFQ Answer 87 = New Offer RFQ Answer 88 = Updated Bid RFQ Answer 89 = Updated Offer RFQ Answer 90 = Bid Execution Summary 91 = AQS Expansion Factor 92 = Collars Expansion Factor 93 = Collars Enabled 94 = Collars Disabled 95 = DCRP Inter-Month Spread 96 = FSP Reference Price 97 = Offer Execution Summary 98 = FSP Triggered 99 = MidPoint BBO 100 = Conventional Trade - Provisional price 101 = High Order Price Control Collar 102 = Low Order Price Control Collar 103 = Order Price Control Collar Reference Price 104 = Issuing Or Tender Offer Trade 105 = RFQ Trade 106 = FLIP Spread 107 = FLIP Reference Price 108 = Strategy Leg Conventional Trade - Provisional price 109 = Block Standard Trade 110 = Block NFC Auction Trade 111 = Block Historical Trade 112 = Large in Scale Package Trade 252 = Static Collar Reference Price 253 = Dynamic Collar Reference Price 254 = Clear Book
Used In	Market Update (1001)
Used For	Cash and Derivatives

Market Model

FIELD NAME	MARKET MODEL
Description	Market Model identifier.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Order Driven 2 = Quote Driven 3 = IPO 4 = Primary Market 5 = RFQ 6 = Conditional Uncrossing 7 = Declaration Driven 8 = Order Driven-Auction
Used In	Standing Data (1007)
Used 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	Alphanumerical ID (character)
Length	4
Conditions	For Declaration Entry (40) message, it is mandatory when Operation Type = '4' or '6'.
Used In	Standing Data (1007) Full Trade Information (1004)
Used For	Cash

Maturity Date

FIELD NAME	MATURITY DATE
Description	On Cash, Maturity Date of the instrument (text formatted as YYYYMMDD). On Derivatives, Maturity ID of the instrument (text formmated as YYYYMM00).
Format	Text (character)
Length	8
Used In	Standing Data (1007) Outright Standing Data (1014) Strategy Standing Data (1012)
Used For	Cash and Derivatives

Max Order Amount Call

FIELD NAME	MAX ORDER AMOUNT CALL
Description	Maximum order amount during a call phase, adjusted by the Pool Factor.
Format	Amount (unsigned integer 64)
Used In	Standing Data (1007)

Max Order Amount Continuous

FIELD NAME	MAX ORDER AMOUNT CONTINUOUS
Description	Maximum order amount during a continuous phase, adjusted by the Pool Factor.
Format	Amount (unsigned integer 64)
Used In	Standing Data (1007)

Max Order Quantity Call

FIELD NAME	MAX ORDER QUANTITY CALL
Description	Maximum order quantity during a call phase, adjusted by the Pool Factor.
Format	Quantity (unsigned integer 64)
Used In	Standing Data (1007)

Max Order Quantity Continuous

FIELD NAME	MAX ORDER QUANTITY CONTINUOUS
Description	Maximum order quantity during a continuous phase, adjusted by the Pool Factor.
Format	Quantity (unsigned integer 64)
Used In	Standing Data (1007)

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)
Used In	Standing Data (1007)
Used 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)

FIELD NAME	MDG SET OF CHANNELS ID
Possible Values	1 = Funds 2 = FixedIncome 3 = BourseDeLuxembourg 4 = WarrantsandCertificates 5 = EquitiesFrance 6 = EquitiesNetherlands 7 = EquitiesBelgium 8 = EquitiesPortugal 9 = EquitiesDublin 10 = EquitiesNorway 11 = BestofBook 12 = FixedIncomeNordicABM 13 = EuronextIndices 14 = EuronextiNAVs 15 = EuronextDublinIndices 16 = CommodityDerivatives 17 = CurrencyDerivatives 18 = EquitiesItaly 19 = EquitiesTAH 20 = EquityDerivativesFrance 21 = EquityDerivativesNetherlands 22 = EquityDerivativesOther 23 = IndexOptionsFrance 24 = IndexOptionsNetherlands 25 = IndexDerivativesOther 26 = IndexFuturesFrance 27 = IndexFuturesNetherlands 28 = IndexFuturesItaly 29 = APASIQuotes 30 = APATradePublication 31 = BestOfBookFunds 32 = ETFAccess 33 = Block 34 = Forex 35 = IrishBondsandFunds 36 = EquityDerivativesItaly 37 = IndexOptionsItaly 38 = CommodityEnergies 39 = FundsETFItaly 40 = FixedIncomeItaly 41 = WarrantsItaly 42 = FixedIncomeETLX 43 = WarrantsETLX 44 = EquitiesETLX 45 = EquitiesGEM 46 = EquitiesIPOFrance 50 = FundsGreece 51 = EquitiesGreece 52 = EquityDerivativesGreece 53 = IndexDerivativesGreece 100 = Equities 101 = Indices 150 = EquitiesSSE
Used In	Channels Configuration (805)

Message Name

FIELD NAME	MESSAGE NAME
Description	Name of the message.
Format	Text (character)
Length	255
Used In	Channels Configuration (805)

FIELD NAME	MESSAGE NAME
Used For	Cash and Derivatives

Message Price Notation

FIELD NAME	MESSAGE PRICE NOTATION
Description	This field provides the type of price notation used per message. For TRF and MOC products the value "Price" is used for TAM trading mode, the values "Spread in basis points" and "Spread" are used for TAIC trading mode.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Price 2 = Spread in basis points 3 = Spread
Conditions	Currently this functionality is used only for TRF and MOC products. Note that for the TRF products the value "Spread" means "Spread in index point".
Used In	Full Trade Information (1004)
Used For	Derivatives

MIC

FIELD NAME	MIC
Description	Identifies the market to which an instrument belongs by its segment MIC (Market Identification Code) according to ISO 10383. It also identifies the trading venue publishing the transaction and the third-country trading venue where the transaction was executed (only for APA), which also are the segment MIC. When populated, the field may have one of the following values: - 'ALXA' - ALTERNEXT AMSTERDAM - 'ALXB' - EURONEXT GROWTH BRUSSELS - 'ALXL' - EURONEXT GROWTH LISBON - 'ALXP' - EURONEXT GROWTH PARIS - 'ATFX' - ATFUND MTF - 'BGEM' - BORSA ITALIANA GLOBAL EQUITY MARKET - 'EMTF' - EURO MTF - 'ENXB' - EURONEXT - EASY NEXT - 'ENXL' - EURONEXT ACCESS LISBON - 'ETFP' - ELECTRONIC ETF, ETC/ETN AND OPEN-END FUNDS MARKET - 'ETLX' - EUROTLX - 'EXGM'-- EURONEXT GROWTH MILAN - 'MERK' - MERKUR MARKET - 'MFOX' - EURONEXT - MERCADO DE FUTUROS E OPÇÕES - 'MIVX' - EURONEXT MIV MILAN - 'MLXB' - EURONEXT ACCESS BRUSSELS - 'MOTX' - ELECTRONIC BOND MARKET - 'MTAA' - EURONEXT MILAN - 'MTAH' - TRADING AFTER HOURS - 'MTSC' - MTS S.P.A - 'SEDX' - SEDEX - 'TNLA' - EURONEXT - TRADED BUT NOT LISTED AMSTERDAM - 'TNLB' - EURONEXT - TRADING FACILITY BRUSSELS - 'VPXB' - EURONEXT - VENTES PUBLIQUES BRUSSELS - 'WQXL' - EURONEXT - MARKET WITHOUT QUOTATIONS LISBON - 'XACD' - EURONEXT ACCESS DUBLIN - 'XAMC' - EURONEXT AMSTERDAM - MULTI-CURRENCY TRADING - 'XAMS' - EURONEXT - EURONEXT AMSTERDAM - 'XBRD' - EURONEXT - EURONEXT BRUSSELS - DERIVATIVES - 'XBRU' - EURONEXT - EURONEXT BRUSSELS - 'XDMI' - ITALIAN DERIVATIVES MARKET - 'XECO' - EURONEXT OTHER COMMODITY DERIV - '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 - 'XMOT' - EXTRAMOT - 'XMSM' - EURONEXT DUBLIN - 'XOAM' - NORDIC ALTERNATIVE BOND MARKET - 'XOAS' - OSLO AXESS - 'XOBD' - OSLO BORS ASA - DERIVATIVES MARKET - 'XOSL' - OSLO BORS ASA - 'XOTH' - Others - This MIC is not registered. It is use for testing purpose in both p-EUA and Production. - 'XPAR' - EURONEXT - EURONEXT PARIS - 'XPMC' - EURONEXT PARIS - MULTI-CURRENCY TRADING - 'XSPM' - EURONEXT STRUCTURED PRODUCTS MTF
Format	Alphanumerical 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.

