Document title

OPTIQ OEG SBE MESSAGES – INTERFACE SPECIFICATION

Document type or subject

INTERFACE SPECIFICATION - EURONEXT CASH AND DERIVATIVES MARKETS

Version number
6.369.0

Date
19 August 2026

Number of pages
269

Author
Euronext – IT Market Services

Related SBE Version
369

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 www.euronext.com/terms-use.

© 2026, Euronext N.V. - All rights reserved.

PREFACE

PURPOSE

This document sets out the client messages specifications for Optiq OEG using the SBE format. More specifically, it describes the contents of administrative and application messages and provides detailed field descriptions.

TARGET AUDIENCE

This document should be read by Euronext's clients developing a Front-End Trading Access.

ScopeThe single set of messages used for Optiq in SBE protocol is provided in the document. Harmonization between Cash and Derivatives messages is completed.

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

Optiq Segment	Segment Value	In/Out of Scope	SBE Versions*
Euronext Cash Market			
Equities EQ	1	✓	116 – 369
Funds FND	2	✓	116 – 369
Fixed Income FXI	3	✓	116 – 369
Structured Products SP	4	✓	116 – 369
Block BLK	14	✓	110 – 369
Irish Bonds and Funds I'BF	16	✖	-
Euronext Derivatives Market			
Commodity Derivatives CMO	8	✓	216 – 369
Index Derivatives IDD	11	✓	216 – 369
Equity Derivatives EQD	12	✓	216 – 369
Euronext Indices			
Indices Indices	9	✖	-
Euronext Approved Publication Arrangement (APA) Facility			

[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.

Optiq Segment	Segment Value	In/Out of Scope	SBE Versions*
Trade Reporting and Publication TRP	10	✘	-
Other Markets			
Luxembourg Stock Exchange BDL	5	✓	116 – 369

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
6.369.0	The following changes have been made to this version of the document: ■ Updated SBE version to 369; ■ Field description: CCP ID added value "4 - Euronext Clearing Athens"; CounterpartFirmID added value "4 - Euronext Clearing Athens"; Kill Reason – new value 48 = "Order Cancelled by Market Operations due to CSD Unavailability".

ASSOCIATED DOCUMENTS

The following list identifies the associated documents, which either should be read in conjunction with this document, or which provide other relevant information for the user:

- Optiq OEG FIX 5.0 Messages - Interface Specification - Euronext Cash and Derivatives Markets
- Optiq OEG MDG - Kinematics Specification - Euronext Cash Markets
- Optiq OEG MDG - Kinematics Specification - Euronext Derivatives Markets
- Optiq OEG TCS Error List – Technical Specification - Euronext Cash and Derivatives Markets (.csv)
- Optiq MDG Messages - Interface Specification - Euronext Cash and Derivatives Markets
- Optiq Files - Interface Specification - Euronext Cash and Derivatives Markets
- Optiq Technical Note SBE

- Optiq OEG Connectivity Specifications - Euronext Markets

Clients are additionally advised to also refer to the Euronext Rules and Regulations documents for more details.

For the latest version of documentation please visit the IT Documentation page.

CONTENTS

1. INTRODUCTION 8
1.1 MiFID II Related Fields and Values 8
1.1.1 Maintenance of Relevant Data relating to Orders in Financial Instruments 8
1.1.2 Reporting to Competent Authorities 10
1.2 Future Use 10
1.3 Glossary 11
1.4 Error Codes 12
2. ORDER ENTRY MAIN PRINCIPLES 13
2.1 New Instrument Segregation - Optiq Segment 13
2.1.1 Optiq Segments 13
2.1.2 Partitions 13
2.1.3 Logical Access and OE Sessions 14
2.1.4 Full mesh OEG-ME Connection 14
2.1.5 Determine the "shorter path" 16
2.1.6 Setting Up Connectivity 16
2.1.7 Overnight instrument migration between partitions 16
2.1.8 Added / Removed Partition 16
2.2 Technical Features 17
2.2.1 Latency Monitoring and Timestamps 17
2.2.2 Drop Copy 17
2.3 Client Order ID Management 18
2.3.1 Client Order ID Overview 18
2.3.2 Client Order ID Usages for Order Management 18
2.3.3 Client Order ID Ranges 18
2.4 Order ID 19
3. ORDER ENTRY GATEWAY SPECIFICS 20
3.1 Session Management 20
3.1.1 Logon Overview 20
3.1.2 Heartbeats and TestRequests 20
3.1.3 Logout 20
3.1.4 Message Sequence Usage 20
3.2 Cancel On Disconnect Mechanism 21
3.3 Inflight Control Mechanism 21
3.3.1 Inflight Mechanism 21
3.3.2 Scope of processing 22
3.3.3 Inflight-controlled messages 22
3.3.4 Inflight mechanism deactivated 22
3.3.5 Intra-day Activation 22
4. FORMATTING 24
4.1 SBE Message Structure 24
4.1.1 SBE Header 24
4.1.2 SBE Repeating Section Header 25

4.1.3 SBE Usage 25
4.1.4 SBE Optional Fields and Null Value 26
4.2 Technical Format Fields 26
4.3 Date and Time Conventions 27
4.4 Sequence Numbers 28
4.5 Price, Quantity, Ratio and Amount Formats 28
4.6 Instrument Identifiers and EMM 29
4.6.1 Symbol Index 29
4.6.2 Order Priority 29
4.6.3 EMM 30
5. MESSAGES 31
5.1 Important Notes 31
5.1.1 Scope of Messages and Functionalities 31
5.1.2 Conditional Values in Outbound Messages 31
5.2 Messages Formatting 32
5.2.1 Introduction to Message Representation 32
5.2.2 Example: NewOrder (01) message 34
5.3 Administration Messages 40
5.3.1 Logon (100) 41
5.3.2 Logon Ack (101) 42
5.3.3 Logon Reject (102) 42
5.3.4 Logout (103) 43
5.3.5 Heartbeat (106) 43
5.3.6 TestRequest (107) 44
5.3.7 Technical Reject (108) 44
5.4 Application Messages 46
5.4.1 New Order (01) 46
5.4.2 Ack (03) 52
5.4.3 Fill (04) 57
5.4.4 Kill (05) 62
5.4.5 Cancel Replace (06) 65
5.4.6 Reject (07) 70
5.4.7 Quotes (08) 73
5.4.8 Quote Ack (09) 77
5.4.9 Quote Request (10) 80
5.4.10 Cancel Request (12) 84
5.4.11 Mass Cancel (13) 86
5.4.12 Mass Cancel Ack (14) 88
5.4.13 Open Order Request (15) 91
5.4.14 Ownership Request (18) 92
5.4.15 Ownership Request Ack (17) 93
5.4.16 Trade Bust Notification (19) 94
5.4.17 Price Input (28) 96
5.4.18 Liquidity Provider Command (32) 97

5.4.19 Ask For Quote (33) 98
5.4.20 Request For Execution (34) 99
5.4.21 RFQ Notification (35) 99
5.4.22 RFQ Matching Status (36) 101
5.4.23 RFQ LP Matching Status (37) 102
5.4.24 User Notification (39) 104
5.4.25 Instrument Synchronization List (50) 109
5.4.26 Synchronization Time (51) 110
5.4.27 Security Definition Request (60) 110
5.4.28 Security Definition Ack (61) 112
5.4.29 New Wholesale Order (64) 113
5.4.30 Wholesale Order Ack (65) 119
5.4.31 MM Sign-In (47) 122
5.4.32 MM Sign-In Ack (48) 124
5.4.33 MM Protection Request (62) 126
5.4.34 MM Protection Ack (63) 127
5.4.35 Request For Implied Execution (66) 129
5.4.36 Cross Order (67) 130
5.4.37 RFQ Audit (72) 134
5.4.38 Wave For Liquidity (73) 136
5.4.39 Wave For Liquidity Notification (74) 140
5.4.40 Clear Book (75) 142
5.4.41 Declaration Entry (40) 144
5.4.42 Declaration Entry Ack (41) 147
5.4.43 Declaration Notice (42) 148
5.4.44 Declaration Cancel and Refusal (43) 152
5.4.45 Fund Price Input (44) 153
5.4.46 Fund Price Input Ack (45) 154
5.4.47 Declaration Entry Reject (46) 155
6. FIELD DESCRIPTION 157

1. INTRODUCTION

The Euronext Optiq Order Entry Gateway (OEG) provides high-speed and real-time connection to the Euronext markets.

The system has the following high-level features:

- **Predictability**
- **Ultra-low latency**
- **MiFID II compliance**
- **Cash & Derivatives message harmonization**
- **High availability**
- **Reliable network solution**
- **High level of scalability**
- **Access to every Euronext Market**

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

1.1 MIFID II RELATED FIELDS AND VALUES

The following sections describe (i) the fields available in the messages, (ii) system functionalities based on the MiFID II requirements and (iii) related services provided by Euronext to its clients.

In this document term 'MIFID II' includes MIFID (2014/65/EU), MIFIR EU (600/2014) as well as the texts of level 2 and 3.

1.1.1 Maintenance of Relevant Data relating to Orders in Financial Instruments

The delegated act "supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the maintenance of relevant data relating to orders in financial instruments" issued by ESMA within the MiFID II requires trading venues to be able to supply to the regulators a wide range of order related data.

In order to fulfil this requirement, members are requested to provide data in the fields available in the Optiq messages, e.g. **NewOrder** (01) message. The sub-set of fields present in different messages for compliance with the acts are listed in the table below. These fields are also included in the description of each individual message:

FIELD IN THE ACT	OPTIQ FIELDS (SBE & FIX)	USED IN
Client identification code	ClientIdentificationShortCode	New Order (01) Ack (3) Fill (04) Kill (05) Cancel Replace (06) Reject (07) Quotes (08) Quote Request (10) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request (18) Price Input (28) Liquidity Provider Command (32)

		User Notification (39) MM Sign-In (47) MM Protection Request (62) New Wholesale Order (64) Request For Implied Execution (66) Cross Order (67)
Investment decision within firm	InvestmentDecisionWFirmShortCode	New Order (01) Quotes (08) New Wholesale Order (64) Cross Order (67)
Execution within firm	ExecutionWithinFirmShortCode	New Order (01) Cancel Replace (06) Quotes (08) Quote Request (10) Cancel Request (12) Mass Cancel (13) Open Order Request (15) Ownership Request (18) Price Input (28) Liquidity Provider Command (32) User Notification (39) New Wholesale Order (64) Request For Implied Execution (66) Cross Order (67)
Non-executing broker	NonExecutingBrokerShortCode	New Order (01) Quotes (08) New Wholesale Order (64) Cross Order (67)
MiFID Indicators	MiFIDIndicators	New Order (01) Cancel Replace (06) Quotes (08) New Wholesale Order (64) Request For Implied Execution (66) Cross Order (67)
Trading Capacity	Trading Capacity	New Order (01) Quotes (08) New Wholesale Order (64) Cross Order (67)

To reduce latency impacts associated to the use of these fields and to avoid sensitive information from being routed over the non-encrypted order interface, the optimized representation of this data is transmitted to Euronext via short codes. Mapping of short codes to required data for reporting may be provided by clients by end of business on the trading day when trade has occurred using the process described below:

- Clients have access to the Customer Web portal where they are able to input the MiFID II compliant data for each required field. This data could be associated to the short codes, which may also be provided by the clients via the Customer Web Portal. For Example:
    - To identify a non-DEA client on behalf of which an order was entered in the system, members are requested to enter their MiFID II *Client identification code* (as described in the associated act): Where the client is a legal entity, the LEI code of the client shall be used. Where the client is not a legal entity, the National ID shall be used.
- When this code is entered, the clients is able to assign a short code to it in the Customer Web Portal. This short code may be used in the **NewOrder** (01) message in the field *ClientIdentificationShortCode*.

- For clients using algorithms in their trading, guidelines for the way they should generate and populate the short codes associated to the executing (*ExecutionWithinFirmShortCode*) and investment decision making (*InvestmentDecisionWFirmShortCode*) should be set based on the setting of the Algo Indicator in the order messages:
  - If the Indicator is set to "0: No algorithm involved" then all positive values (from 0 to 2^{31}-1) would represent a human trader,ì
  - If the indicator is set to "1: Algorithm involved" clients are requested to populate this field with the ranges of values identified below. No technical checks would be performed to validate correctness of the ranges used by the system:
    - In–house algorithms: with positive range of values between 0 to 2^{31}-1
    - ISV algorithms: negative range of values between -2^{31}+1 to -1

Clients should take the following into consideration for population of short codes in inbound messages:

- *ExecutionWithinFirmShortCode* is mandatory to be provided in all inbound application messages.
- *InvestmentDecisionWFirmShortCode* is mandatory to be provided in when the order is flagged as Liquidity Provider, Related Party or House. It does not apply if an order is flagged as DEA. It is optional in other cases.
- *ClientIdentificationShortCode* is mandatory when an order is flagged as Client, RO or DEA. It is optional in other cases.
- *NonExecutingBrokerShortCode* is optional in all cases.

In the order messages short codes are used for regulatory reporting. In most other messages these codes, if identified, are to be used for purposes of identifying individual market makers and Kill command.

1.1.2 Reporting to Competent Authorities

MiFID II requires market participants to report additional transaction information to the regulators. The requirements for this reporting are summed up in the delegated act "supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the reporting of transactions to competent authorities" issued by ESMA within the MiFID II Regulatory Technical Standards. Euronext provides an Approved Reporting Mechanism (ARM) service to its clients, which allows them to comply with these requirements in a stream-lined manner.

Clients established within the European Union, are able to subscribe to this optional supplementary service. For clients established outside of the European Union the reporting is done by the exchange on a compulsory basis, with client participation in the service and provision of data required by this act being mandatory.