FIELD NAME	MIC
Used In	Standing Data (1007) Contract Standing Data (1013) Full Trade Information (1004) RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MIC List

FIELD NAME	MIC LIST
Description	Identifies the Euronext markets on which an instrument is listed by its MIC (Market Identification Code). 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: - The first MIC is the same than the "Market Identification Code (MIC) of the listed instrument - The others MIC indicate the other listing places
Format	Alphanumerical ID (character)
Length	20
Used In	Standing Data (1007)

MiFID Clearing Flag

FIELD NAME	MIFID CLEARING FLAG
Description	Code to identify whether the transaction will be cleared. - 'true': Transaction to be cleared. - 'false': Transaction not to be cleared.
Format	Text (character)
Length	5
Used In	Full Trade Information (1004) RTS 2 Post Trade Transparency (804)
Used For	Derivatives

MiFID Currency

FIELD NAME	MIFID CURRENCY
Description	Currency in which the price is expressed (applicable if the price is expressed as monetary value) following ISO 4217 standard.
Format	Alphanumerical ID (character)
Length	3
Used In	Full Trade Information (1004) RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Emission Allowance Type

FIELD NAME	MIFID EMISSION ALLOWANCE TYPE
Description	This field is only applicable for emission allowances. Possible values: - 'EUAE' – European Union Allowances (EUA) - 'CERE' - Certified Emission Reductions (CER) - 'ERUE' - Emission Reduction Units (ERU) - 'EUAA' - European Union Aviation Allowances (EUAA) - 'OTHR' – Other (for derivatives only)
Format	Text (character)
Length	4
Conditions	For MiFID Declaration Trade Entry (40) message, it is only applicable for APA (i.e. when ARM APA Indicator = '2' or '3'). For emission allowances and emission allowance derivatives only.
Used In	Full Trade Information (1004)
Used For	Derivatives

MiFID Execution ID

FIELD NAME	MIFID EXECUTION ID
Description	MiFID Transaction Identification Code is a unique ID of the Execution per instrument, day and EMM. The value in the field is a concatenation of the Execution ID (10 char) and an identifier of the instruments [ISIN code (12 char) or Symbol Index (10 char)]. In most cases the identifier of the instrument is the 12 character ISIN code. For derivatives, in cases when the trade occurs on an instrument for which the ISIN code is not populated (e.g. Strategies) the Symbol Index of the instrument is used instead.
Format	Alphanumerical ID (character)
Length	52
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

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)
Used In	Contract Standing Data (1013)
Used For	Derivatives

MiFID Instrument Category

FIELD NAME	MIFID INSTRUMENT CATEGORY
Description	Indicates to which MiFID instrument categorization the instrument belongs to.
Format	Enumerated (unsigned integer 8)
Possible Values	0 = Not Applicable 1 = RTS1 - Equity Instrument following MiFID definition 2 = RTS2 - Non Equity Instrument following MiFID definition
Used In	Standing Data (1007)
Used For	Cash

MiFID Instrument ID

FIELD NAME	MIFID INSTRUMENT ID
Description	Code used to identify the financial instrument. This code has to be processed with the MiFID Instrument ID Type. For CTPs, this field is always equal to the instrument's ISIN.
Format	Alphanumerical ID (character)
Length	12
Used In	Full Trade Information (1004) RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Instrument ID Type

FIELD NAME	MIFID INSTRUMENT ID TYPE
Description	Code type used to identify the financial instrument. Possible values: - 'ISIN' = ISIN code, where ISIN is available. - 'OTHR' = other identifier.
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MiFID Market Maker

FIELD NAME	MIFID MARKET MAKER
Description	ESMA definition: 'Market Maker' means a person who holds himself out on the financial markets on a continuous basis as being willing to deal on own account by buying and selling financial instruments against that person’s proprietary capital at prices defined by that person. It must have LEI format as defined in ISO 17442. The value of this field is set to SBE Null in RTS messages.
Format	Text (character)
Length	20
Used In	RTS 1 Pre Trade Transparency (802)
Used For	Cash and Derivatives

MiFID Notional Amount

FIELD NAME	MIFID NOTIONAL AMOUNT
Description	Nominal amount or notional amount. The Possible values have maximum of 18 digits with a maximum of 5 decimals. The decimal separator is '.' (full stop). For example: - For spread bets, the notional amount shall be the monetary value wagered per point movement in the underlying financial instrument. - For credit default swaps, it shall be the notional amount for which the protection is acquired or disposed of.
Format	Text (character)
Length	20

FIELD NAME	MIFID NOTIONAL AMOUNT
Conditions	For MiFID Declaration Trade Entry (40) message, it is mandatory for APA (i.e. when ARM APA Indicator = '2' or '3'). For all financial instruments except in the cases described under Article 11(1) letters (a) and (b) of ESMA Regulation RTS 2.
Used In	Full Trade Information (1004) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Number Of Orders

FIELD NAME	MIFID NUMBER OF ORDERS
Description	The number of aggregated orders or quotes from members or participants.
Format	Text (character)
Length	18
Used In	RTS 1 Pre Trade Transparency (802)
Used For	Cash and Derivatives

MiFID Number Of Transactions

FIELD NAME	MIFID NUMBER OF TRANSACTIONS
Description	ESMA definition: This field should be populated with the number of transactions executed when deferred publication of details of several transactions in an aggregated form is required under Article 11(3)(b) of MiFIR. This field is always equal to SBE NULL. This field is created to fit ESMA expected format.
Format	Text (character)
Length	20
Used In	RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Post Trade Flags

FIELD NAME	MIFID POST TRADE FLAGS
Description	Post Trade flags that includes the values of: For CTP Bond: - MMT Benchmark Indicator = 'BENC' or 'RFPT' - MMT Contribution to Price = 'NPFT' - MMT Contingent Transaction Indicator = 'CONT' - MMT Publication Mode = 'LRGS' - MMT Negotiation Indicator = 'NLIQ' or 'OLIQ' - MMT Algorithmic Indicator = 'PRIC' or 'ALGO' - MMT Modification Indicator = 'CANC' or 'AMND' - Post Trade Deferral Flags = 'MLF1' or 'MIF2' or 'LLF3' or 'LIF4' or 'VLF5'or 'VIF5' For CTP Equities: - MMT Benchmark Indicator = 'BENC' or 'RFPT' - MMT Contribution to Price = 'NPFT' - MMT Contingent Transaction Indicator = 'CONT' - MMT Publication Mode = 'LRGS' - MMT Negotiation Indicator = 'NLIQ' or 'OLIQ' - MMT Algorithmic Indicator = 'PRIC' or 'ALGO' - MMT Modification Indicator = 'CANC' or 'AMND' Flags field is populated with the list of all applicable flags seperated by comma (,). If none of the flags is populated, then Null is provided.

FIELD NAME	MIFID POST TRADE FLAGS
Format	Text (character)
Length	100
Used In	RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Price

FIELD NAME	MIFID PRICE
Description	Traded price of the transaction excluding, where applicable, commission and accrued interest. Where price is reported in monetary terms, it shall be provided in the major currency unit. Where price is not applicable the field shall not be populated. Possible values: - For price expressed as monetary value: maximum of 18 digits with a maximum of 13 decimals. - For price expressed as percentage or yield: maximum of 11 digits with a maximum of 10 decimals. - For price expressed as basis points: maximum of 18 digits with a maximum of 17 decimals. Note 1: Decimal separator is '.' (full stop). Note 2: Negative numbers are prefixed with '-' (minus). Note 3: Where applicable, values shall be rounded and not truncated. Note 4: Price expressed as basis points is only relevant for CTP.
Format	Text (character)
Length	20
Used In	Full Trade Information (1004) RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Price Notation

FIELD NAME	MIFID PRICE NOTATION
Description	Indication as to whether the price is expressed in monetary value, in percentage or in yield. Possible values: ‘MONE’ – Monetary value ‘PERC’ – Percentage ‘YIEL’ – Yield ‘BAPO’ – Basis points.
Format	Text (character)
Length	4
Conditions	For MiFID Declaration Trade Entry (40) message, it is mandatory for APA (i.e. when ARM APA Indicator = '2' or '3').
Used In	Full Trade Information (1004) RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Qty in Measurement Unit Notation