1.2 FUTURE USE

In preparation for various functionalities expected to be implemented in the future on Optiq a number of messages and fields 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 finalised specifications for the relevant service are communicated to clients.

The associated messages and effective use of fields will not be technically supported until the announced date for implementation of these functionalities. Submission of inbound messages that are flagged as 'Future Use' will be rejected by the system. Such fields or values, if provided in supported inbound messages, will be ignored by the system.

This behaviour applies to:

- **Messages** flagged as 'For Future Use';
- **Fields** flagged as 'For Future Use', 'Pending Regulatory Approval' and when Used For is set to 'Derivatives'.

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

1.3 GLOSSARY

This section provides some high-level definitions of commonly used terms in this document. Please note that some of these terms are described in more details in the dedicated sections within this document.

- **Optiq:** is Euronext's multi-market full trading chain technology platform.
- **Order Entry Gateway (OEG):** is the software that manages the access for exchanges' clients, and acts as the private interface between the clients and the Optiq matching engine.
- **Market Data Gateway (MDG):** is the software that provides high-speed, real-time market data (public messages) for the Euronext markets.
- **Matching Engine:** is the software that manages the trading services for the Euronext markets.
- **Optiq Segment:** defines a universe of instruments habitually sharing common trading properties. An OPTIQ Segment can contain one or several asset classes. An OPTIQ Segment access is setup through a Logical Access.
- **Partition:** is a technical subdivision of an Optiq Segment. An Optiq Segment may be comprised of at least one or several partitions, physically independent one from one another, but connected to each other within the context of the Optiq Segment. Instruments may move from one partition to another within an OPTIQ segment.
- **Logical Access:** is an OEG (Order Entry Gateway) entry point, setup for clients to connect to a single OPTIQ Segment, containing the technical configuration for the client's connectivity. Multiple logical accesses can share the same SFTI line.
- **OE Session:** the individual physical connection, to a single Partition. A single Logical access may have as many OE sessions as there are partitions in the Optiq segment.
- **Simple Binary Encoding (SBE):** is the open source binary protocol used as the solution for market data and order entry messaging in Optiq. SBE was designed within the FIX Protocol Limited organization, with a focus on low-bandwidth utilization and the goal of producing a binary encoding solution for low-latency financial trading.
- **Symbol Index:** is a unique system-wide identifier (in private and public messages) assigned to a trading instrument and Contracts in Optiq. Note that an instrument here represents either a single tradeable instrument, an index or a strategy. Except for strategies, it represents the combination of the following instrument characteristics: ISIN, MIC, Currency and when required the MIC of the Market of Reference. *Symbol Index* will not change over the lifetime of the instrument, but can take a different value for the same instrument, depending on the environment (Prod or Test).
- **Message:** is a discrete unit of communication, provided in pre-defined format, which depends on the chosen protocol and the target functionality it relates to, containing information exchanged between Euronext and its clients, to enable trading on its systems.
  - **Administration message** is an electronic instruction from client or response from the OEG used to exchange technical, non-trade related information, most notably used to setup and maintain connectivity between a client and an OEG.
  - **Application message** is an electronic instrument from a client or a response from the OEG, used to exchange order and trade related information, including requests and events that impact orders and trades, but do not directly represent them.
  - **Order:** An order is an electronic instruction from a firm to buy or sell an instrument via Optiq. Firms can send many types of buy, sell and cross orders that are matched upon arrival or placed in the order book to await a match.
  - **Trade:** A trade is an electronic agreement between the client(s) that submitted the order(s) to exchange for a certain quantity of one or more instruments, for one of the various forms of reimbursements (payment, exchange of goods, services, etc.).
- **Standing Data:** provides referential data characteristics of all trading instruments available on Euronext markets. The data is provided via files and messages.
  - **Standing data files** contain referential data characteristics of the contracts, trading instruments including outrights, and strategies that may be required, or provided as value-added information. These files are provided on a daily basis and can be obtained from a separate HTTPS service.
  - **Standing data messages** contain the basic information of each instrument and strategy, and are disseminated via MDG at the start of each trading session and intra-day on creation of Derivative instruments.
  - Clients should refer to the **MDG documentation** for the full details about these services.
- **Self-Trade Prevention (STP):** Service provided by Euronext on its trading platform, to allow trading clients to avoid unintentional trading with themselves, that results from the matching of two opposite orders of the same client. This service is made available to clients performing specific types of activities (e.g. Liquidity Providers) setup depending on the rules defined per Optiq Segment.
- **Firm:** A firm is an investment firm or financial institution that deals, advises, and/or acts on behalf of its clients and possibly itself on the Euronext markets.

- **A Firm Access**: An entity allowing the Firm to access the Trading Platform. The two Firm Access types, which can both be used by a given Firm, are **Regular Access** and **Service Bureau Access**, as described below:
  - **Regular Access**: when a firm contracts its own and exclusive order entry access means directly with Euronext, the Firm Trading Solution type is Regular Access (or sometimes Direct Access).
  - **Service Bureau Access**: when a third-party customer, which may, among others, refer to a Service Bureau, contracts order entry access means with Euronext to act as an order carrier on behalf of several firms, the Firm Trading Solution type is Service Bureau Access.

1.4 ERROR CODES

When the Matching Engine receives an incoming message, it performs several checks on this message, and may reject it. When this occurs, the error is identified in the outgoing message sent back by the responding system as an *Error Code*. In Optiq the response messages contain only the error codes.

The list of errors that can be issued by the Optiq Matching Engine (ME) & Order Entry Gateway (OEG) upon reception of incoming private messages is provided in a dedicated file: Error Code List, which may be downloaded from the Euronext website. This list includes errors that may occur due to issue encountered within messages sent by customers to or exchange business continuity conditions, as well as the errors that are issued by the Trade Confirmation System (TCS).

The Error Codes are classified by Rejection Type. The rejection types are defined in the following table and the first digit in the *Error Code* is set to represent the type of rejection:

REJECTION TYPE	TECHNICAL / FUNCTIONAL	DESCRIPTION
0 – TCS	TCS	Errors specific to messages sent to the Trade Confirmation System (TCS)
1 – Inconsistent	Functional	The specified value is functionally invalid (e.g., Expire time < actual time); OR Fields/characteristics are provided in the message but are irrelevant (e.g., a Stop Price filled for a Limit Order)
2 – Forbidden	Functional	Request is forbidden due to Exchange's Functional rules described in the associated Rules & Regulations documents (e.g. Trading Manual identifies that during the current phase, or due the member's authorizations a specific type of activity is forbidden)
3 – Invalid	Technical	The specified value is technically invalid (e.g., MsgSeqNum n < MsgSeqNum n-1); OR The format is not the expected format for free fields (String instead of Integer); OR The specified value is not one of the enumerated values listed for the field
4 – Missing	Technical	Necessary field is missing
5 – Failure	Technical	Failure in the exchange system

Notes:

- Fields, presence of which is "Mandatory" or "Conditional", can lead to an order rejection (Rejection type 4 - Missing) if not provided
- Fields, format of which is "Enumerated", can lead to an order rejection (Rejection Type 3 - Invalid) if the value provided is not among the authorized values
- All Fields can lead to an order rejection (Rejection Type 3 - Invalid) if the format is different from the format required
- Fields with null value are considered as not provided

2. ORDER ENTRY MAIN PRINCIPLES

2.1 NEW INSTRUMENT SEGREGATION - OPTIQ SEGMENT

High reliability, significantly increased throughput and latency performance with minimal standard deviation, improved flexibility in delivery of new functionalities and products, shorter time to market as well as the improved resiliency will be ensured within Optiq in part by introduction of the new instrument segmentation through Optiq Segments.

2.1.1 Optiq Segments

An Optiq Segment defines a universe of instruments sharing common trading and financial properties, it allows Euronext to segregate instruments among hermetic universes to facilitate clients' organisation toward Euronext financial markets.

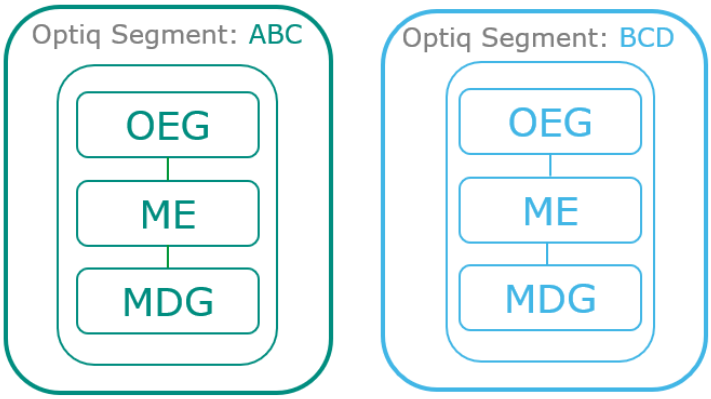
For the implementation of Optiq Segments the instrument universe is rationalized and reorganized to fit the new structure.

A segment can contain one or several asset classes. Information of the Optiq Segment to which an instrument belongs to / hosted on is communicated to clients within the Standing Data files and messages[2].

Clients must be aware of the different existing Optiq segments and the instruments they host in order to identify which segment(s) they would connect to.

- Segmentation provides:
    - Improvement in resiliency - failure of a single Optiq segment should have limited direct technical impact on other Optiq segments;
    - Increased flexibility – possibility of independent software and operational lifecycle.

Illustration of two different segments:



2.1.2 Partitions

An Optiq Segment may be comprised of one or more physical partitions.

A partition is composed of an Order Entry Gateway (OEG), a Matching Engine (ME) and a Market Data Gateway (MDG).

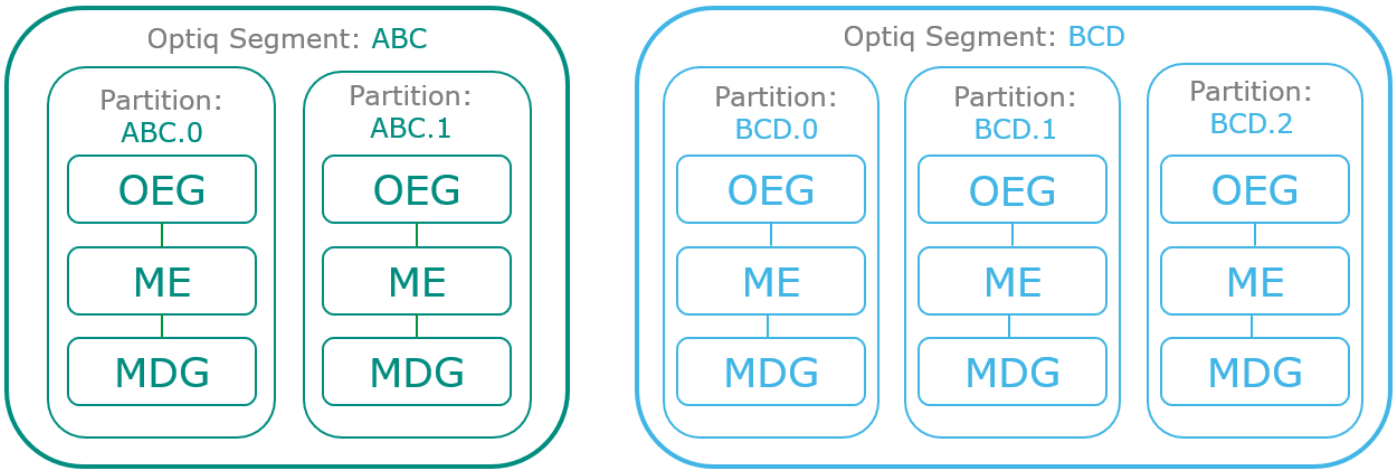
Instruments have the flexibility to be moved from one partition to another within an Optiq segment.

- Partitioning provides the following benefits:
    - Improved resiliency - failures on one partition impact only a fraction of the market / clients;
    - Improved scalability: simple and seamless scalability model based on horizontal scalability principles;

[2] Standing data files and messages refer to the data provided for Cash and Derivatives, instruments, contracts, outrights and strategies.

- Ensured stable latency and high performance.

Illustration of segments divided into partitions:



2.1.3 Logical Access and OE Sessions

Access to an Optiq Segment requires a dedicated Logical Access:

- A Logical Access is a point of entry configuration for connectivity to a specific Optiq Segment and allows the client to technically reach all the instruments belonging to the particular segment for which an access is setup.
  - A Logical Access is dedicated to an Optiq Segment, i.e. a single Logical Access cannot connect to two different Optiq Segments;
  - Clients may have several Logical Accesses per Optiq Segment;
  - It allows the client to connect to all partitions belonging to the segment either directly or indirectly;
  - The physical connection is managed at the OE Session level and there is at least one per Logical Access.
- An OE session corresponds to the actual physical connection of the client to a partition:
  - OE Sessions are automatically created by the Exchange upon creation of a Logical Access;
  - OE Session is the login identifier for each physical connection represented by the combination of the *Logical Access ID* and the *OE Partition ID*. These two fields represent an ID which is unique across the whole system and across the various Optiq Segments;
  - One OE Session always belongs to one Logical Access, but a Logical Access can have multiple OE Sessions. There can be as many OE Sessions as there are partitions in the Segment;
  - An OE session inherits the majority of characteristics setup for the Logical Access;
  - By default, OE Sessions hold the ownership of the orders entered through it.

2.1.4 Full mesh OEG-ME Connection

If a segment has multiple partitions, for the best possible response times, clients should initiate an OE session for each available partition and send messages through it only for the instruments hosted on this partition. However, a client may use a single OE Session to access all the instruments of an Optiq Segment, no matter how many partitions compose the segment. This is made possible by the full mesh OEG-ME connectivity provided by Optiq as represented in the diagram below. Such cross-partition access will incur additional response times (i.e. increased latency).

Quotes and other Market Making messages cannot be sent across partitions, and must be sent only to the partition where the Instrument or Contract is hosted.

By default, the responses to the private response messages sent through a different partition will return to the OE session holding the ownership of the order (from which it was sent). However, the corresponding MDG messages is issued by the partition on which the instrument is hosted.

As it relates to the OEG and private messaging, Order ownership is the technical belonging of the order to the physical connection that submitted the order, or to the physical connection that took ownership of the order. Outbound messages are sent to the OE Session that owns the corresponding order. Functionally the orders belong to the Firm (designated by its *Firm ID*), and for the scope of change of ownership; modification can only be done by

the requestor with the same *Firm ID*, and between physical connections or Logical Accesses that are set with the same *Firm ID*.

Illustration of segments, partitions and connectivity:

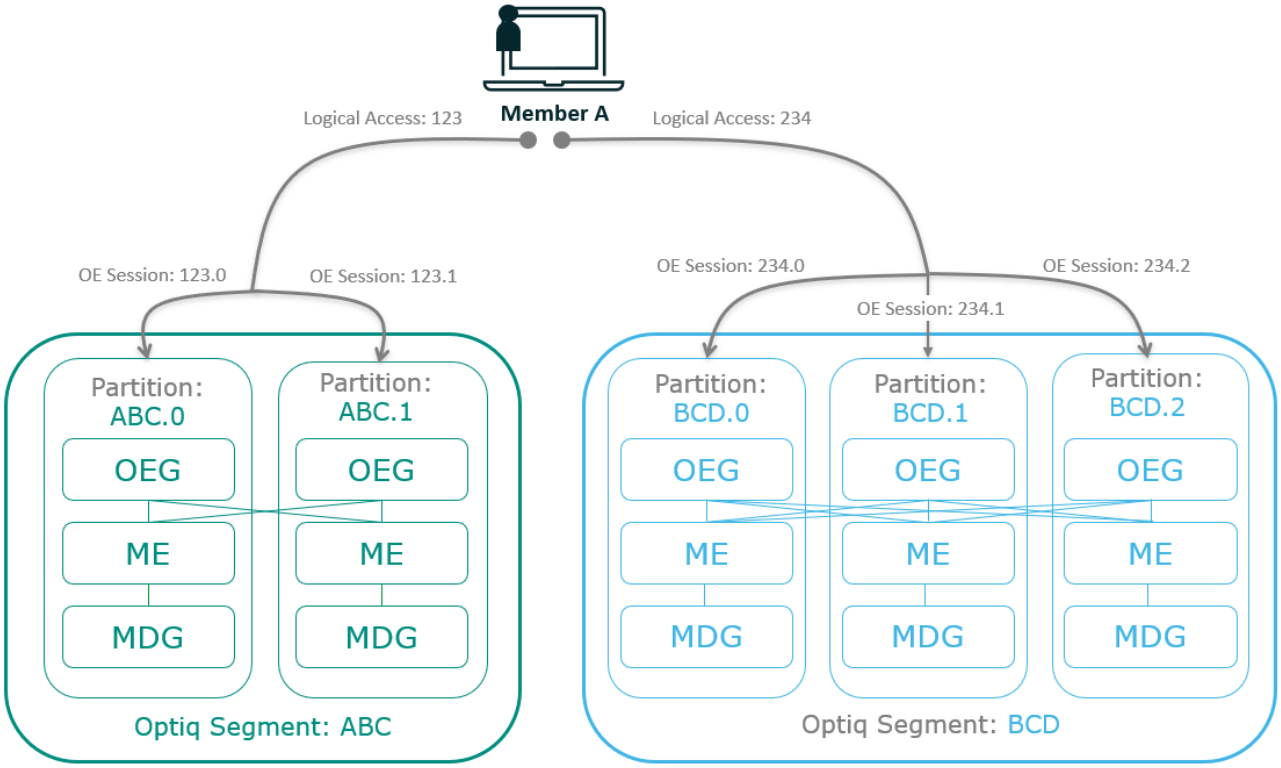
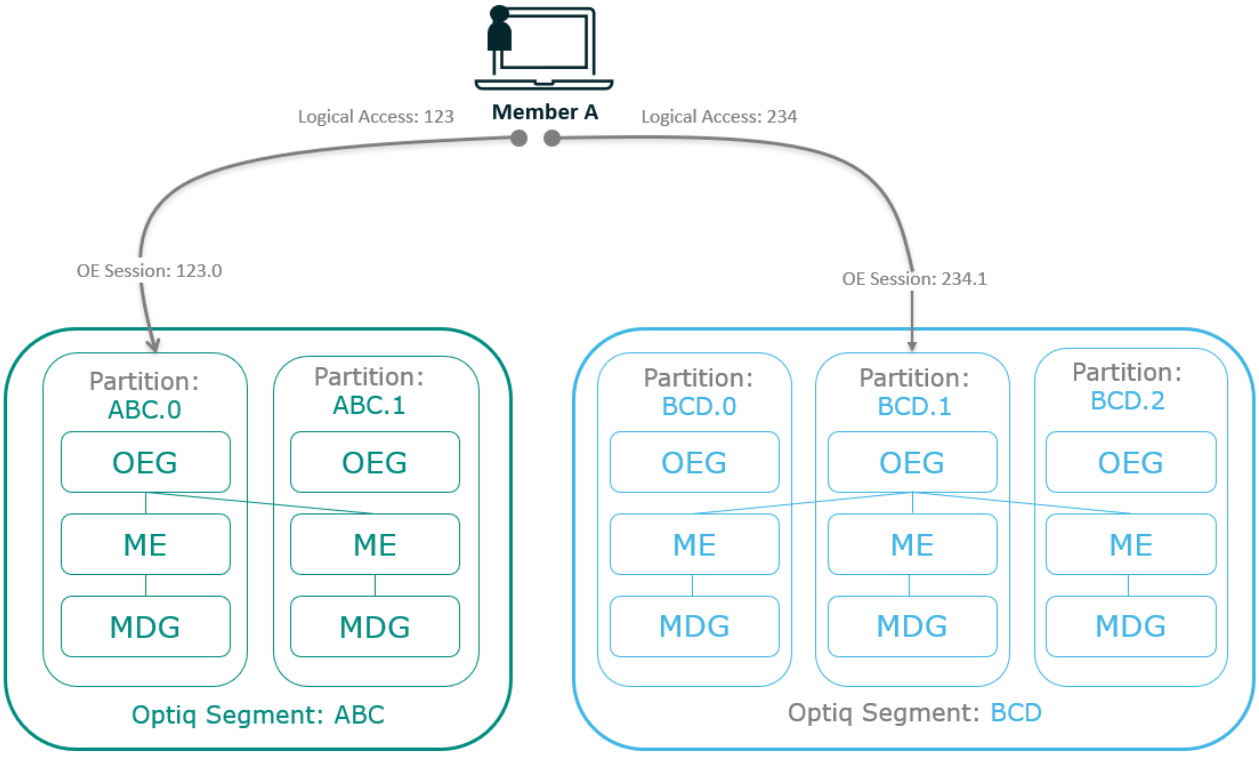


Illustration of the **full mesh** connectivity:



2.1.5 Determine the "shorter path"

In order to benefit from the best response times, the clients should send messages directly to the partition on which the instrument is located. To identify on which partition each instrument is located, clients must use, and update on a daily basis, their referential data by downloading the Standing Data files or using the **StandingData** market data messages, where details of the *Partition ID* assigned to each instrument are provided[3].

2.1.6 Setting Up Connectivity

Euronext provides connectivity information within a dedicated document, the Connectivity Detail specifications, covering all required technical details. Ranges of IPs / Ports and Multi-cast channels are identified for each Optiq segment for Order Entry and Market Data gateways.

To take full advantage of the scalability of Optiq, and ensure continuity of service, clients are strongly encouraged to setup connectivity to the full range specified per segment for OEG and MDG. Individual partitions will be assigned a sub-set of values identified within the specified ranges.

In addition, the relevant details for OEG and MDG connectivity per instrument will be communicated in the referential standing data files provided on a daily basis. For the details of the format in which this data is provided please refer to the *Euronext Market – Optiq File Specifications* document.

2.1.7 Overnight instrument migration between partitions

In order to improve latencies and predictability, an overnight load balancing mechanism is introduced by the new Optiq system. This new technical mechanism implies that every day all instruments belonging to an Optiq Segment may potentially be relocated across the partitions belonging to this Optiq Segment.

Please note that this migration between partitions will not cause instruments to migrate from one Optiq Segment to another Optiq Segment.

Every instrument can migrate overnight from one partition to another. It means that connectivity information associated to an instrument can change every day, which is why it is crucial for clients to daily update their referential data by downloading the standing data files provided on the Euronext server.

Please refer to the *Euronext Markets – Optiq MDG Client Specifications* document for further details on standing data files.

Note: While migration of instruments between Optiq Segments is not expected to be a regularly occurring event, it may happen, and will be done with prior notification to clients.

2.1.8 Added / Removed Partition

The partitioning of the Optiq Segments, and full-mesh connectivity, allows Euronext to add or remove a partition without impacting the clients' connectivity. Adding or removing a partition will not impact connectivity to other existing partitions or OE sessions.

In case of introduction of new partitions. Until clients are able to connect to the new partition they will still be able to use individual order messages to access all the instruments belonging to an Optiq Segment by connecting to the already existing partition(s).

In case of removal of a partition, Clients will still be able to connect to existing partitions, and access instruments that were hosted on these partitions before the change, as well as any instruments that had to be moved to the existing partitions from the one being removed.

Partition on which the contract or instrument is hosted is identified in the Standing data that is provided on a daily basis.

In all cases clients will always be provided prior notice before such changes are performed.

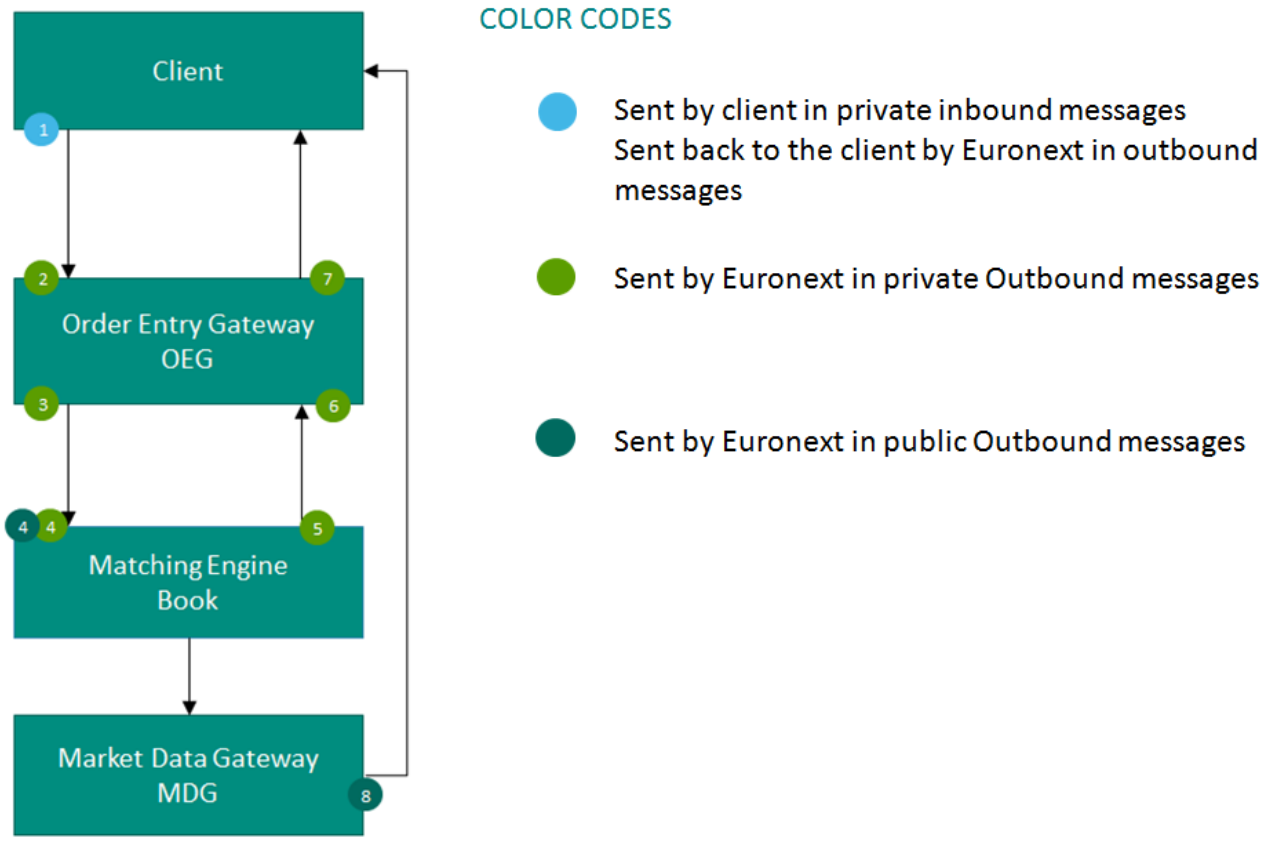
[3] For the Cash markets. Standing data file is: CashStandingDataFile (9007); Real time MDG Standing data messages: Standing Data (1007) | For the Derivatives markets. Standing data file is: DerivativesStandingDataFile (9013); Real time MDG Standing data messages: Contract Standing Data (1013)

2.2 TECHNICAL FEATURES

2.2.1 Latency Monitoring and Timestamps

Outbound messages provide several internal timestamps to allow the clients to monitor the processing time of the system at different levels.