FIELD NAME	MIFID QTY IN MEASUREMENT UNIT NOTATION
Description	Indication of measurement units in which the quantity in measurement unit is expressed. Possible values: 'TOCD' – tonnes of carbon dioxide equivalent 'TONE' – metric tonnes 'MWHO' – megawatt hours 'MBTU' – one million British thermal unit 'THMS' – therms 'DAYS' – days 'FFEU' – Forty-Foot Equivalent Unit Or {ALPHANUM-25} otherwise.
Format	Text (character)
Length	25
Conditions	For MiFID Declaration Trade Entry (40) message, it is only applicable for APA (i.e. when ARM APA Indicator = '2' or '3'). For commodity derivatives, emission allowance derivatives and emission allowances except in the cases described under Article 11(1) letters (a) and (b) of ESMA Regulation RTS 2.
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MiFID Qty in Measurement Unit Notation 2

FIELD NAME	MIFID QTY IN MEASUREMENT UNIT NOTATION 2
Description	Indication of the notation in which the quantity in measurement unit is expressed. Possible values: 'TOCD' – tonnes of carbon dioxide equivalent, for any contract related to emission allowances 'TONE' – metric tonnes 'MWHO' – megawatt hours 'MBTU' – one million British thermal unit 'THMS' – therms 'DAYS' – days Or {ALPHANUM-4} otherwise. This field is created in addition to 'MiFID Qty in Measurement Unit Notation' because the latter has a format which does not fit the ESMA expectations. The length moves from 25 to 4.
Format	Text (character)
Length	4
Used In	RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Quantity

FIELD NAME	MIFID QUANTITY
Description	Number of units of the financial instrument. The nominal or monetary value of the financial instrument. Possible values: - For quantity expressed as number of units: maximum of 18 digits with a maximum of 17 decimals. - For quantity expressed as monetary or nominal value: maximum of 18 digits with a maximum of 5 decimals. Note 1: Decimal separator is '.' (full stop).
Format	Text (character)
Length	20
Used In	Full Trade Information (1004) RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Quantity Measurement Unit

FIELD NAME	MIFID QUANTITY MEASUREMENT UNIT
Description	The equivalent amount of commodity or emission allowance traded expressed in measurement unit Possible values: - For quantity expressed as number of units: maximum of 18 digits with a maximum of 17 decimals. Note: Decimal separator is '.' (full stop).

FIELD NAME	MIFID QUANTITY MEASUREMENT UNIT
Format	Text (character)
Length	20
Conditions	For MiFID Declaration Trade Entry (40) message, it is only applicable for APA (i.e. when ARM APA Indicator = '2' or '3'). For commodity derivatives, emission allowance derivatives and emission allowances except in the cases described under Article 11(1) letters (a) and (b) of ESMA Regulation RTS 2.
Used In	Full Trade Information (1004) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Side

FIELD NAME	MIFID SIDE
Description	ESMA definition: The side of the order or quote. For periodic auction trading system, this field is not mandatory. The allowed values for this field are 'BUYI' and 'SELL'.
Format	Text (character)
Length	4
Used In	RTS 1 Pre Trade Transparency (802)
Used For	Cash and Derivatives

MiFID Trade Unique Identifier

FIELD NAME	MIFID TRADE UNIQUE IDENTIFIER
Description	ESMA Definition: Alphanumerical code assigned by trading venues (pursuant to Article 12 of Commission Delegated Regulation (EU) 2017/5801) and APAs and used in any subsequent reference to the specific trade.
Format	Text (character)
Length	52
Used In	RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Trading Phase

FIELD NAME	MIFID TRADING PHASE
Description	Trading Phase according to ESMA during which the event occurs. The expected values: - 'UDUC': Undefined Auction - 'SOAU': Scheduled Opening Auction - 'SCAU': Scheduled Closing Auction - 'SIAU': Scheduled Intraday Auction - 'UAUC': Unscheduled Auction - 'ODAU': On Demand Auction - 'COTR': Continuous Trading - 'MACT': At Market Close Trading - 'OMST': Out of Main Session Trading - 'OTSP': Other - 'TROE': Trade Reporting (On Exchange) - 'TROF': Trade Reporting (Off Exchange) - 'TRSI': Trade Reporting (Systemtic Internaliser) - 'CLSD': Closed
Format	Text (character)
Length	4
Used In	RTS 1 Pre Trade Transparency (802)
Used For	Cash and Derivatives

MiFID Trading System Type

FIELD NAME	MIFID TRADING SYSTEM TYPE
Description	When in a message used to communicate transactions (orders, trades, etc), it identifies the type of trading system on which the transaction was executed. In other cases, it identifies the type of trading system the information covered by the message relates to. When the field 'Venue of execution' is populated with 'SINT' or 'XOFF', this field shall not be populated. Hybrid trading systems, as per MiFID II definition, combines different trading systems (two or more) at the same time or if the system has a price determination process which is of a different nature than that applicable to the types of system covered by other values. Within Euronext, - RFQ (Request for Quote) and RFC (Request for Cross) are Hybrid trading systems because they match with 2 types of system defined by MiFID II (Quote-driven trading system and Continuous auction order book trading system). - RFE on Warrants model (Request for Execution) is a Hybrid trading system as it does not match any of the 5 types of system defined by MiFID II because the price determination process is of a different nature than that applicable to the types of system covered by first five rows. The expected values: - 'CLOB': Central Limit Order Book Trading Systems - 'QDTS': Quote Driven Trading Systems - 'PATS': Periodic Auction Trading Systems - 'RFQT': Request For Quote Trading Systems - 'VOIC': Voice Trading Systems - 'HYBR': Hybrid Trading Systems - 'OTHR': For Any Other Trading Systems
Format	Text (character)
Length	4
Used In	RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

MiFID Venue

FIELD NAME	MIFID VENUE
Description	When in a message used to communicate transactions (orders, trades, etc), it is the identification of the venue where the transaction was executed. In other cases, it identifies the venue the information covered by the message relates to. For CTP, when related to transactions, if the transaction is executed on an organised trading platform outside of the EU then in addition to 'XOFF' also the population of the field 'Thirdcountry trading venue of execution' is required. For non CTP matters: - Use the ISO 10383 segment MIC for transactions executed on an EU trading venue. Where the segment MIC does not exist, use the operating MIC. - Use 'SINT' for financial instruments admitted to trading or traded on a trading venue, where the transaction on that financial instrument is executed on a Systematic Internaliser. - Use MIC code 'XOFF' for financial instruments admitted to trading or traded on a trading venue, where the transaction on that financial instrument is neither executed on an EU trading venue nor executed by a systematic internaliser. Possible values: {MIC} – EU trading venues or 'SINT' — systematic internaliser 'XOFF' — otherwise
Format	Text (character)
Length	4
Used In	RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)

Missing Price

FIELD NAME	MISSING PRICE
Description	Defines the reason why Price is not available. Possible values: - 'PNDG': Price is Currently Not Available but Pending - 'NOAP': Price Is Not Applicable
Format	Text (character)
Length	4
Used In	Full Trade Information (1004) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used 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)
Possible Values	0 = Delta 1 = Volume
Used In	Contract Standing Data (1013)
Used For	Derivatives

MMT Agency Cross Trade Indicator

FIELD NAME	MMT AGENCY CROSS TRADE INDICATOR
Description	Defines the agency cross trade indicator following MMT level 3.3. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'ACTX': Agency Cross Trade - '-': No Agency Cross Trade
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Algorithmic Indicator

FIELD NAME	MMT ALGORITHMIC INDICATOR
Description	Defines the algorithmic indicator following MMT level 3.9. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'ALGO': Algorithmic Trade - '-': No Algorithmic Trade
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash

MMT Benchmark Indicator

FIELD NAME	MMT BENCHMARK INDICATOR
Description	Defines the benchmark indicator or the reference price indicator following MMT level 3.5. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'BENC': Benchmark Trade - 'RFPT': Reference Price Trade - '-': No Benchmark or Reference Price Trade
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Contingent Transaction Indicator

FIELD NAME	MMT CONTINGENT TRANSACTION INDICATOR
Description	Defines a transaction where all the components of the trade are meant to be executed as a single lot following MMT level 3.12. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'CONT': Contingent Trade - '-': Not a Contingent Trade
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash

MMT Contribution to Price

FIELD NAME	MMT CONTRIBUTION TO PRICE
Description	Defines the contribution to price or the price discovery process following MMT level 3.8. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - '-': Plain-Vanilla Trade - 'NPFT': Non-Price Forming Trade (formerly known as the Technical Trade) - 'PNDG': Price is Currently Not Available but Pending - 'NOAP': Price Is Not Applicable
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Duplicative Indicator

FIELD NAME	MMT DUPLICATIVE INDICATOR
Description	Not used anymore (since APA decommissioning). Defines the duplicative indicator following MMT level 5. ted since APA decommissioning) Possible values: - 'DUPL': Duplicative Trade Report (reported to more than one APA) - '-': Unique Trade Report
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash

MMT Market Mechanism

FIELD NAME	MMT MARKET MECHANISM
Description	Defines the fundamental functional market mechanism that has facilitated the trade following MMT level 1. This field is technically optional for backward compatibility but is functionally mandatory.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Central Limit Order Book 2 = Quote Driven Market 3 = Dark Order Book 4 = Off Book including Voice or Messaging Trading 5 = Periodic Auction equal Uncrossing 6 = Request for Quotes 8 = Hybrid System 9 = Any Other Excluding Hybrid
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Modification Indicator

FIELD NAME	MMT MODIFICATION INDICATOR
Description	Defines the modification indicator following MMT level 3.4. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'CANC': Trade Cancellation - 'AMND': Trade Amendment - '-': New Trade
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)

FIELD NAME	MMT MODIFICATION INDICATOR
Used For	Cash and Derivatives

MMT Negotiation Indicator

FIELD NAME	MMT NEGOTIATION INDICATOR
Description	Defines the negotiation indicator or pre-trade transparency waiver following MMT level 3.2. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'N': Negotiated Trade - 'NLIQ': Negotiated Trade in Liquid Financial Instruments - 'OILQ': Negotiated Trade in Illiquid Financial Instruments - 'PRIC': Negotiated Trade Subject to Conditions Other Than The Current Market Price - 'ILQD': Pre-Trade Transparency Waiver for illiquid instrument on an Side - '-': No Negotiated Trade
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash

MMT Off Book Automated Indicator

FIELD NAME	MMT OFF BOOK AUTOMATED INDICATOR
Description	Defines the off book automated indicator following MMT level 3.7. This field is technically optional for backward compatibility but is functionally mandatory.
Format	Enumerated (character)
Possible Values	M = Off Book Non-Automated Q = Off Book Automated - = Unspecified or does not apply
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Portfolio Transaction Indicator

FIELD NAME	MMT PORTFOLIO TRANSACTION INDICATOR
Description	Defines if the transaction is part of a portfolio trade following MMT level 3.11. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'PORT': Portfolio Trade - '-': Not a Portfolio Trade
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Post Trade Deferral

FIELD NAME	MMT POST TRADE DEFERRAL
Description	Defines the post trade deferral or enrichment type following MMT level 4.2. This field is technically optional for backward compatibility but is functionally mandatory. Possible values for the original trade: - 'LMTF': Limited Details Trade - 'DATF': Daily Aggregated Trade - 'VOLO': Volume Omission Trade - 'FWAF': Four Weeks Aggregation Trade - 'IDAF': Indefinite Aggregation Trade - 'VOLW': Volume Omission Trade, Eligible for Subsequent Enrichment in Aggregated Form Possible values for the subsequent enrichment trade: - 'FULF': Full Details of Earlier "Limited Details Trade (LMTF)" - 'FULA': Full Details of Earlier "Daily Aggregated Trade (DATF)" - 'FULV': Full Details of Earlier "Volume Omission Trade (VOLO)" - 'FULJ': Full Details of Earlier "Four Weeks Aggregation Trade (FWAF)" - 'COAF': Full Details in Aggregated Form of Earlier "Volume Omission Trade, Eligible for Subsequent Enrichment in Aggregated Form (VOLW)" Possible values if neither apply: - '-': Not Applicable / No Relevant Deferral or Enrichment Type
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Pre-Trade Transparency Waiver Related to Size and Scale

FIELD NAME	MMT PRE-TRADE TRANSPARENCY WAIVER RELATED TO SIZE AND SCALE
Description	Defines the pre-trade transparency waiver related to the size following MMT level 3.10. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'SIZE': Pre-Trade Transparency Waiver for Above Standard Market Size on an SI (for RTS 1 only) - '-': No Application of a Pre-Trade Transparency Waiver for Above Standard Market Size on an SI
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash

MMT Publication Mode

FIELD NAME	MMT PUBLICATION MODE
Description	Defines the publication mode or post-trade deferral reason following MMT level 4.1. Possible values: - '-': Immediate Publication - 'NIPM': Non-Immediate Publication - 'LRGS': Non-Immediate Publication: Deferral for "Large in Scale"
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Publication Mode Illiquid

FIELD NAME	MMT PUBLICATION MODE ILLIQUID
Description	Defines if the post-trade deferral is due to liquidity reason following MMT level 4.3. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'ILQD': Non-Immediate Publication: Deferral for "Illiquid Instrument" - '-': No Application of Deferral for "Illiquid Instrument"
Format	Text (character)
Length	4

FIELD NAME	MMT PUBLICATION MODE ILLIQUID
Used In	Full Trade Information (1004)
Used For	Derivatives

MMT Publication Mode Size Specific

FIELD NAME	MMT PUBLICATION MODE SIZE SPECIFIC
Description	Defines if the post-trade deferral is due to size specific reason following MMT level 4.4. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'SIZE': Non-Immediate Publication: Deferral for "Size Specific" - '-': No Application of Deferral for "Size Specific"
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Derivatives

MMT Special Dividend Indicator

FIELD NAME	MMT SPECIAL DIVIDEND INDICATOR
Description	Defines the special dividend indicator following MMT level 3.6. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'SDIV': Special Dividend Trade - '-': No Special Dividend Trade
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash

MMT Trading Mode

FIELD NAME	MMT TRADING MODE
Description	Differentiates transactions by defining the trading mode under which the trade was executed following MMT level 2. This field is technically optional for backward compatibility but is functionally mandatory.
Format	Enumerated (character)
Possible Values	1 = Undefined Auction equal Uncrossing 2 = Continuous Trading 3 = At Market Close Trading 4 = Out of Main Session Trading 5 = Trade Reporting On Exchange 6 = Trade Reporting Off Exchange 7 = Trade Reporting Systematic Internaliser I = Scheduled Intraday Auction equal Uncrossing K = Scheduled Closing Auction equal Uncrossing O = Scheduled Opening Auction equal Uncrossing U = Unscheduled Auction equal Uncrossing P = On Demand Auction equal Frequent Batched Auction
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

MMT Transaction Category

FIELD NAME	MMT TRANSACTION CATEGORY
Description	Defines the transaction category following MMT level 3.1. This field is technically optional for backward compatibility but is functionally mandatory. Possible values: - 'D': Dark Trade - 'RPRI': Trade that has Received Price Improvement - 'TPAC': Package Trade (excluding Exchange for Physicals) - 'XFPH': Exchange for Physicals Trade - '-': None apply (a standard trade for the Market Mechanism and Trading Mode)
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

Mnemonic

FIELD NAME	MNEMONIC
Description	Mnemonic code of the instrument. This field is not populated for every instrument. As of 2022, this field should no longer be used, in favor of the Long Mnemonic created to handle Borsa Italiana's Mnemonics of length 6.
Format	Alphanumerical ID (character)
Length	5
Used In	Standing Data (1007)
Used 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	Contract Standing Data (1013)
Used For	Derivatives

N

Nominal Currency

FIELD NAME	NOMINAL CURRENCY
Description	Code of the nominal currency (ISO 4217-3A).
Format	Alphanumerical ID (character)
Length	3
Used In	Standing Data (1007)
Used For	Cash

Notional Currency

FIELD NAME	NOTIONAL CURRENCY
Description	Currency in which the notional is denominated following ISO 4217 standard.
Format	Alphanumerical ID (character)
Length	3
Conditions	For MiFID Declaration Trade Entry (40) message, it is mandatory for APA (i.e. when ARM APA Indicator = '2' or '3'). For all financial instruments except in the cases described under Article 11(1) letters (a) and (b) of ESMA Regulation RTS 2.
Used In	Full Trade Information (1004) RTS 2 Post Trade Transparency (804)
Used 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)
Used In	Standing Data (1007)
Used For	Cash

Number Of Orders

FIELD NAME	NUMBER OF ORDERS
Description	Number of orders at the current price limit.
Format	Numerical (unsigned integer 16)
Used In	Market Update (1001)
Used For	Cash and Derivatives

O

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)

FIELD NAME	OPTIQ SEGMENT
Possible Values	1 = Equities 2 = Funds 3 = Fixed Income 4 = Warrants and Certificates 5 = Bourse de Luxembourg 6 = Options 7 = Futures 8 = Commodities 9 = Indices 10 = Trade Reporting and Publication 14 = Block 11 = Index Derivatives 12 = Equity Derivatives 13 = Financial Derivatives 15 = Forex 16 = IBF 25 = Scottish Stock Exchange 98 = Cross Segment Derivatives 99 = Cross Segment Cash
Used In	Channels Configuration (805) Standing Data (1007) Contract Standing Data (1013)
Used 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)
Possible Values	0 = Order EntryCancelModify Disabled 1 = Order EntryCancelModify Enabled 2 = Cancel and Modify Only 3 = Cancel Only 4 = Order Entry Only 5 = Order EntryModify Only
Used In	Timetable (1006) Market Status Change (1005)
Used For	Cash and Derivatives

Order Side

FIELD NAME	ORDER SIDE
Description	Indicates the side of the order. Please note that the value Cross is used only for the Order Entry, it will never be populated in the Market Data feed.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Buy 2 = Sell 3 = Cross
Conditions	The value Cross is only used in the NewOrder (01) message. For Cancel Replace (06) and Cancel Request (10) messages if the Order Side different than the Order Side of the targeted order, the request will be rejected with the reason "Unknown Order". For RFQ Notification (35) message Order Side may not be provided if the RFQ issuer did not specified the side in its request.