- The following diagram represents the different timestamps provided in the outbound messages:



#	FIELD NAME	DESCRIPTION OF DATA PROVIDED
1	*Message Sending Time*	is assigned by the Client in his inbound message
2	*OEG IN From Member*	is assigned by the OEG after decoding the inbound message
3	*OEG Out to ME*	is assigned by the OEG when sending the inbound message to the matching engine, and is later on provided in the Outbound messages
4	*Book IN Time*	is assigned by the ME when receiving the inbound message from the OEG
5	*Book OUT Time*	is assigned by the ME when sending the outbound message to the OEG
6	*OEG IN From ME*	is assigned by the OEG when receiving the outbound message from the ME
7	*OEG OUT To Member*	is assigned by the OEG when sending the outbound message to the client
8	*Packet Time*	is assigned by the MDG when sending the message to the market

2.2.2 Drop Copy

Drop Copy is a service, providing near real-time copies of trade reports & order messages, usually used for risk management and for compliance needs.

Clients require a dedicated connection to receive Drop Copy messages, which can be setup with configuration that fits their needs.

The service is available in FIX protocol only; further details are provided in a dedicated document.

2.3 CLIENT ORDER ID MANAGEMENT

2.3.1 Client Order ID Overview

Clients must provide a *Client Order ID* in every inbound application message, otherwise the message will be immediately rejected by the OEG.

Clients may provide any value that respects the *Client Order ID* format, which is an 8-byte signed integer, and the ranges as defined below. The Exchange recommends setting a unique ID per order, Firm and Symbol Index.

For order entry, the *Client Order ID* value is not checked by the Exchange[4], it is simply returned in the corresponding outbound message to allow clients to reconcile the response message with their original inbound request.

For modification and cancellation using the *Original Client Order ID* as unique identifier[5], the value is checked by the Exchange for possible duplicates, that would represent different live orders originally submitted with the same *Client Order ID*. In case of duplicates, the inbound request is rejected with the associated *Error Code*.

2.3.2 Client Order ID Usages for Order Management

Clients can submit modification and cancellation requests by using the *Original Client Order ID* as unique identifier, i.e. the value of the *Client Order ID* as submitted previously with the original order.

This allows clients to use the *Client Order ID* as unique identifier to modify or cancel their orders per Symbol Index and Firm, in addition of the *Order ID*. It does not restrict clients to use the *Order ID* to manage their orders.

Please note that *Client Order ID* provided for the modification requests will not be updated in the live order itself; order will keep its original *Client Order ID*.

To properly perform the inbound request, the system checks that the value exists on the corresponding Symbol Index among live orders belonging to the requesting Firm. If no order is found the request is rejected, or if more than one order is found the request is also rejected. In this case clients must use the *Order ID* to reach their orders.

As the uniqueness of the *Client Order ID* is not checked by the Exchange for order entry but only in case of modification and cancellation requests, clients who want to use the *Original Client Order ID* as unique identifier for these requests must ensure on their own the unicity of the Client Order ID per Symbol Index and Firm for orders they submit.

However, after an order, with a specific *ClOrdID* participates in a trade, it can no more be re-used to submit orders. This is not allowed in order to make sure that in case of trade investigation, only one single instance of order linked to the trade is available. The same behaviour is appied for "Cancellation of RFC submission" using the *ClOrdID*.

As requests using the *Original Client Order ID* require additional checks to be performed by the system, clients may observe a slight increase of the response time for these requests. Hence to ensure the best possible response times clients are encouraged to use *Order ID* as the reference for their orders.

2.3.3 Client Order ID Ranges

Depending on the nature of the client access, the *Client Order ID* must respect some constraints as described below.

Moreover, it is recommended that clients implement their own configurable prefix in order to allow firms to integrate several application instances easily and ensure *Client Order ID* uniqueness across all the firm orders.

2.3.3.1 For Regular "In House" Accesses

The guideline for the range to use for the Regular In-House accesses (i.e. non via ISV nor using Service Bureau):

- clients should use the positive number range only;

[4] With the exception of the Service Bureau accesses for which a check is always performed.

[5] If both *Original Client Order ID* and *Order ID* are provided in a modification or cancellation request, the *Original Client Order ID* is totally ignored and the request is performed on *Order ID* only.

- numerically it means that clients are restricted to values from 0 to 2^{63} -1.

There is no other constraint than positive values for the non-Service Bureau accesses.

The correct use of the client order id range is checked by the exchange during the conformance test, however afterwards the OEG will not perform any checks of the correct assignment of the range in the inbound application message.

2.3.3.2 For Regular Accesses via ISV

The guideline for the range to use for the Regular access via ISV, without use of Service Bureau:

- clients should use the negative number range only;
- clients should insert at the beginning of the field the unique ISV ID, which will be provided by the Exchange.
  - the ISV ID is composed of three digits
- numerically it means that clients are restricted to a range from –XXX0000000000000000 to –XXX9999999999999999, where XXX is their ISV ID.

The use of the ISV ID is optional and the OEG will not perform any checks of the correct assignment of the ID or range in the inbound application message.

2.3.3.3 For Service Bureau Accesses

For Service Bureau accesses:

- clients must use the negative number range only;
- clients must insert at the beginning of the field the unique Service Bureau ID, as provided by the Exchange.
  - the Service Bureau ID is composed of three digits
- numerically it means that clients are restricted to a range from –XXX0000000000000000 to –XXX9999999999999999, where XXX is their Service Bureau ID.

The Service Bureau ID is provided by the Exchange and is checked during the conformance test and is also checked and enforced at the OEG level for each inbound application message.

2.4 ORDER ID

The *Order ID* used in the messages for trading purposes is a numerical order identifier assigned by the matching engine, unique per instrument over the entire lifetime of the order, which means that this value remains unchanged, even upon submission of the modifications of the order using **CancelReplace** (06) message.

For reconciliation purposes with Euronext's clearing & settlement partners clients may obtain the Order Number and the Order Entry Date from the *Order ID* field, which is composed of three parts, as depicted below:

- the least-significant 2-bytes include the relative calendar days number since 1-jan-1970 at 0:00 UTC (EPOCH) (Please note, currently the clearing partners may use the date corresponding to this value in ASCII format);
- Then 1-byte includes the EMM;
- The remaining most-significant 5-bytes contain the Order Number which is a sequence number restarted at 1 at each start of day.

graphical representation of the OrderID

3. ORDER ENTRY GATEWAY SPECIFICS

3.1 SESSION MANAGEMENT

3.1.1 Logon Overview

Clients initiate a TCP/IP session to the Order Entry Gateway, and then initiate a logon by sending the **Logon** (100) message. Session Logon is always initiated by the client. The **Logon** (100) message must be the first message sent by the client otherwise the OEG will drop the connection, and needs to be sent individually to each partition to which physical connection will be established. Please refer to the description of use for the individual messages and Kinematics document to see the various cases and the associated expected exchange of messages.

After the logon is successful application messages may be exchanged between the client and server. A client has *n* seconds after they connect to send a logon request, otherwise the server drops the connection.

The value of the time delay *n* is provided for each Optiq Segment in the *Euronext Markets – Optiq OEG Connectivity Specifications* document.

3.1.2 Heartbeats and TestRequests

The OEG uses the **Heartbeat** and **TestRequest** messages to ensure the connection between the client and the Exchange is up and functioning properly. During periods of inactivity the mechanism used by the OEG functions as described below.

OEG sends a:

- **Heartbeat** (106) message after the given delay of inactivity on its side, i.e. the OEG sends a **Heartbeat** (106) message after it hasn't sent out any messages within *n* second(s). In case no other application messages, the clients will receive at least one **Heartbeat** (106) message every *n* second(s) when they are logged on. This ensures the client that OEG is up and functions properly.
- **TestRequest** (107) message after the given delay of inactivity on the client side, i.e. when the client has not sent any message in the last *n* second(s).
    - The client has another, equivalent time delay to answer the **TestRequest** (107) message by sending back to the OEG either a **Heartbeat** (106) message, or any other application message.
    - Otherwise if the client does not issue any message within the given delay, the OEG closes the connection. (Note that this disconnection triggers the Cancel on Disconnect mechanism for any messages in scope)

The **TestRequest** (107) message can also be sent by the client to the OEG at any moment and the OEG will answer with a **Heartbeat** (106) message.

The parameter n has a specific value for each Optiq Segment that is specified in the *Euronext Markets – Optiq OEG Connectivity Specifications* document.

3.1.3 Logout

Logout (103) message is used to improve session management processes. This message identifies to the exchange if the client has disconnected on purpose or because of technical issue.

3.1.4 Message Sequence Usage

Optiq uses sequence numbers to ensure no loss of messages. Clients assign sequence numbers to the messages they send to the exchange and the Optiq tracks these numbers for the incoming (sent by client) messages. Similarly, Optiq assigns its own sequence numbers to the outgoing messages (sent by Optiq) that it sends to the client.

The first sequence values provided in the initial Logon messages of the day are set to zero (0) [or 1 for FIX]. When clients log on after a disconnection, the Logon message allows the client and Optiq to exchange the sequence numbers of the last messages that they processed from each other. Each side can then start sending the next

message that has not been processed by the other side, or otherwise follow the business continuity and recovery processes.

Please note that message sequence numbers are assigned only to application messages and not to administration messages.

3.2 CANCEL ON DISCONNECT MECHANISM

Cancel on Disconnect is a mechanism which triggers an automatic cancellation of all non-persisted orders upon disconnection of the client whether voluntary or due to an issue.

In typical day-to-day operations the Cancel On Disconnect applies at the OE Session level, which means that it is triggered per OE Session (physical connection) and it does not affect other OE Sessions that belong to the same Logical Access.

By default, the Cancel On Disconnect is enabled for all clients and for all their Logical Accesses / OE Sessions. It means that every single order is checked for Cancel On Disconnect.

The Cancel On Disconnect mechanism is triggered when the connection between a client and the OEG is dropped. If the client application is disconnected from the OEG, then all live quotes and non-persisted orders submitted during current day's trading sessions, and belonging to the corresponding OE Session are cancelled for their remaining quantity, regardless of order type and validity type.

When the mechanism kicks in, a **Kill** (05) messages are sent to the OE Session for which the mechanism has been triggered, for each instrument in scope and each killed order. If the client has not yet reconnected the messages will be queued until he returns.

Clients can indicate on each order if they want it to be persistent, i.e. not included in the scope of the Cancel On Disconnect mechanism. If the *Disabled Cancel On Disconnect Indicator* (see field *Execution Instruction*) is set to "True" for an order, this order will not be cancelled even if the Cancel On Disconnect kicks in for the OE Session it belongs to.

Please refer to the "Cancel on Disconnect for OEG" section of the *Euronext Cash and Derivatives Markets – Optiq OEG Connectivity Aruba DataCentre - Technical Specification* document for further details.

3.3 INFLIGHT CONTROL MECHANISM

The inflight mechanism in Optiq is designed to manage the queueing and processing of high-volume messages, like mass cancel, to ensure orderly market operation. The mechanism can be activated or deactivated per segment, providing flexibility in operational management.

3.3.1 Inflight Mechanism

When the inflight mechanism is activated within Optiq, the inflight-controlled messages are subject to two (2) additional checks at the **OE Gateway** (OEG) level: **Clear to proceed** and **Processing completion**.

Clear to proceed: If there are any messages, or any type, from the specific OE session in the processing queue that arrive before one of the inflight-controlled messages, then for each such message OE session must receive an explicit acknowledgement for all the preceding messages before it can be processed. Until all previous messages are processed and acknowledged, the impacted message remain queued in the OEG.

The clear to proceed check is applied regardless of whether subsequent messages are destined for different logical cores (causing to miss parallel processing opportunity).

If there are no messages, of any type, from the specific OE session in the processing queue when an inflight-controlled message arrives – it is processed as soon as it arrives, and follows existing parallel processing rules in Optiq.

Processing completion: Upon starting of processing of one of the inflight-controlled messages, from a specific OE session, any subsequent messages from that OE session are queued until the processing of the message is fully completed and acknowledged back to the client.

Currently the Inflight control mechanism is activated only on the Cash markets.

3.3.2 Scope of processing

On the **Cash segments**, the inbound message queues are handled at the instrument book level; if the request concerns a Mass processing message (e.g. Mass cancel request) trading group or an instrument, it is pushed asynchronously to the inbound queue of each book of the specified instrument or instruments belonging to the specified group.

When the Inflight Control Mechanism is active, a Mass Cancel message from a specific OE session may be queued, therefore not immediately processed by the matching engine, because the OE session must receive an explicit acknowledgement for all the preceding messages. Consequently, a new incoming order (orderN) sent by another member may be received after the Mass Cancel request has been submitted, but before it has been processed by matching engine due to queuing under the Inflight Control Mechanism.

In this situation,

- *an order that was supposed to be cancelled by the queued Mass Cancel request may still be executed against that incoming order (orderN) before the cancellation is processed;*
- *the timestamp of the resulting trade is potentially later than the Mass Cancel acknowledgment time (not to be confused with the Mass Cancel completion acknowledgment time, which will be after the execution timestamp)*

On the **Derivatives segments**, the inbound message queues are handled at the contract level; whether the request concerns a contract or an instrument, the request is queued at the level of the contract's inbound queue.

3.3.3 Inflight-controlled messages

When the inflight mechanism is activated within Optiq, the inflight-controlled messages that are subject to these additional checks at the OE Gateway (OEG) level are:

- Mass Cancel;
- Cancel Request;
- Cancel Replace;
- Price Input; *[Cash markets only]*
- Ownership Request;
- Open Order Request.

3.3.4 Inflight mechanism deactivated

When the inflight mechanism is deactivated, the checks and associated queueing is not applied and all messages are routed directly to the relevant logical core for parallel processing.

3.3.5 Intra-day Activation

In case of emergency, Euronext Market Operations may re-activate the inflight mechanism for the affected Optiq Segment intraday.

4. FORMATTING

4.1 SBE MESSAGE STRUCTURE

Private inbound and outbound messages are composed of the following parts displayed from left to right in the table below:

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

Each message is enriched with a "Frame" field followed by the SBE header. The *Frame* field contains the length of the message including the length of the "Frame" and "SBE header" fields.