FIELD NAME	ORDER SIDE
Used In	Full Trade Information (1004)
Used For	Cash

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) - 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)
Possible Values	0 = Market 1 = Limit 2 = Stop Stop Loss 3 = Stop Limit 4 = Market on Open MOO 5 = Trade at Settlement
Used In	Contract Standing Data (1013)
Used For	Derivatives

Original Report Timestamp

FIELD NAME	ORIGINAL REPORT TIMESTAMP
Description	(Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

P

Packet Flags

FIELD NAME	PACKET FLAGS
Description	Used to flag information (Little-Endian): - Bit 0: Compression - 0 = body of the packet not compressed (the body is the packet without the packet header) - 1 = body of the packet compressed - Bit 1 to 3: will be set to 0 every morning and incremented for each restart of MDG in the same day (wrapping to 0 if the field overflows) - Bit 4 to 6: used if the Packet Sequence Number (PSN) goes over (2^32)-1. They are PSN high weight bits. - Bit 7: is set to 1 when in the packet there is a Start Of Snapshot (2101) message, 0 otherwise. - Bit 8: is set to 1 when in the packet there is an End Of Snapshot (2102) message, 0 otherwise. - Bit 9: is set to 1 when in the packet there is a Health Status (1103) message, Start Of Day (1101) message or End Of Day (1102) message, 0 otherwise. - Bit 10 to 15: for future use.
Format	Numerical (unsigned integer 16)
Used In	Market Data Packet Header
Used For	Cash and Derivatives

Packet Sequence Number

FIELD NAME	PACKET SEQUENCE NUMBER
Description	Each channel has its own PSN sequence. Starting from 1 at every MDG start and increasing by step of 1. In case of overflow (over 4.2 billons) Packet Flags will increase for bits 4-6. With this mechanism the PSN has 35 bits available.
Format	Numerical ID (unsigned integer 32)
Used In	Market Data Packet Header
Used For	Cash and Derivatives

Packet Time

FIELD NAME	PACKET TIME
Description	Time when the packet is pushed to the clients (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Used In	Market Data Packet Header
Used For	Cash and Derivatives

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)
Used In	Standing Data (1007)
Used For	Cash

Partition ID

FIELD NAME	PARTITION ID
Description	Identifies uniquely an Optiq partition across all the Exchange partitions.
Format	Numerical ID (unsigned integer 16)
Used In	Standing Data (1007) Contract Standing Data (1013)
Used For	Cash and Derivatives

Partition Number

FIELD NAME	PARTITION NUMBER
Description	Identifies a Partition within an Optiq Segment
Format	Numerical (unsigned integer 8)
Used In	Channels Configuration (805)

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. Cash Markets only.
Format	Numerical ID (unsigned integer 16)
Used In	Timetable (1006) Standing Data (1007) Contract Standing Data (1013)
Used For	Cash

Phase Id

FIELD NAME	PHASE ID
Description	Indicates the phase of the instrument.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Inaccessible 2 = Closed 3 = Call 4 = Uncrossing 5 = Continuous 7 = Continuous Uncrossing
Used In	Timetable (1006)
Used 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 – Stressed Market Conditions: indicates stressed market conditions (0: No ; 1: Yes) - bit in position 7 – Exceptional Market Conditions: indicates exceptional market conditions (0: No ; 1: Yes) - bit in position 9 - Quoting Period: It indicates a Call Phase during which only a specific Trading Firm can send its order(s) to the Trading System (0: No ; 1: Yes). - bit in position 10 - Execution Prevention Across All Firms: It indicates the Execution Prevention Across All Firms (0: No ; 1: Yes). For IPO operation, only an Assigned Broker Trading Firm (Account Type = 16) can send its Sell order(s) during the "Quoting Period" for example.
Format	Bitmap (unsigned integer 16)
Possible Values	0 = No Qualifier 1 = Call BBO Only 2 = Trading At Last 3 = Random Uncrossing 4 = Suspended 5 = Wholesale Allowed 6 = Stressed Market Conditions 7 = Exceptional Market Conditions 8 = Price Improvement Only 9 = Quoting Period 10 = Execution Prevention Across All Firms
Used In	Timetable (1006) Market Status Change (1005)

FIELD NAME	PHASE QUALIFIER
Used For	Cash and Derivatives

Phase Time

FIELD NAME	PHASE TIME
Description	(Time in an integer on 4 bytes expressed as hhmmss).
Format	Integer Time in hhmmss (unsigned integer 64)
Used In	Timetable (1006)
Used For	Cash and Derivatives

Pool Factor

FIELD NAME	POOL FACTOR
Description	Allows to calculate how much of the original loans have yet to be repaid. Internally: Pool Factor is used to adjust Max Order Amount Call, Max Order Amount Continuous, Max Order Quantity Call and Max Order Quantity Continuous.
Format	Numerical (unsigned integer 32)
Used In	Standing Data (1007)

Post Trade Deferral Flags

FIELD NAME	POST TRADE DEFERRAL FLAGS
Description	Indicates which deferral type was applied for transaction on Bonds instrument. Possible values for the original trade: - 'MLF1': Medium Liquid Flag - 'MIF2': Medium Illiquid Flag - 'LLF3': Large Liquid Flag - 'LIF4': Large Illiquid Flag - 'VLF5': Very Large Liquid Flag - 'VIF5': Very Large Illiquid Flag
Format	Text (character)
Length	4
Used In	Full Trade Information (1004)
Used For	Cash

Price

FIELD NAME	PRICE
Description	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).
Format	Price (signed integer 64)
Conditions	In New Wholesale Order (64) message for the Derivative markets, when price is not applicable, field Price should be populated with value of zero (0).
Used In	Market Update (1001) Price Update (1003)
Used For	Cash and Derivatives

Price / Index Level 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)
Used In	Standing Data (1007) Contract Standing Data (1013)
Used For	Cash and Derivatives

Price Limits

FIELD NAME	PRICE LIMITS
Description	Indicates the Price Limits mode.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Price Limits Enabled - Normal 2 = Price Limits Enabled - Wide 3 = Price Limits Enabled - Widest 4 = Price Limits Disabled
Used In	Market Status Change (1005)
Used For	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)
Used In	Full Trade Information (1004)
Used For	Cash

Price Multiplier Decimals

FIELD NAME	PRICE MULTIPLIER DECIMALS
Description	Number of decimals for the field Price Multiplier.
Format	Numerical (unsigned integer 8)
Conditions	For Declaration Entry (40) message, it is mandatory when Price Multiplier is provided.
Used In	Full Trade Information (1004)
Used For	Cash

Price Qualifier

FIELD NAME	PRICE QUALIFIER
Description	Represents a qualifier of the type of update being communicated to the market.
Format	Enumerated (unsigned integer 8)

FIELD NAME	PRICE QUALIFIER
Possible Values	1 = Last Adjusted Closing Price 2 = Last Traded Price 3 = Volume Weighted Average Price 4 = Closing Uncrossing Price 5 = Valuation Price 6 = Average of BBO 7 = Average of Best Bid 8 = Updated by Market Operations 9 = Closing Price of Reference Market
Used In	Price Update (1003)
Used For	Cash and Derivatives

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)
Possible Values	0 = Standard 1 = Total Return Future 2 = Market On Close 3 = Standard with Negative Prices 4 = Trading At Settlement
Used In	Contract Standing Data (1013)
Used For	Derivatives

Product Code

FIELD NAME	PRODUCT CODE
Description	Physical alphanumerical product code.
Format	Alphanumerical ID (character)
Length	4
Used In	Contract Standing Data (1013)
Used For	Derivatives

Publication Date And Time

FIELD NAME	PUBLICATION DATE AND TIME
Description	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. 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.ddddddd' is the second and its fraction of a second. - 'Z' constant 'Z' letter that stands for UTC time.
Format	Text (character)
Length	28

FIELD NAME	PUBLICATION DATE AND TIME
Used In	RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

Publication Date Time

FIELD NAME	PUBLICATION DATE TIME
Description	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. 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
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

Q

Quantity

FIELD NAME	QUANTITY
Description	Number of traded or ordered units (to be calculated with Quantity Decimals).
Format	Quantity (unsigned integer 64)
Conditions	For Declaration Entry (40) message, it must always be provided when Operation Type = '1', '4', '5' or '7'. For a trade/declaration on Dutch Funds if expressed as an amount (Operation Type = '6'), this field should not be provided. In New Wholesale Order (64) message for the Derivative markets, when Quantity is not applicable, field Quantity should be populated with value of zero (0).
Used In	Market Update (1001) Price Update (1003)
Used For	Cash and Derivatives

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)
Used In	Standing Data (1007) Contract Standing Data (1013)
Used 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	Standing Data (1007) Contract Standing Data (1013)
Used For	Cash

Quote Spread Multiplier

FIELD NAME	QUOTE SPREAD MULTIPLIER
Description	Indicates the Quote Spread Multiplier.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Quote Spread Multiplier 1 2 = Quote Spread Multiplier 2 3 = Quote Spread Multiplier 3
Used In	Market Status Change (1005)
Used For	Derivatives

R

Ratio / Multiplier 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)
Used In	Standing Data (1007) Contract Standing Data (1013)
Used For	Cash and Derivatives

Rebroadcast Indicator

FIELD NAME	REBROADCAST INDICATOR
Description	Indicates if this message is resent or new (1 if resent, 0 otherwise). For a snapshot, this field will always be set to '1'.
Format	Numerical ID (unsigned integer 8)
Used In	Technical Notification (1106) Timetable (1006) Standing Data (1007) Contract Standing Data (1013) Outright Standing Data (1014) Strategy Standing Data (1012) Market Update (1001) Price Update (1003) Full Trade Information (1004) Market Status Change (1005) Statistics (1009)

FIELD NAME	REBROADCAST INDICATOR
Used For	Cash and Derivatives

Reference Price Origin

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)
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
Used In	Contract Standing Data (1013)

Reference Spread Table ID

FIELD NAME	REFERENCE SPREAD TABLE ID
Description	ID of the Reference Spread Table.
Format	Numerical ID (unsigned integer 16)
Used In	Contract Standing Data (1013)
Used 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)
Possible Values	0 = Instr neither eligible for SRD or Loan and Lending Mkt 1 = Instr eligible for SRD and for Loan and Lending Market 2 = Instr eligible for the SRD long only 3 = Instr eligible for Loan and Lending Mkt and for SRD long only 4 = Easytoborrow Instr eligible for SRD and for Loan and Lending Mkt 5 = Instr eligible for the Loan and Lending Market 8 = Non significant
Used In	Standing Data (1007)
Used For	Cash

Repo Settlement Date

FIELD NAME	REPO SETTLEMENT DATE
Description	Repo Settlement date is the date when the Repo-Seller gets the assets back from the Repo-Buyer. Used in case of a Repo (Repurchase Agreement) trade.
Format	Date (unsigned integer 16)
Used In	Full Trade Information (1004)

FIELD NAME	REPO SETTLEMENT DATE
Used For	Cash and Derivatives

Retransmission End Time

FIELD NAME	RETRANSMISSION END TIME
Description	Indicates when the retransmission ends. For trade retransmission, all the trades previously received by the clients that have an "Event time" strictly higher than this field are valid (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Used In	Technical Notification (1106)
Used For	Cash and Derivatives

Retransmission Start Time

FIELD NAME	RETRANSMISSION START TIME
Description	Indicates when the retransmission starts. For trade retransmission, all the trades previously received by the clients that have an "Event time" strictly lower than this field are valid (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Used In	Technical Notification (1106)
Used For	Cash and Derivatives

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)
Possible Values	0 = Cancel Previously Scheduled Event 1 = Reopening 3 = Resumption of trading 4 = Closed 5 = Expiry 6 = Wholesale Large in Scale LiS trades open extension 7 = Wholesale Basis trades open extension 8 = Wholesale Against Actuals trades open extension 9 = Wholesale Large in Scale LiS Package trades open extension 10 = Wholesale Exchange For Swaps trades open extension 11 = Wholesale Trades Open Extension 12 = Suspension 13 = Collars Normal 14 = Collars Wide 15 = Pre-Expiry 16 = Closing Price 17 = End of Trading 18 = Order EntryCancelModify Enabled 19 = Order EntryCancelModify Disabled 20 = Order Cancel Only 21 = Restricted Trading

FIELD NAME	SCHEDULED EVENT
Used In	Timetable (1006) Market Status Change (1005)
Used For	Cash and Derivatives

Scheduled Event Time

FIELD NAME	SCHEDULED EVENT TIME
Description	Scheduled Time for the event to happen (time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Used In	Market Status Change (1005)
Used For	Cash and Derivatives

Session

FIELD NAME	SESSION
Description	Current market session.
Format	Enumerated (unsigned integer 8)
Possible Values	0 = Session 0 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
Used In	Timetable (1006) Market Status Change (1005)
Used For	Cash and Derivatives

Session Trading Day

FIELD NAME	SESSION TRADING DAY
Description	Date of the current trading session (in number of days since the 1st of January 1970).
Format	Date (unsigned integer 16)
Used In	Channels Configuration (805) Start Of Day (1101) End Of Day (1102)
Used For	Cash and Derivatives

Settlement Date

FIELD NAME	SETTLEMENT DATE
Description	Settlement date is the date when a trade is final, and the buyer must make payment to the seller while the seller delivers the assets to the buyer.
Format	Date (unsigned integer 16)

FIELD NAME	SETTLEMENT DATE
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

Settlement Delay

FIELD NAME	SETTLEMENT DELAY
Description	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. This is generally a standard period for Euronext Cash markets. Permitted Values - 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	Standing Data (1007)
Used For	Cash

Settlement Method

FIELD NAME	SETTLEMENT METHOD
Description	Settlement method - "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	Contract Standing Data (1013)
Used 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)
Used In	Contract Standing Data (1013)
Used For	Derivatives

Snapshot Time

FIELD NAME	SNAPSHOT TIME
Description	Indicates the time when snapshot generation has respectively started/ended in the Start Of Snapshot/End Of Snapshot message (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Used In	Start Of Snapshot (2101) End Of Snapshot (2102)
Used For	Cash and Derivatives

Start Time Vwap

FIELD NAME	START TIME VWAP
Description	(Number of seconds since the beginning of the day).
Format	Intraday Time in Seconds (unsigned integer 32)
Conditions	For Declaration Entry (40) message, it is mandatory for declarations when Operation Type = '5'.
Used In	Full Trade Information (1004)
Used For	Cash

Stats Update Type

FIELD NAME	STATS UPDATE TYPE
Description	Indicates the type of published statistics update.
Format	Enumerated (unsigned integer 8)
Possible Values	5 = Daily High 6 = Daily Low 7 = Yearly High 8 = Yearly Low 9 = Lifetime High 10 = Lifetime Low 14 = Variation Last Price 15 = Open Price 16 = Trade Count 17 = Last Traded Price 18 = Percent Variation Previous Close 19 = Off Book Cumul Qty 21 = On Book Auction Cumul Qty 22 = On Book Continuous Cumul Qty 23 = On and Off Book Cumul Qty 24 = Lifetime Contract High 25 = Lifetime Contract Low
Used In	Statistics (1009)
Used For	Cash and Derivatives

Stats Update Value

FIELD NAME	STATS UPDATE VALUE
Description	Indicates the value of the published statistics update. This field has to be calculated with a scale code field depending on the "Stats Update Type" as follow: - Price / Index Level Decimals for "Stats Update Type": "5 - Daily High", "6 - Daily Low", "7 - Yearly High", "8 - Yearly Low", "9 - Lifetime High", "10 - Lifetime Low", "15 - Open Price" and "17 - Last Trade Price" - Quantity Decimals for "Stats Update Type": "19 - Off Book Cumulative Quantity", "21 - On Book Auction Cumulative Quantity", "22 - On book Continuous Cumulative Quantity" and "23 - On and Off Book Cumulative Quantity" - Ratio / Multiplier Decimals for "Stats Update Type": "14 - Variation Last Price" and "18 - Percent Variation Previous Close" "16 - Trade Count" has no scale code.
Format	Signed Numerical (signed integer 64)
Used In	Statistics (1009)
Used For	Cash and Derivatives