Please note that even if the Frame must be present on the wire for every message, for readability purpose it is not represented in the message structures of this document.

4.1.1 SBE Header

The SBE Header is composed of the following fields:

FIELD	DESCRIPTION	LENGTH	VALUES
Block Length	Length of the block. The Block is the message without the repeating section headers and the repeating sections. This is especially useful of new versions of messages in case Euronext adds fields at the end of the block. Clients will remain able to process the block fields and know where the repeating sections starts.	2 bytes	From 0 to 2^{16}-1
Template ID	Identifier of the message template. This is the **message type** of the messages (e.g. **NewOrder** (01), **Ack** (03)…).	2 bytes	From 0 to 2^{16}-1
Schema ID	Identifier of the message schema that contains the template.	2 bytes	From 0 to 2^{16}-1
Schema version	Version of the message schema in which the message is defined. Used to add messages and/or modify some others.	2 bytes	From 0 to 2^{16}-1

A Schema is the file describing a group of messages (Private inbound and outbound, Market Data, etc.) used by the Exchange. The group of messages is identified by the *Schema ID*. The schema contains the templates that represent the structure of messages supported by the Exchange, each message being identified by its *Template ID* (message type). A given schema may have several *Schema Version* values, which specify the message structure used by the sender.

Hence the OEG SBE template file (or the *OEG_SBE_Input_Schema*) contains all the Templates for the private inbound and outbound messages. The Schema Version defines the version of this *OEG_SBE_Input_Schema* and the structure to be used by the sender. For more information for the SBE template please review the *Euronext Cash and Derivatives Markets – Optiq Files - Interface Specification* document.

Please note that the SBE Header must be present on the wire for every message, but for readability purpose it is not represented in the message structures of this document.

4.1.2 SBE Repeating Section Header

The SBE Repeating Section Header is composed of the following fields:

FIELD	DESCRIPTION	LENGTH	VALUES
Block Length	Defines the length in bytes of a repeating section (without the length of the header).	1 bytes	From 0 to 255
Num In Group	Defines how many times the repeating section is repeated. It is set to "0" if there is no occurrence of this repeating section.	1 bytes	From 0 to 255

This header must be present at the beginning of each repeating section group.

Please note – the messages structures contain the actual names of the repeating groups that are used in the SBE template.

In the message structures (section 5), repeating section headers are represented as follows:

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE	PAGE
Block Length for repeating section 1	Defines the length in bytes of the repeating section 1.	Header	1	18	Mandatory	24
Num In Group for repeating section 1	Defines how many times the repeating section 1 is repeated.	Header	1	0 to n	Mandatory	24

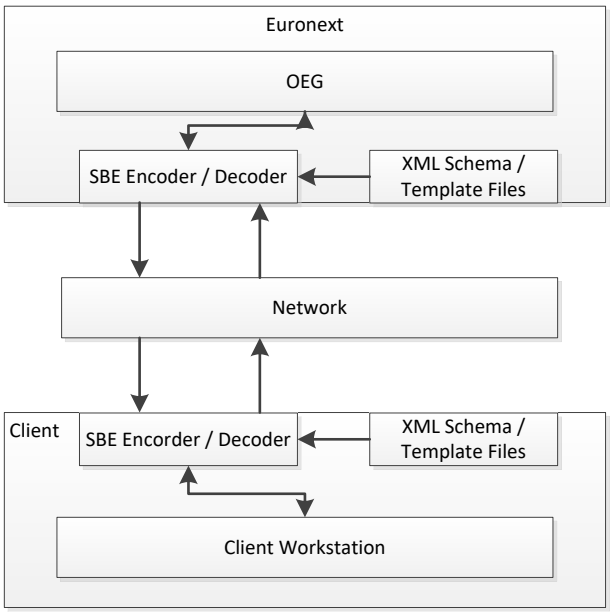
Some empty repeating sections have been introduced for future use purpose at the end of some messages. But due to technical constraints, headers of these repeating sections must be present at the end of the messages; they are represented in message structures as follows:

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE	PAGE
Block Length for repeating section 1	Defines the length in bytes of the repeating section 1.	Header	1	0	Mandatory	24
Num In Group for repeating section 1	Defines how many times the repeating section 1 is repeated.	Header	1	0	Mandatory	24

For these empty repeating sections, clients must set the two fields of the header to zero "0".

4.1.3 SBE Usage

Euronext provides SBE Template XML files that contain all message types supported by the system. Client systems can decode and encode SBE message using the schema and the template files as below:



SBE offers the possibility to have backward and forward compatibility. It means that clients are not required to be on the last version of Schema Version (message structure version) to be able to read the message. This is only possible if changes between versions occurred at the end of:

- The block
- The repeating section.

Using message length, SBE is able to know the difference between the block length or the repeating section length managed by a given client and the received message. As such, fields that do not match a client's version of the messages will be skipped.

However, it is crucial to note that the list of available values in any given field can be updated and the length can be changed. In this case, the update must be taken into account.

Hence if a field required by the regulator becomes mandatory in a message, each client using this message will need to update its Schema for the latest version, otherwise this message will be rejected by the Order Entry Gateway. A change of length of any field will also lead client to update their Schema if they want to use a message containing this field.

Please refer to the *Euronext - SBE Technical Note* for further details on the SBE Encoder / Decoder.

Note: Changes of SBE template are communicated to clients in advance.

4.1.4 SBE Optional Fields and Null Value

Optional and conditional fields can be provided as null value, as defined by the SBE standard and further indicated in the SBE XML templates.

Please note that the Null Value means that the field is not applicable, not provided or not used and cannot be used in a mandatory field. This is different from the value of zero (0), which may have its own meaning depending on the field.

For unused Bitmap fields all the bits must be set to '0'.

4.2 TECHNICAL FORMAT FIELDS

The format of the fields contained in the messages will follow these rules:

- All integers are numeric (signed/ unsigned specified in each field format description) using two's complement method.

- Binary data are in Intel byte order (Little-Endian).
- Unless otherwise specified (i.e. *Counterpart Firm ID*), all "Alphanumerical ID" and "Text" fields are alphanumeric based on UTF-8, left aligned and null padded.
- SBE allows optional fields with a null value. The applicable NULL value is defined by SBE interface.
- Only field values will appear in the published messages (no name or 'tag' will appear in the messages).
- The field names that appear in this document are for reference purposes only.
- All the fields are contiguous.
- All field sizes are fixed and constant.
- Even if it is not always mandatory to be able to process last message version (Schema Version), it is mandatory for clients to check for each update if it contains important or regulatory updates.

FORMAT FIELDS	DESCRIPTION
Alphanumerical ID	String type identifying an element.
Amount	Signed numerical field representing an amount.
Bitmap	Array of bits, each bit specifying whether an optional value is present (set to "1") or not (set to "0") (in Little-Endian). e.g. For the field Execution Instruction a Bitmap field allows indicating in different positions of the field, for the same order message, in position zero (0) with the bit set to one (1) STP type of Resting, as well as in position four (4) with the bit set to one (1) as well, indicate that this order should be persisted and should be excluded from the scope of CoD
Boolean	Indicator having two possible values, either 'true - 1' or 'false - 0'. This value is set on the first bit of the byte (in Little-Endian).
Date	Date of an event (in number of days since 01/01/1970 UTC - 01/01/1970 is the day "0").
Enumerated	Information having a delimited set of possible values.
Numerical	Generic numerical field.
Numerical ID	Numerical field identifying an element.
Price	Numerical field representing a price (either signed or not signed). See the description in Price, Quantity, Ratio and Amounts Formats
Quantity	Unsigned numerical field representing a quantity of elements (for example a number of shares).
Sequence	See the description in Sequence Numbers
Text	Text in UTF-8, left aligned and completed with null padding.
Epoch Time in Nanoseconds	Time in number of nanoseconds since 01/01/1970 UTC.

4.3 DATE AND TIME CONVENTIONS

Date and Time provided in this document refer to the following names, and are provided in the following format:

Timestamps:

They are expressed in UTC (Universal Time, Coordinated) and are synchronised using Precision Time Protocol (PTP). Their format is defined in number of nanoseconds since 01/01/1970 UTC, and is populated as 8-byte unsigned integers.

Date:

- **For Cash and Derivatives Markets:**
- Dates are defined in number of days since 01/01/1970 UTC (01/01/1970 is the day "0") and are populated as 2-byte unsigned integers.

Note: Expiry Date *and Time* provided for *Good Till Time (GTT) and* Good Till Date (GTD) orders follow their own rules, please refer to the field description for further details. Also, please note that the Time In Force *Good Till Time (GTT)* is not available, and is reserved for future use.

■ **For TCS Reporting:**

Dates and Times formatted for ESMA reporting (MiFID II) are defined with a 27-byte 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.dddddddZ".
- "hh" is the hour.
- "mm" is the minute.
- "ss.dddddd" is the second and its fraction of a second.
- "Z" is a constant letter used for UTC time.

4.4 SEQUENCE NUMBERS

The Order Entry Gateway manages two sequence numbers:

- Message Sequence Number: this sequence number is incremented one by one by the OEG and per OE Session (physical connection). It is provided in every application outbound message.
- Client Message Sequence Number: this sequence number must be managed by the client's workstation and is mandatory for each application inbound message. It is recommended to increment this number one by one per OE Session (physical connection), starting from 1. Please note that this sequence is not checked by the OEG but will be useful for some specific recovery cases.

4.5 PRICE, QUANTITY, RATIO AND AMOUNT FORMATS

If a price is needed in the messages, it is expressed in currency or in percentages (generally for bonds).

The volume of the order is a number of Securities or an amount expressed in currency.

All prices are processed using two values:

- the price value (Signed/Unsigned Integer);
- the scale code (*Price/Index Level Decimals*).

Clients have to link each instrument to the associated "*Price/Index Level Decimals*" from the Standing Data message or file.

The prices must be calculated according to the following formula:

$$\text{Price} = \frac{Integer}{10^{\text{"Price/Index Level Decimals"}}}$$

For example, a price of 27.56 is sent in messages in the *Price* field as an Integer of 275600, if the "*Price / Index Level Decimals*" from the Standing Data is equal to 4.

Whether the price is expressed in currency or in basis points, the format of providing the price is the same.

- The same mechanism is used for:
  - All quantities with "*Quantity Decimals*"
  - All ratios and percentages with "*Ratio / Multiplier Decimals*"
  - All amounts with "*Amount Decimals*"

4.6 INSTRUMENT IDENTIFIERS AND EMM

4.6.1 Symbol Index

An instrument is identified by its *Symbol Index*.

The standard security identifier (for example ISIN), mnemonic, tick size, instrument name and other instrument characteristics are carried only in the following Market Data messages: **StandingData** (1007), **OutrightStandingData** (1014), **StrategyStandingData** (1012), **ContractStandingData** (1013) and in the Standing Data files available on the HTTPS server. As such, the client applications must link the *Symbol Index* which is used in all messages, with other instrument characteristics present in the Standing Data messages or files.

The *Symbol Index* is assigned by Euronext and will not change over the lifetime of the instrument.

In some extraordinary cases an instrument can move from one Optiq segment to another keeping its *Symbol Index*. Clients will always be notified in advance before such changes.

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.

For further details on the Standing Data messages and files please refer to the *Euronext Cash and Derivatives Markets – Optiq MDG Messages - Interface Specification* document.

4.6.2 Order Priority

The *Order Priority* is provided in private **Ack** (03) messages for every individual order.

Value in the field *Order Priority* is based on the time of the entry of the order into the book, or the cases of its modification that impact priority.

According to the rules of the market modification of price and volume of an order in most cases have a negative impact on the priority, with exception of modification that is reducing the volume, in which case order maintains its priority. In case of loss of priority, the Order Priority is reset to the time of the modification.

For **Quotes** (08) messages priority is not assigned, as an individual Market Maker may be present only once at single price level.

For Cash Markets Only

For the Cash Markets, the *Order Priority* may be used to allow clients to reconcile with the Market Data feed as the *Order Priority* is also provided in the **OrderUpdate** (1002) message.

For further details please refer to the description of the **Ack** (03) message and to the Cash Market Kinematics document in Section *1.2.5.1 Private and Public feed reconciliation*.

For the Dark functionality, Dark Sweep orders *Order Priority* will be provided in the private **Ack** (03) message. This order priority indicates the rank of the Dark Sweep order on its arrival.

When Dark Sweep orders are swept, a new **Ack** (03) message is issued, with the field *Ack Type* properly populated, they will be assigned a new order priority that indicates their priority vs. the rest of the order book.

For both Cash and Derivatives Markets

For Stop orders *Order Priority* will be provided in the private **Ack** (03) message. This order priority indicates the rank of the stop order on its arrival. If multiple stop orders exist with the same price conditions, they would be triggered in the order of the priority assigned to the stop order upon entry.

When Stop orders are triggered, a new **Ack** (03) message is issued, with the field *Ack Type* set to "Stop Triggered Ack", they will be assigned a new order priority that indicates their priority vs. the rest of the order book.

4.6.3 EMM

The *Exchange Market Mechanism* represents the platform to which the order sent by the client must be routed. It must be specified by clients each time a *Symbol Index* is specified as it is used to route the order to the right platform.

5. MESSAGES

5.1 IMPORTANT NOTES

5.1.1 Scope of Messages and Functionalities

While attempts are made to provide as comprehensive an overview of functionalities as possible please note that:

- Some of the functionalities and messages in the document are applicable only when enabled for the specific scope of instruments;
- The functionalities follow the rules set out in the Euronext Trading manual and Rule books.

The following table describe each Optiq Segment tag. Each tag will be then used for each message to specify on which Optiq Segment this message applies on.

OPTIQ SEGMENT	TAG
Equities	EQ
Funds	FND
Fixed Income	FXI
Warrants and Certificates	SP
Equity Derivatives	EQD
Index Derivatives	IDD
Commodities	CMO
Block	BLK

5.1.2 Conditional Values in Outbound Messages

Please note that for the outbound messages (Client◀OEG) the "presence" of the fields in the block of the message is often set to "Conditional", which means that those fields might be populated with Null Value, when not required. As a single outbound message may cover several trading cases, it contains fields needed in all of these cases, which may be populated or not.

5.2 MESSAGES FORMATTING

5.2.1 Introduction to Message Representation

To help reading the message structure in this document the following introductory explanation is provided.

- In all the structures of messages of this document (the tables representing the messages only):
  - All the lengths identified are in bytes.
  - Short descriptions of individual fields within the structures might not be exhaustive, please refer to Section 6 Field Description where further details are provided for each individual field.
- Where a list of specific allowed values is provided, if client provides data that is outside of this range of values, the message will be rejected
  - In the fields description the following pictograms represent:
    - [C] means that the value is for Cash only;
    - [D] means that the value is for Derivatives only;
    - [i] means that special conditions apply to the displayed value. These conditions are detailed in the "conditions" in the description of the corresponding field.
  - The display of message sections is formatted as described below:
    - **Block section**: The block is for all the non-repeated fields. They must be present on the wire for each message, even if they are optional or conditional. The length of the section is defined in each individual message template (in bytes).

Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	From 0 to 2^32-2	Mandatory	96
Firm ID	Identifier of the member firm that sends the message.	Alphanumeric al ID	8	(See field description)	Mandatory	104
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	From 0 to 2^64-2	Mandatory	111
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	From -2^63+1 to 2^63-1	Mandatory	96
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory	125
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory	100

    - **Green Repeating section**: All the fields that are repeated. All these fields are in bold and green table borders, it might be **0 to *n* occurrence(s)** for this repeating section. (the maximum value of *n* is defined in the *Template*)

Bid Quantity	Quote bid quantity, (To be calculated with Quantity Decimals).	Quantity	8	From 0 to 2^64-1	Optional	93
Bid Price	Quote bid price, (To be calculated with Price/Index Level Decimals).	Price	8	From -2^63 to 2^63-1	Optional	93
Offer Quantity	Quote offer quantity, (To be calculated with Quantity Decimals).	Quantity	8	From 0 to 2^64-1	Optional	116
Offer Price	Quote offer price, (To be calculated with Price/Index Level Decimals).	Price	8	From -2^63 to 2^63-1	Optional	116
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory	125
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory	100

    - **Light Blue Repeating section**: All these fields are in bold and light blue table borders, it might be **0 to 2 occurrence(s)** for this repeating section. This is mainly used to manage optional fields.

Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(See field description)	Optional	105

- **Blue Repeating section**: All these fields are in bold and blue table borders, it might be **0 to 1 occurrence** for this repeating section. This is mainly used to manage optional fields.

Collar Rejection Type	Hit collar type (high or low) in case of order rejection due to collar breach.	Enumerated	1	1 = Low dynamic collar 2 = High dynamic collar	Conditional	98
Breached Collar Price	Breached collar price in case of collar rejection.	Price	8	From -2^63 to 2^63-1	Conditional	94

- SBE message structures are organized as below:

SBE SECTION	DESCRIPTION	LENGTH
Block	The block is for all the non-repeated fields. They must be present on the wire for each message, even if they are optional.	As defined by the individual message template (in bytes)
Repeating section 1	All the fields that are repeated. All these fields are in bold and are outlined by green table borders; there may be 0 to *n* occurrences of this repeating section. (the maximum value of *n* is defined in the *Template*)	As defined by the template (in bytes)
Repeating section 2	All these fields are in bold and are outlined by light blue table borders; there may be 0 to 2 occurrences of this repeating section. This it is mainly used to manage optional fields.	As defined by the template (in bytes)
Repeating section 3	All these fields are in bold and are outlined by blue table borders; there may be 0 to 1 occurrence of this repeating section. This it is mainly used to manage optional fields.	As defined by the template (in bytes)

  - In this explanatory example, the Frame, SBE Header and SBE Repeating Section Header are represented in the structure. There are in a grey background and will not be provided in the rest of this document.
  - Please note not all messages use repeating sections. In those cases, repeating sections are not identified in the structure of the message.

- For example: the following combination of blocks could be present in a Message Structure

SBE SECTION	DESCRIPTION	LENGTH
Frame	The "Frame" field contains the length of the message including the length of the "Frame" and "SBE header" fields.	2 bytes
SBE Header	SBE header is composed of 4 fields, as previously defined.	8 bytes
Block	The block is for all the non-repeated fields. They must be present on the wire for each message, even if they are optional.	As defined by the template (in bytes)
Repeating section 1 header	This is how many times the repeating section is repeated and the length of the repeating section. It will not been displayed in any below message. *Num In Group* is at 0 if there is no repeating section.	2 bytes (1byte for the length 1byte for the count)
Repeating section 1.a	First occurrence of the repeating section 1.	As defined by the template (in bytes)
Repeating section 1.n	Occurrence N of the repeating section 1.	As defined by the template (in bytes)

SBE SECTION	DESCRIPTION	LENGTH
Repeating section 2 header	This is how many times the repeating section is repeated and the length of the repeating section. It will not been displayed in any below message. *Num In Group* is at 0 if there is no repeating section.	2 bytes (1byte for the length 1byte for the count)
Repeating section 2.a	All these fields are in bold and blue table borders, it might be 0 to 1 occurrence for this repeating section. This it is used to manage optional fields.	As defined by the template (in bytes)

5.2.2 Example: NewOrder (01) message

- Below is an example representing the sections using the **NewOrder** (01) message (Frame and headers provided):

SBE SECTION	DESCRIPTION	LENGTH
Frame	The "Frame" field contains the length of the message including the length of the "Frame" and "SBE header" fields.	2 bytes
SBE Header	SBE header is composed of 4 fields, as previously defined.	8 bytes
Block	Includes all the mandatory fields for the NewOrder (01) message.	As defined by the template (in bytes)
FreeTextSection header	This is how many times the repeating section 1 is repeated and the length of a repeating section 1. It will not been displayed in any below message. It is at 0 if there is no repeating section.	2 bytes (1byte for the length 1byte for the count)
FreeTextSection Repeating section	This repeating section contains only the *FreeText* and can be populated 0, 1 or 2 times (2 times for Cross Orders only).	As defined by the template (in bytes)
MiFIDShortcodes Repeating section header	This is how many times the repeating section 2 is repeated and the length of a repeating section 2. It will not been displayed in any below message. It is at 0 if there is no repeating section.	2 bytes (1byte for the length 1byte for the count)
MiFIDShortcodes Repeating section	This repeating section contains MiFID II short codes and can be populated 0, 1 or 2 times (2 times for Cross Orders only).	As defined by the template (in bytes)
OptionalFields Repeating section header	This is how many times the repeating section 3 is repeated and the length of a repeating section 3. It will not been displayed in any below message. It is at 0 if there is no repeating section.	2 bytes (1byte for the length 1byte for the count)
OptionalFields Repeating section	This repeating section contains additional order characteristics and can be populated 0 or 1 time.	As defined by the template (in bytes)
ClearingFields Repeating section header	This is how many times the repeating section 4 is repeated and the length of a repeating section 4. It will not been displayed in any below message. It is at 0 if there is no repeating section.	2 bytes (1byte for the length 1byte for the count)
ClearingFields Repeating section	This repeating section contains the clearing data and can be populated 0, 1 or 2 times (2 times for Cross Orders only).	As defined by the template (in bytes)

SBE SECTION	DESCRIPTION	LENGTH
NotUsedGroup1 Repeating section header	Header of an empty repeating section; both fields of this header must be set to "0".	2 bytes (1byte for the length 1byte for the count)
NotUsedGroup2 Repeating section header	Header of an empty repeating section; both fields of this header must be set to "0".	2 bytes (1byte for the length 1byte for the count)

It means that a message that contains at least one repeating section has a variable length, depending of the number of times each repeating section is populated.

- As an example, below is a representation of the fields that may be sent in the structure of NewOrder (01) message, that represent some of the sections listed above.
    - The following sections are populated in this example: the Frame, SBE Header, Block, **MiFIDShortcodes Repeating Section** populated once, **OptionalFields Repeating Section** populated once.
    - The following sections are not populated in this example: **FreeTextSection Repeating Section, ClearingFields Repeating Section**.

Please note that the values provided in this example are purely indicative and do not represent any specific trading case. Moreover, the values are here provided in a "human readable format" when in reality they will be sent on the wire in a binary format.

FIELD	SHORT DESCRIPTION	VALUES	PRESENCE
Frame	The "Frame" field contains the length of the message including the length of the "Frame" and "SBE header" fields.	152	Mandatory
Block Length	Length of the block. The Block is the message without the repeating sections.	72	Mandatory
Template ID	Identifier of the message template. This is the message type of the message	01	Mandatory
Schema ID	Identifier of the message schema that contains the template.	2	Mandatory
Schema version	Version of the message schema in which the message is defined.	1	Mandatory
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	5	Mandatory
Firm ID	Firm ID.	00010258	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	26th October 2016 @ 12:16:46-015-255-248	Mandatory
Client Order ID	Client order ID.	1	Mandatory
Symbol Index	Exchange identification code of the instrument.	46489	Mandatory

FIELD	SHORT DESCRIPTION	VALUES	PRESENCE
EMM	Defines the Exchange Market Mechanism applied on each platform.	1 COB	Mandatory
Order Side	Indicates the side of the order.	2 Sell	Mandatory
Order Type	Type of Order.	2 Limit	Mandatory
Time In Force	Specifies the maximum validity of an order.	0 Day	Mandatory
Order Price	Instrument price per quantity unit.	150000000	Conditional
Order Quantity	Total order quantity, per quantity unit.	200000000	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	54687785	Mandatory
Trading Capacity	MiFID II field that indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	1	Mandatory
Account Type	Indicates the account type for which the order is entered.	4 RO	Mandatory
LP Role	Liquidity Provider Role identifies the type of the Liquidity Provider.	Null Value	Conditional
Execution Instruction	Field used as instruction for order handling.	00000000	Mandatory
Dark Execution Instruction	Field used as instruction for dark order handling.	00000000	Mandatory
MiFID Indicators	Field used as instruction for order handling.	00000000	Mandatory
STP ID	Identifier of a group of Users or Traders sharing the same business activity at the same Firm.	Null Value	Optional
Non Executing Client ID	This field will be used as unique client Key.	Null Value	Optional
Block Length for FreeTextSection repeating section	Defines the length in bytes of the repeating section 1.	18	Mandatory
Num In Group for FreeTextSection repeating section	Defines how many times the repeating section 1 is repeated.	0	Mandatory
Block Length for MiFIDShortcodes repeating section	Defines the length in bytes of the repeating section 2.	12	Mandatory
Num In Group for MiFIDShortcodes repeating section	Defines how many times the repeating section 2 is repeated.	1	Mandatory
InvestmentDecisionWFirmShortCode	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	Null Value	Conditional

FIELD	SHORT DESCRIPTION	VALUES	PRESENCE
NonExecutingBrokerShortCode	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	432108435	Optional
ClientIdentificationShortCode	MiFID II short code, Client identification code. Short Code used to identify the entity executing the transaction. In case there is DEA, the code of the DEA user shall be used.	525896547	Conditional
Block Length for OptionalFields repeating section	Defines the length in bytes of the repeating section 3.	50	Mandatory
Num In Group for OptionalFields repeating section	Defines how many times the repeating section 3 is repeated.	1	Mandatory
Stop Trigger Price	Stop Trigger Price is mandatory for stop orders.	Null Value	Conditional
Undisclosed Price	Optional price a client can give to the hidden part of an Iceberg order.	Null Value	Conditional
Disclosed Quantity	Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Level Decimals)	Null Value	Conditional
Minimum Order Quantity	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Level Decimals).	50000000	Optional
QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	Null Value	Optional
Order Expiration Time	*Field used as time of order expiration for GTT orders.*	*Null Value*	*Conditional*
Order Expiration Date	Field used as date of order expiration for GTD orders.	Null Value	Conditional
Peg Offset	Tick offset for a pegged order.	Null Value	Conditional
Trading Session Validity	Trading Session Validity.	Null Value	Optional
Undisclosed Iceberg Type	Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.	Null Value	Optional
Triggered Stop Time In Force	Specifies the maximum validity of an triggered stop order.	Null Value	Conditional
Block Length for ClearingFields repeating section	Defines the length in bytes of the repeating section 4.	34	Mandatory
Num In Group for ClearingFields repeating section	Defines how many times the repeating section 4 is repeated.	0	Mandatory

FIELD	SHORT DESCRIPTION	VALUES	PRESENCE
Block Length for NotUsedGroup1 repeating section	Defines the length in bytes of the repeating section 5.	0	Mandatory
Num In Group for NotUsedGroup1 repeating section	Defines how many times the repeating section 5 is repeated.	0	Mandatory
Block Length for NotUsedGroup2 repeating section	Defines the length in bytes of the repeating section 6.	0	Mandatory
Num In Group for NotUsedGroup2 repeating section	Defines how many times the repeating section 6 is repeated.	0	Mandatory

- Below is another example of the fields that may be sent in the structure of NewOrder (01) message, but this time the repeating section containing the clearing data is repeated twice:
    - The following sections are populated in this example: the Frame, SBE Header, Block, **ClearingFields Repeating Section** populated twice.
    - The following sections are not populated in this example: **FreeTextSection Repeating Section**, **MiFIDShortcodes Repeating Section** and **OptionalFields Repeating Section**.

Please note that the values provided in this example are purely indicative and do not represent any specific trading case. Moreover, the values are here provided in a "human readable format" when in reality they will be sent on the wire in a binary format.