Status Reason

FIELD NAME	STATUS REASON
Description	Provides the reason for Book State changes.
Format	Enumerated (unsigned integer 8)
Possible Values	0 = Scheduled 4 = Collars Breach 7 = Automatic Reopening 8 = No Liquidity Provider 11 = KnockIn by Issuer 12 = KnockOut by Exchange 13 = KnockOut by Issuer 15 = Action by Market Operations 16 = Waiting for Tradable State 20 = New Listing 21 = Due to Underlying 22 = Outside of LP quotes 23 = Technical 24 = Due to Leg 25 = Due to Main Market
Used In	Market Status Change (1005)
Used For	Cash and Derivatives

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)

FIELD NAME	STRATEGY AUTHORIZED
Possible Values	0 = Jelly Roll 1 = Butterfly 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 = CallPut 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 48 = ICS one sided combination same expiry 49 = ICS two sided combination same expiry 50 = Ratio Inter Contract Spread 51 = Call Spread versus Put Or Put Spread versus Call 52 = Ratio Spread Option
Used In	Contract Standing Data (1013)

Strategy Code

FIELD NAME	STRATEGY CODE
Description	Exchange-recognized strategy code
Format	Alphanumerical ID (character)
Length	1

FIELD NAME	STRATEGY CODE
Possible Values	A = Jelly Roll B = Butterfly C = Call or Put Cabinet 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 Z = Reduced Tick Spread 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 = CallPut 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 u = Buy Write 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 T = ICS one sided combination same expiry U = ICS two sided combination same expiry l = Ratio Inter Contract Spread 1 = Call Spread versus Put Or Put Spread versus Call 2 = Ratio Spread Option
Used In	Strategy Standing Data (1012)
Used For	Derivatives

Strike Currency

FIELD NAME	STRIKE CURRENCY
Description	Code of the strike currency (ISO 4217-3A).
Format	Alphanumerical ID (character)
Length	3

FIELD NAME	STRIKE CURRENCY
Used In	Standing Data (1007)
Used 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)
Possible Values	0 = Change rate not applied to the strike price 1 = Change rate applied to the strike price
Used In	Standing Data (1007)
Used 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)
Used In	Standing Data (1007) Outright Standing Data (1014)
Used 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)
Used In	Standing Data (1007)
Used For	Cash

Strike Price Decimals Ratio

FIELD NAME	STRIKE PRICE DECIMALS RATIO
Description	Value used , in particular 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. The maximum number of decimals is 5. 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)
Used In	Contract Standing Data (1013)

FIELD NAME	STRIKE PRICE DECIMALS RATIO
Used 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)
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	Technical Notification (1106) Timetable (1006) Standing Data (1007) Contract Standing Data (1013) Outright Standing Data (1014) Strategy Standing Data (1012) Market Update (1001) Price Update (1003) Full Trade Information (1004) Market Status Change (1005) Statistics (1009)
Used 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)
Possible Values	0 = Not eligible to PEA - The stock has never been a Monory stock 3 = Eligible to PEA 9 = Not provided
Used In	Standing Data (1007)
Used For	Cash

Technical Notification Type

FIELD NAME	TECHNICAL NOTIFICATION TYPE
Description	Indicates the technical notification sent.

FIELD NAME	TECHNICAL NOTIFICATION TYPE
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Instrument Book Retransmission End 10 = Trade Retransmission Start 11 = Trade Retransmission End
Used In	Technical Notification (1106)
Used For	Cash and Derivatives

Threshold LIS Post Trade 120mn

FIELD NAME	THRESHOLD LIS POST TRADE 120MN
Description	Defines the amount, in trading curreny, of an order to benefit from the Trade Deferred publication to 120 min (to be calculated with the Amount Decimals). It is not a LIS Threshold even mentioned in the name of the field.
Format	Amount (unsigned integer 64)
Used In	Standing Data (1007)
Used For	Cash

Threshold LIS Post Trade 60mn

FIELD NAME	THRESHOLD LIS POST TRADE 60MN
Description	Defines the amount, in trading curreny, of an order to benefit from the Trade Deferred publication to 60 min (to be calculated with the Amount Decimals). It is not a LIS Threshold even mentioned in the name of the field.
Format	Amount (unsigned integer 64)
Used In	Standing Data (1007)
Used For	Cash

Threshold LIS Post Trade EOD

FIELD NAME	THRESHOLD LIS POST TRADE EOD
Description	Defines the amount, in trading curreny, of an order to benefit from the Trade Deferred publication to EOD (to be calculated with the Amount Decimals). It is not a LIS Threshold even mentioned in the name of the field.
Format	Amount (unsigned integer 64)
Used In	Standing Data (1007)
Used For	Cash

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)
Used In	Standing Data (1007) Contract Standing Data (1013)

FIELD NAME	TICK SIZE INDEX ID
Used For	Cash and Derivatives

Trade Qualifier

FIELD NAME	TRADE QUALIFIER
Description	Trade Qualifier. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions. ■ bit in position 0 - Uncrossing Trade: indicates whether the trade occurred during an Uncrossing, or not. (0: No; 1: Yes) ■ bit in position 1 - First Trade Price: indicates whether the price of the trade is the first trade price of the day, or not. (0: No; 1: Yes) Please note that there can be multiple Trades with the "First Trade Price" flag set to Yes. ■ bit in position 2 - Passive Order: indicates whether the corresponding order was passive, or not. (0: No; 1: Yes) ■ bit in position 3 - Aggressive Order: indicates whether the corresponding order was aggressive, or not. (0: No; 1: Yes) ■ bit in position 4 - Trade Creation by Market Operations: indicates whether the trade results from a creation by Market Operations, or not. (0: No; 1: Yes) - For future use ■ bit in position 5 - NAV Trade expressed in bps: indicates whether the trade results from a NAV trade expressed in basis point on the ETF Access platform. (0: No; 1: Yes) ■ bit in position 6 - NAV Trade expressed in price currency: indicates whether the trade is a NAV trade expressed in price currency. This trade is always an update from a previous NAV trade expressed in basis point on the ETF Access platform. (0: No; 1: Yes) ■ bit in position 7 - Deferred Publication: indicates whether the trade publication is deferred or immediate. (0: Immediate Publication; 1: Deferred Publication) If all bits are set to 0, then it means that no Trade Qualifier applies. For the Market Data feed: The values Passive Order and Aggressive Order always qualify the Buy order.
Format	Bitmap (unsigned integer 8)
Possible Values	0 = Uncrossing Trade 1 = First Trade Price 2 = Passive Order 3 = Aggressive Order 4 = Trade Creation by Market Operations 5 = NAV Trade expressed in bps 6 = NAV Trade expressed in price currency 7 = Deferred Publication
Conditions	Values 5 and 6 will be used only for the NAV trading on the ETF Access platform.
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

Trade Reference

FIELD NAME	TRADE REFERENCE
Description	Reference of the trade reported to the Exchange.
Format	Alphanumerical ID (character)
Length	30
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

Trade Type

FIELD NAME	TRADE TYPE
Description	Type of trade.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Conventional Trade 2 = Large in Scale LiS Trade 3 = Basis Trade 4 = Large in Scale LiS Package Trade 5 = Guaranteed Cross Trade 6 = Against Actual Trade 7 = Asset Allocation Trade 9 = Exchange for Swap Trade 10 = Exchange for Physical Trade Cash Leg 11 = Strategy Leg Conventional Trade 12 = Strategy Leg Large in Scale LiS Trade 13 = Strategy Leg Basis Trade 14 = Strategy Leg Guaranteed Cross Trade 15 = Strategy Leg Against Actual Trade 16 = Strategy Leg Asset Allocation Trade 18 = Strategy Leg Exchange For Swap Trade 19 = Strategy Leg Exchange For Physical Trade 20 = BoB Trade 22 = AtomX Trade 24 = Trade Cancellation 25 = Out of Market Trade 26 = Delta Neutral Trade Underlying Cash Leg 27 = Market VWAP Operation Trade 28 = Euronext Fund Service Trade 29 = Secondary Listing Trade 30 = Request for Cross Trade 31 = Request for cross strategy Leg Trade 32 = Trade Publication 33 = Dark Trade 34 = Delta Neutral Trade Underlying Future Leg 36 = Total Traded Volume 37 = ETF MTF NAV Trade price in bp 38 = ETF MTF NAV Dark Trade price in bp 39 = Guaranteed Cross Negotiated deal NLIQ 40 = Guaranteed Cross Negotiated deal OILQ 41 = Large in Scale Trade 42 = Large in Scale Trade in basis points 43 = Large in Scale Package Trade in basis points 44 = Strategy Leg Large in Scale Trade in basis points 45 = Trade Reversal 46 = Non-Standard Settlement 47 = Repurchase Agreement - Repo 48 = Exchange Granted Trade 49 = Other 50 = Odd Lot 100 = Conventional Trade - Provisional price 101 = Large in Scale (LiS) Trade - Provisional price 102 = Large in Scale (LiS) Package Trade - Provisional price 103 = Issuing Or Tender Offer Trade 104 = RFQ Trade 105 = AVD Trade 106 = Strategy Leg Conventional Trade - Provisional price 107 = Block Standard Trade 108 = Block NFC Auction Trade 109 = Block Historical Trade
Conditions	In OEG, for the Fill (04) message, the following values are NOT used: '4', '7', '10' , '14', '16', '19', '22', '24', '25','36','37', '38' and '45'; for consistency purposes other values are also listed here, however they are only used in market data.
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