FIELD	SHORT DESCRIPTION	VALUES	PRESENCE
Frame	The "Frame" field contains the length of the message including the length of the "Frame" and "SBE header" fields.	154	Mandatory
Block Length	Length of the block. The Block is the message without the repeating sections.	72	Mandatory
Template ID	Identifier of the message template. This is the message type of the message	01	Mandatory
Schema ID	Identifier of the message schema that contains the template.	2	Mandatory
Schema version	Version of the message schema in which the message is defined.	1	Mandatory
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	7	Mandatory
Firm ID	Firm ID.	00010258	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	26th October 2016 @ 14:07:22-785-123-591	Mandatory
Client Order ID	Client order ID.	2	Mandatory
Symbol Index	Exchange identification code of the instrument.	77997	Mandatory

FIELD	SHORT DESCRIPTION	VALUES	PRESENCE
EMM	Defines the Exchange Market Mechanism applied on each platform.	1 COB	Mandatory
Order Side	Indicates the side of the order.	3 Cross	Mandatory
Order Type	Type of Order.	2 Limit	Mandatory
Time In Force	Specifies the maximum validity of an order.	0 Day	Mandatory
Order Price	Instrument price per quantity unit.	273000000	Conditional
Order Quantity	Total order quantity, per quantity unit.	1000000000	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	2132156	Mandatory
Trading Capacity	MiFID II field that indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	1	Mandatory
Account Type	Indicates the account type for which the order is entered.	1 Client	Mandatory
LP Role	Liquidity Provider Role identifies the type of the Liquidity Provider.	Null Value	Conditional
Execution Instruction	Field used as instruction for order handling.	00000000	Mandatory
Dark Execution Instruction	Field used as instruction for dark order handling.	00000000	Mandatory
MiFID Indicators	Field used as instruction for order handling.	00000000	Mandatory
STP ID	For Future Use.	Null Value	Optional
Non Executing Client ID	This field will be used as unique client Key.	Null Value	Optional
Block Length for FreeTextSection repeating section	Defines the length in bytes of the repeating section 1.	18	Mandatory
Num In Group for FreeTextSection repeating section	Defines how many times the repeating section 1 is repeated.	0	Mandatory
Block Length for MiFIDShortcodes repeating section	Defines the length in bytes of the repeating section 2.	12	Mandatory
Num In Group for MiFIDShortcodes repeating section	Defines how many times the repeating section 2 is repeated.	0	Mandatory
Block Length for OptionalFields repeating section	Defines the length in bytes of the repeating section 3.	50	Mandatory
Num In Group for OptionalFields repeating section	Defines how many times the repeating section 3 is repeated.	0	Mandatory

FIELD	SHORT DESCRIPTION	VALUES	PRESENCE
Block Length for ClearingFields repeating section	Defines the length in bytes of the repeating section 4.	34	Mandatory
Num In Group for ClearingFields repeating section	Defines how many times the repeating section 4 is repeated.	2	Mandatory
Clearing Firm ID	Clearing firm ID.	Null Value	Optional
Client ID	Field used to identify the client (investor).	Null Value	Optional
Account Number	Account Number	JFG147G22G14	Optional
Technical Origin	Indicates the nature of the order issuer	Null Value	Optional
Open Close	Open Close Indicator, Posting action.	Null Value	Optional
Clearing Instruction	Clearing Instruction.	Null Value	Optional
Account Type Cross	Indicates the account type for which the sell side of a cross order is entered.	Null Value	Optional
Clearing Firm ID	Clearing firm ID.	Null Value	Optional
Client ID	Field used to identify the client (investor).	Null Value	Optional
Account Number	Account Number	DHCVIE14987G	Optional
Technical Origin	Indicates the nature of the order issuer	Null Value	Optional
Open Close	Open Close Indicator, Posting action.	Null Value	Optional
Clearing Instruction	Clearing Instruction.	8 Manual Mode	Optional
Account Type Cross	Indicates the account type for which the sell side of a cross order is entered.	1 Client	Optional
Block Length for NotUsedGroup1 repeating section	Defines the length in bytes of the repeating section 5.	0	Mandatory
Num In Group for NotUsedGroup1 repeating section	Defines how many times the repeating section 5 is repeated.	0	Mandatory
Block Length for NotUsedGroup2 repeating section	Defines the length in bytes of the repeating section 6.	0	Mandatory
Num In Group for NotUsedGroup2 repeating section	Defines how many times the repeating section 6 is repeated.	0	Mandatory

5.3 ADMINISTRATION MESSAGES

All administrative messages are available on the following Optiq Segments:

EQ FND FXI SP EQD IDD CMO BLK

5.3.1 Logon (100)

Client ▶ OEG

5.3.1.1 Message Description

The **Logon** (100) message is used by the clients to establish a connection with the Exchange and identify the last response message they have processed. It must be the first message sent by the client otherwise the OEG will drop the connection.

The **Logon** (100) message contains the following fields:

- *Logical Access ID*: it must be populated by the client according to the Logical Access used.
- *OE Partition ID*: it must be populated according to the partition the client connects to.
- *Last Message Sequence Number*: it is the sequence number of the last message received by the client from the Exchange on a specific OE Session.
- *Software Provider*: it is an optional field that should be populated for client using software provider services.
- *Queueing Indicator*: defines whether the orders are rejected or queued in case of throttling.

If the logon is successful, the OEG sends back a **LogonAck** (101) message providing the exchange identifier (*Exchange ID*) and the sequence number of the last message received from the client. Otherwise the OEG sends back a **LogonReject** (102) message providing the reason of the rejection (*Logon Reject Code*) and closes the connection.

Use of the Last Message Sequence Number

At the first logon of the trading day the client must set the field *Last Message Sequence Number* to 0, as no message can be received before a successful logon.

In case of an unintentional disconnection the client must use the field *Last Message Sequence Number* to indicate to the Exchange the sequence number of the last message he has received. If some messages have been lost during the disconnection the OEG will resend them to the client.

The clients must not skip sequence numbers; can however pass the Null Value as *Last Message Sequence Number* to notify the server not to validate the next sequence number. The server will accept the next sequence from the client and then send what it thinks is the next outbound sequence.

If the *Last Message Sequence Number* provided in the Logon message exceeds the sequence number of the last message sent by the Exchange, the OEG will reject the logon (**LogonReject** (102)) and will drop the connection, (this behaviour may differ for specific recovery cases).

5.3.1.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Logical Access ID	Identifier of the Logical Access.	Numerical ID	4	0..2^32-2	Mandatory
OE Partition ID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Numerical ID	2	0..2^16-2	Mandatory
Last Message Sequence Number	Indicates the sequence number of the last message received by the Client from the Exchange on the OE Session.	Sequence	4	0..2^32-2	Conditional
Software Provider	Free text field entered by the client in the Logon (100) message, identifying the provider of the software used for exchange of messages for trading purposes.	Text	8	(Free Text)	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Queueing Indicator	Indicates whether the client requests its orders to be queued or rejected in case of throttling. (0: False - Reject ; 1: True - Queue).	Boolean	1	0 = False 1 = True	Mandatory

5.3.2 Logon Ack (101)

Client ◀ OEG

5.3.2.1 Message Description

The **LogonAck** (101) message is sent by the OEG as a response to a successful logon of a client. The message provides the Exchange identifier (*Exchange ID*) along with the sequence number of the last client message processed by the system.

The sequence number may be used to identify gap in the messages sent or received. If the client realizes that some messages have been dropped, he can decide whether to resend or not to the messages that have not been processed by the Exchange.

Please note that rejected messages are considered as processed messages.

5.3.2.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Exchange ID	Identifies the exchange in the Logon process	Text	8	(See field description)	Mandatory
Last Client Message Sequence Number	Indicates the sequence number of the last message received by the Exchange from the Client on the OE Session.	Sequence	4	0..2^32-2	Mandatory

5.3.3 Logon Reject (102)

Client ◀ OEG

5.3.3.1 Message Description

The **LogonReject** (102) message is sent by the OEG as a response to an unsuccessful logon of a client. The message provides the Exchange identifier (*Exchange ID*) along with the reason of the rejection (*Logon Reject Code*).

The *Last Client Message Sequence Number* indicates the sequence number of the last client message processed by the system and *Last Message Sequence Number* indicates the sequence number of the last message sent by the Exchange.

A logon rejection will automatically lead OEG to drop the connection.

If the logon fails because the OEG does not recognize the **Logon** (100) message at all (because of a structural error, when a message is improperly formatted according to these specifications, for example), then no connection is established and OEG does NOT send a **LogonReject** (102) message. In this circumstance, the client does not receive any response at all to the **Logon** (100) message.

5.3.3.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Exchange ID	Identifies the exchange in the Logon process	Text	8	(See field description)	Mandatory
Logon Reject Code	Provides the logon rejection reason.	Enumerated	1	(See field description)	Mandatory
Last Client Message Sequence Number	Indicates the sequence number of the last message received by the Exchange from the Client on the OE Session.	Sequence	4	0..2^32-2	Mandatory
Last Message Sequence Number	Indicates the sequence number of the last message received by the Client from the Exchange on the OE Session.	Sequence	4	0..2^32-2	Mandatory

5.3.4 Logout (103)

Client ◀▶ OEG

5.3.4.1 Message Description

The **Logout** (103) message with *Log Out Reason Code* = 0 is sent by the client in order to close the connection with the Exchange. In regular cases, at the end of day the Exchange sends a **Logout** (103) message with *Log Out Reason Code* = 1 to the clients before dropping the connection.

Please note that in both cases it will trigger the Cancel On Disconnect mechanism if it is enabled.

Please note, any incoming message, that was not processed when **Logout** (103) is submitted, are not queued and will not be returned at the next **Logon** (101)

5.3.4.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Log Out Reason Code	Log Out Reason Code. Value 0 is provide by the client, all other possible values are provided by the Exchange.	Enumerated	1	(See field description)	Mandatory

5.3.5 Heartbeat (106)

Client ◀▶ OEG

5.3.5.1 Message Description

The **Heartbeat** (106) message is used during periods of inactivity, (i.e. when there is no exchange of application messages), either by the OEG or the clients to notify each other that this inactivity is not due to a technical issue.

The message is only composed of an SBE Header. Please refer to Section 4.1.1 SBE Header.

It is sent by:

- The OEG after *n* second(s) of inactivity to notify the client that the connection functions properly, or as a response to a client's **TestRequest** (107).

- The client as a response to a **TestRequest** (107) message to notify the OEG that his system functions properly. (Please note that any application message is also a proper response to the **TestRequest** (107) message.)

The parameter *n* has a specific value defined for each Optiq Segment. Please refer to the *Euronext Cash and Derivatives Markets – Optiq OEG Connectivity Aruba Datacentre - Technical Specification* document for the values of the parameter *n*.

5.3.6 TestRequest (107)

Client ◀▶ OEG

5.3.6.1 Message Description

The **TestRequest** (107) message is used by the OEG to check if the network and the client's system function properly.

The message is only composed of an SBE Header. Please refer to Section 4.1.1 Header.

It is sent by the OEG after *n* second(s) of inactivity on the client side. Then:

- The client has *n* second(s) delay to answer the **TestRequest** (107) message by sending a **Heartbeat** (106) message, or any other application message.
- Otherwise if the client does not issue any message within the given delay, the OEG closes the connection. (Note that it triggers the Cancel on Disconnect mechanism if it is enabled)

It can also be sent by the clients to the OEG at any moment and the OEG will answer with a **Heartbeat** (106) message.
The parameter *n* has a specific value defined for each Optiq Segment.
Please refer to the *Euronext Cash and Derivatives Markets – Optiq OEG Connectivity Aruba Datacentre – Technical Specification* document for the values of the parameter *n*.

5.3.7 Technical Reject (108)

Client ◀ OEG

5.3.7.1 Message Description

The **TechnicalReject** (108) message is sent by the order entry gateway to notify the request issuer that their requests are not processed. It is used to reject application and unknown messages sent by the client.

The **TechnicalReject** (108) message is sent by the order entry gateway for the following reasons:

- Throttling
- Unknown message

The *Rejected Client Message Sequence Number* provided in the **TechnicalReject** (108) message identifies the request which is rejected: it is the *Client Message Sequence Number* of the corresponding inbound message sent by the client.

Note: in case of a rejection of an unknown message the *Rejected Client Message Sequence Number* may not be provided.

The reason of the rejection is provided by the *Error Code*, and a text message explaining the error is provided in the Error Code list file (.csv).

Please refer to the *Euronext Cash and Derivatives Markets – Optiq OEG Connectivity Aruba Datacentre – Technical Specification* and *Euronext Cash Markets – Throttling Description* documents for further details.

5.3.7.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
Rejected Client Message Sequence Number	Indicates the Client Message Sequence Number of the rejected message.	Sequence	4	0..2^32-2	Conditional
Rejected Message	*[N/A] Deprecated field*	*Numerical ID*	*1*	*0..2^8-1*	*Conditional*
Error Code	Error code in case of rejection.	Numerical ID	2	0..2^16-2	Mandatory
Rejected Message ID	Provides the ID (Template ID) of the rejected message.	Numerical ID	2	0..2^16-1	Conditional

5.4 APPLICATION MESSAGES

5.4.1 New Order (01)

Client ▶ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.1.1 Message Description

The **NewOrder** (01) message is used by the clients to create a new order.

All the fields in the block of the message must be populated for each **NewOrder** (01) otherwise the message will be immediately rejected by the Order Entry Gateway (OEG).

Optional fields clients do not want to populate must still be present in the block and set to the null value by the client application. For example, for Market, Stop-Market and Market To Limit orders, the *Order Price* is useless but the field must be present and set to the null value.

The **NewOrder** (01) message can be used by the Liquidity Providers to answer a specific **QuoteRequest** (10) message and by the RFQ issuer to confirm the RFQ (*OrderPrice* field is mandatory).