Trade Unique Identifier

FIELD NAME	TRADE UNIQUE IDENTIFIER
Description	Alphanumerical code unique, consistent and persistent per ISO10383 segment MIC and per trading day assigned by the trading venue to a transaction. Trade Unique Identifier (TUI) is a field aimed at identifying an individual transaction and used as Trading Venue Transaction Identification Code (TVTIC). This is a unique transaction identification code generated by trading venues and disseminated to both the buying and the selling parties, in accordance with Article 12 of the Commission Delegated Regulation (EU) 2017/580 Regulatory Technical Standards (RTS).
Format	Alphanumerical ID (character)
Length	16
Conditions	For trades on a strategy, in Fill (04) messages, the Trade Unique Identifier field in the Block of the message contains the trade identifier for the Strategy, and in the repeating group this field contains the Trade Unique Identifier of the individual strategy leg (i.e. the outright).
Used In	Full Trade Information (1004)
Used For	Cash and Derivatives

Trading Currency

FIELD NAME	TRADING CURRENCY
Description	Code of the currency (ISO 4217-3A).
Format	Alphanumerical ID (character)
Length	3
Used In	Standing Data (1007) Contract Standing Data (1013)
Used 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)
Possible Values	0 = Change rate not applied to the traded price 1 = Change rate applied to the traded price
Used In	Standing Data (1007)
Used For	Cash

Trading Date And Time

FIELD NAME	TRADING DATE AND 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)

FIELD NAME	TRADING DATE AND TIME
Length	28
Conditions	It indicates the original execution date for a reporting/publication entered.
Used In	RTS 1 Pre Trade Transparency (802) RTS 1 Post Trade Transparency (803) RTS 2 Post Trade Transparency (804)
Used For	Cash and Derivatives

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.dddddd Z. 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.dddddd Z. - '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	Full Trade Information (1004)
Used For	Cash and Derivatives

Trading Period

FIELD NAME	TRADING PERIOD
Description	Provides the current trading period.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Opening 2 = Standard 3 = Closing
Used In	Timetable (1006) Market Status Change (1005)
Used For	Cash and Derivatives

Trading Phase

FIELD NAME	TRADING PHASE
Description	Trading Phase according to ESMA during which the event occurs. Currently used to generate the canonical message that will be used to send the message for RTS 1 and CTP reporting.
Format	Enumerated (unsigned integer 8)

FIELD NAME	TRADING PHASE
Possible Values	1 = UDUC 2 = SOAU 3 = SCAU 4 = SIAU 5 = UAUC 6 = ODAU 7 = CONT 8 = MACT 9 = OMST 10 = OTHR 11 = COTR 12 = OTSP 13 = CLSD
Used In	Market Status Change (1005)
Used 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)
Possible Values	1 = Price Explicit Time 2 = Price Pro Rata
Used In	Contract Standing Data (1013)
Used For	Derivatives

Trading Side

FIELD NAME	TRADING SIDE
Description	Indicates the Trading Side.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Bid Only 2 = Offer Only 3 = PAKO 4 = Both Sides
Used In	Market Status Change (1005)
Used For	Cash

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. The Trading Unit field does not support decimals, so it should be replaced by the Lot Multiplier in the future.
Format	Quantity (unsigned integer 64)
Used In	Contract Standing Data (1013) Outright Standing Data (1014)

FIELD NAME	TRADING UNIT
Used For	Derivatives

Transaction Type

FIELD NAME	TRANSACTION TYPE
Description	Transaction type or publication type.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Plain Vanilla Trade 2 = Dark Trade 3 = Benchmark Trade 4 = Technical Trade 5 = Giveup Givein Trade 6 = Ex Cum dividend Trade 7 = Trade With Condition 15 = Summary Report
Used In	Full Trade Information (1004)
Used For	Cash

Transparency Indicator

FIELD NAME	TRANSPARENCY INDICATOR
Description	Used to define the transparency of the trade.
Format	Enumerated (unsigned integer 8)
Possible Values	0 = LitRegular Trade 1 = Dark Trade and Immediate Publication 2 = Dark Trade and Deferred Publication
Used In	Full Trade Information (1004)
Used For	Cash

Type Of Corporate Event

FIELD NAME	TYPE OF CORPORATE EVENT
Description	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. Valid values are: "00" – No specific event "01" – Dividend payment in cash or in stocks "02" – Interest payment (for securities which the price is not in % of the nominal) "03" – Interest payment (for securities which the price is in % of the nominal "04" – Split "05" – Bonus (i.e. attribution) "06" – Subscription "07" – Share allocation "08" – Share swap "09" – Reverse split "10" – Merger "11" – Final Fix Income redemption "12" – Capital amortization "13" – Draw announcement (Belgian Fix Income only) "14" – Block trade of controlling interest "15" – Optional corporate events(dividend option) "16" – Complex corporate event "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) "18" – Ex event (event with a detachment/adjustment on the security's price "22" - Luxembourg Stock Exchange corporate event
Format	Alphanumerical ID (character)
Length	2
Used In	Standing Data (1007)
Used 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 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 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	Standing Data (1007)
Used For	Cash

U

Underlying Derivatives Instrument Trading Code

FIELD NAME	UNDERLYING DERIVATIVES INSTRUMENT TRADING CODE
Description	Is the underlying of the Derivatives Instrument Trading Code.
Format	Alphanumerical ID (character)
Length	18
Used In	Outright Standing Data (1014)
Used 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)
Used In	Contract Standing Data (1013)
Used 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.
Format	Alphanumerical ID (character)
Length	12
Used In	Standing Data (1007) Contract Standing Data (1013)
Used 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	Alphanumerical ID (character)
Length	4
Used In	Standing Data (1007) Contract Standing Data (1013)

Underlying Subtype

FIELD NAME	UNDERLYING SUBTYPE
Description	Defined the underlying sub-type associated to the underlying type. Underlying Type "Stock" accepts following Underlying Subtypes: Basket, Dividend, ETF and Share Underlying Type "Index" accepts: Dividend Index, Equity Index, TRF Index and Volatility Index Underlying Type "Future" accepts: Future on Commodities Underlying Type "Exchange rate" accepts: FX Cross Rates (FXCR), FX Emerging Markets (FXEM) and FX Majors (FXMJ) 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) Underlying Type "Interest Rate" accepts: Bonds Basket
Format	Enumerated (unsigned integer 8)
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 = FX Cross Rates 10 = FX Emerging Markets 11 = FX Majors 12 = Agricultural 13 = Environmental 14 = Freight 15 = Fertilizer 16 = Industrial products 17 = Inflation 18 = Multi Commodity Exotic 19 = Metals 20 = Energy 21 = Official economic statistics 22 = Other C10 23 = Other 24 = Paper 25 = Polypropylene 26 = Bonds Basket
Used In	Contract Standing Data (1013)
Used 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)
Used In	Contract Standing Data (1013) Outright Standing Data (1014)
Used For	Derivatives

Underlying Type

FIELD NAME	UNDERLYING TYPE
Description	Defines the instrument type of the underlying.
Format	Enumerated (character)

FIELD NAME	UNDERLYING TYPE
Possible Values	A = Basket with Commodity B = Basket C = Commodity D = Depositary Receipt F = Future G = Currency Leveraged Index H = Other I = Index J = Bonds K = Stock Dividend L = Leveraged Index N = Interest Rate O = Other Derivative P = Commodity Index Q = Commodity Leveraged Index R = Right S = Stock T = Credit U = Fund V = Currency W = Stock Warrant X = Exchange Rate Z = Security Leveraged Index
Used In	Contract Standing Data (1013)
Used For	Cash and 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	Alphanumerical ID (character)
Length	11
Used In	Full Trade Information (1004)

13. APPENDIX C: REVISION HISTORY

13.1. Change Summary

VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
6.362.0	06 Feb 2026	IT Solutions	First version
6.369.0	23 Sept 2026	IT Solution	Updatd MDG Channels for ENX Athens
6.371.0	13 Oct 2026	IT Solutions	Added Partition 1 for Funds (Segment: ETF)