On Block Segment, the **NewOrder** (01) message might be sent as an answer to an indication of interest and, in that case**:**

- *IOI ID* must be set to the value of the *Exchange IOI ID* provided by the Exchange in the **Wave For Liquidity Notification** (74) sent to acknowledge the **Wave For Liquidity** (73). In case the value provided doesn't match an existing indication of interest the order is rejected;

On Derivatives segments, Market Makers using Logical Accesses setup as 'Market Making', may use the **NewOrder** (01) message with *Account Type* of Market Maker, while also using the **Quotes** (08) messages.

The field *Long Client ID* is used as following:

- For the Derivatives market, in place of the *Client ID* field - used for Cash markets only;
  - If the field *Client ID* is provided for Derivatives markets the message is rejected;
- For Cash markets, must be provided in the appropriate format in case of IPO market model where the allocation algorithm is tax id, to provide the tax code information (note that it is not case sensitive). For all other cases, it is ignored;

The field *Minimum Order Quantity* is conditional as the client must enter a quantity when the field *Dark Execution Instruction*, bit in position 5 from the left (corresponding to Minimum Quantity Type) is equal to 1 (MES); else the order could never be executed during the RFQ matching mechanism.

Repeating Section Usage

The message contains **eight optional repeating sections:**

- **FreeText repeating section:** the first repeating section contains only the field *FreeText*. It can be populated once for Buy and Sell orders and twice for Cross orders, respectively for the buy side and the sell side. Please note that the *FreeText* is part of the Clearing Data repeating section, which aggregates the clearing-related data (clearing aggregate) but it is set in a dedicated repeating section for performance purpose. Possible number of repeating groups: 0, 1, 2.
- **MiFID Shortcodes repeating section:** the second repeating section contains the MiFID shortcodes and can be populated once for Buy and Sell orders. It can be repeated twice for Cross orders, respectively for the buy side and the sell side. Possible number of repeating groups: 0, 1, 2.
- **Additional Order Characteristics repeating section:** the third repeating section can be populated only once and contains optional order characteristics along with conditionally required fields. For the specific conditions on the conditionally required fields please refer to section *Order Characteristics*. Possible number of repeating groups: 0, 1.
- **Clearing Data repeating section:** the fourth repeating section contains the clearing fields. Possible number of repeating groups: 0, 1, 2.

- For standard Buy and Sell orders the first occurrence is optional and contains all the clearing data of the order. Please note that in that case, the field *Account Type Cross* is always ignored by the system as the Account Type value of the standard order is specified in the block of the message.
- For Cross orders, two occurrences are mandatory; the first one for the buy side and the second one for the sell side.
  - Account Type for Cross orders is filled by Members as follows:
    - The Account Type value of the buy side is specified in the *Account Type* field in the block of the message and the Account Type value of the sell side is specified in the *Account Type Cross* field of the second occurrence (the sell side occurrence). As a consequence, the *Account Type Cross* field of the first occurrence is never used and is thus ignored by the OEG.
  - Trading Capacity for Cross orders is filled by Members as follows:
    - Either in the block of the message via the field *Trading Capacity* when the value of the Trading Capacity on the Buy side is equal to the value of the Trading Capacity on the Sell side.
    - OR in the block of the message via the field *Trading Capacity* for the Buy Side and via the field *Trading Capacity Cross* in the second occurrence (the sell side occurrence) when the value of the *Trading Capacity* on the Buy side is different from the value of the Trading Capacity on the Sell side . As a consequence, the *Trading Capacity Cross* field of the first occurrence is never used and is thus ignored (or rejected in case content is invalid) by the OEG.

Note: The following combinations of Trading Capacity and Trading Capacity Cross values are rejected for Cross orders:

- DEAL vs. DEAL
- DEAL vs. MTCH
- MTCH vs. DEAL
- MTCH vs. MTCH

- **NotUsedGroup1 Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".
- **NotUsedGroup2 Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".
- **AdditionalInfos:** This repeating section contains only the "Long Client ID" field. Possible number of repeating groups: 0, 1.
- **Optional IDs:** This repeating section contains only the "LP ID" field. Possible number of repeating groups: 0, 1.

5.4.1.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell 3 = Cross [i]	Mandatory
Order Type	Type of Order.	Enumerated	1	(See field description)	Mandatory
Time In Force	Specifies the maximum validity of an order.	Enumerated	1	(See field description)	Mandatory
Order Price	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Conditional
Order Quantity	Total order quantity, per quantity unit. (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
Trading Capacity	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Mandatory
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.	Enumerated	1	(See field description)	Mandatory
LP Role	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	Enumerated	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider 12 = RFQ Liquidity Provider	Conditional
Execution Instruction	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Dark Execution Instruction	Field used as instruction for dark order handling. 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.	Bitmap	1	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Dark STP Indicator 6 = Dark Passive Order Indicator	Mandatory
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory
STP ID	Identifier of a group of Users or Traders sharing the same business activity at the same Firm.	Numerical ID	2	0..2^16-1	Optional
Non Executing Client ID	This field will be used as unique client Key. Field indicating the client ID of the participant in a commercial package.	Numerical ID	2	0..2^16-1	Optional
IOI ID	Unique identifier of IOI message.	Numerical ID	8	-2^63+1..2^63-1	Optional
FreeTextSection length		Numerical	1	18	Mandatory
FreeTextSection occurrences		Numerical	1	0..2	Mandatory
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(Free Text)	Optional
MiFIDShortcodes length		Numerical	1	12	Mandatory
MiFIDShortcodes occurrences		Numerical	1	0..2	Mandatory
InvestmentDecisionWFirmShortCode	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	Numerical ID	4	-2^31+1..2^31-1	Conditional
NonExecutingBrokerShortCode	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	Numerical ID	4	-2^31+1..2^31-1	Optional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
OptionalFields length		Numerical	1	50	Mandatory
OptionalFields occurrences		Numerical	1	0 .. 1	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Stop Trigger Price	Stop Trigger Price is mandatory for stop orders.	Price	8	-2^63+1..2^63-1	Conditional
Undisclosed Price	[N/A] Optional price for the hidden part of an Iceberg order.	Price	8	-2^63+1..2^63-1	Optional
Disclosed Quantity	Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)	Quantity	8	0..2^64-1	Conditional
Minimum Order Quantity	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-1	Conditional
QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-1	Conditional
Order Expiration Time	*[N/A] Field used as time of order expiration for GTT orders.*	*Numerical ID*	*4*	*0..2^32-1*	*Conditional*
Order Expiration Date	Field used as date of order expiration for GTD orders.	Date	2	0..2^16-1	Conditional
Peg Offset	Tick offset for a pegged order.	Numerical ID	1	-128 .. 127	Conditional
Trading Session Validity	Trading Session Validity. 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.	Bitmap	1	Bit 1 = Session 1 Bit 2 = Session 2 Bit 3 = Session 3 Bit 4 = Session 4	Conditional
Undisclosed Iceberg Type	[N/A] Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.	Enumerated	1	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Optional
Triggered Stop Time In Force	Specifies the maximum validity of an triggered stop order.	Enumerated	1	0 = Day 1 = Good Till Cancel 3 = Immediate or Cancel 6 = Good till Date	Conditional
ClearingFields length		Numerical	1	35	Mandatory
ClearingFields occurrences		Numerical	1	0..2	Mandatory
Clearing Firm ID	Clearing firm ID.	Alphanumerical ID	8	(See field description)	Optional
Client ID	Field used to identify the client (investor). This field is part of the clearing aggregate	Alphanumerical ID	8	(See field description)	Optional
Account Number	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	12	(See field description)	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Technical Origin	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	1	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	Optional
Open Close	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Bitmap	2	(See field description)	Optional
Clearing Instruction	Clearing Instruction.	Enumerated	2	(See field description)	Optional
Account Type Cross	Indicates the account type for which the sell side of a cross order is entered.	Enumerated	1	(See field description)	Optional
Trading Capacity Cross	Indicates for the sell side of a cross order whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Optional
NotUsedGroup1 length		Numerical	1	0	Mandatory
NotUsedGroup1 occurrences		Numerical	1	0	Mandatory
NotUsedGroup2 length		Numerical	1	0	Mandatory
NotUsedGroup2 occurrences		Numerical	1	0	Mandatory
AdditionalInfos length		Numerical	1	16	Mandatory
AdditionalInfos occurrences		Numerical	1	0..1	Mandatory
Long Client ID	Field used to identify the Client (investor), or trader's reference / posting order number for a pre-posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives. For Cash Markets this field is ignored except for IPO where this field is used to provide the information of the tax code.	Alphanumerical ID	16	(See field description)	Optional
OptionalIDs length		Numerical	1	10	Mandatory
OptionalIDs		Numerical	1	0..1	Mandatory
LP ID	Indicates the Liquidity Provider ID under a given Firm ID for which dedicated Market Maker Roles and Obligations can be defined.	Numerical ID	10	(See field description)	Optional

5.4.2 Ack (03)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.2.1 Message Description

The acknowledgment message is sent by the matching engine to confirm that the corresponding request has been taken into account by the matching engine. Moreover, it usually allows the client to reconcile the *Client Order ID* he has given to its request with the *Order ID* assigned by the matching engine.

Note: *Original Client Order ID* is only provided in the **Ack** (03) as response to a **CancelReplace** (06) message if originally used in the corresponding request.

The acknowledgment message is sent by the matching engine in the following situations:

- Responses to **NewOrder** (01) requests in case of acceptation;
- Responses to **CancelReplace** (06) requests in case of acceptation;
- Responses to **PriceInput** (28) requests in case of acceptation; *used on the Cash markets only*
- Responses to **LiquidityProviderCommand** (32) requests in case of acceptation; *used on the Cash markets only*
- Responses to **QuoteRequest** (10) requests, in case of acceptation;
- Responses to **NewOrder** (01) or **CancelReplace** (06) for an Iceberg Transformed to Limit due to Minimum size;
- Responses to **RequestForImpliedExecution** (66) requests, in case of acceptation; *used on Derivatives markets only*
- Responses to **Cross Order** (67) requests, in case of acceptation; *used on Derivatives markets only*
- Notifications of triggered Stop-Market/Stop-Limit orders;
- Notifications of triggered Valid For Uncrossing and Valid For Closing Uncrossing orders;
- Notifications of refilled Iceberg orders;
- Notifications of MTL orders transformed into Limit at the end of an Uncrossing trading phase;
- Notifications of order creations by Market Operations;
- Notifications of Dark Sweep orders being swept from Dark Order Book to COB;
- Notifications of triggered AVD orders on Opening Uncrossing or Closing Uncrossing.

As a response to a NewOrder (01) request, *Ack Type*=New Order Ack.
It confirms the creation of the new order and specifies the *Order ID*, *Order Side*, *Order Price* (if any), *Order Quantity* for which the system has processed the order.

As a response to a CancelReplace (06) request, *Ack Type*=Replace Ack.
It confirms the modification of the order identified by the *Order ID* and specifies the *Order Side*, *Order Price (if any)*, *Order Quantity* for which the system has processed the modified order. The *Original Client Order ID* will also be provided if it was provided in the original corresponding request. Note that the *Order Quantity* is the total order quantity originally submitted or newly modified by the client and not the leaves quantity.

Handling of **CancelReplace (06)** messages in case of different events and ownership or order messages:

- For an individual order **CancelReplace** (06) message sent by the same Logical access and OE session that sent the order, a **Ack** (03) message is sent to that Logical Access and OE session.

  Example: LA1 / OE1 sends the order, then LA1 / OE1 sends a CancelReplace, *Ack message is sent to the LA1 / OE1*

- For an individual order **CancelReplace** (06) message sent by a different Logical access or OE session than the one that sent the original order, a **Ack** (03) message is sent to the Logical Access or OE session that submitted the cancellation

  Example: LA1 / OE1 sends the order, then LA2 / OE2 sends a cancelreplace*. Ack message is sent to the LA2 / OE2*

As a response to a PriceInput (20) request, *Ack Type*=Price Input Ack.

It confirms that the matching engine has accepted the submitted reference price. It specifies the accepted price in the field *Order Price*, the fields *Order Side* and *Order Quantity* are irrelevant and then set to the null value.

As a response to a LiquidityProviderCommand (32) request, *Ack Type*=KIBI/KOBI/PAKO/Bid Only/Offer Only Ack.
It confirms that the matching engine has accepted the submitted action. The action is specified in the Ack Type (KIBI/KOBI/PAKO/Bid Only/Offer Only).

As a response to a QuoteRequest (10) message, *Ack Type*=RFQ Ack.
For the Funds segment - It confirms the creation of the new RFQ.

For the Derivatives segments – It confirms acceptance of the message for publication of the request for liquidity to the Market.

In both cases the Ack message specifies the *QuoteReqID* of this request, which is provided to the client in the *OrderID* field of the **Ack** (03) message.

As a response to a NewOrder (01) for an Iceberg Transformed to Limit due to Minimum size, *Ack Type*= Iceberg Transformed to Limit due to Minimum size.
It confirms the creation of the new order but it notifies the client that his iceberg order has been transformed into a limit order because any Iceberg order that is entered into the book below the minimum iceberg amount (as defined by MiFID II), or has its total amount updated to be below this amount, is automatically converted to a Limit order.

As a response to a RequestForImpliedExecution (66) message, *Ack Type*=RFIE Ack.
It confirms that the matching engine has accepted the submitted request for Implieds generation in the targeted strategy book.

As a response to a Cross Order (67) message, Used for the Derivatives Markets, *Ack Type*=Cross Order Ack.
It confirms the acceptance of a cross order and specifies the *Order ID*, *Order Side*, *Order Price*, *Order Quantity* for which the system has processed the order. One Ack message is sent for each submitted side (i.e. two for the initiator).

As a notification of a triggered Stop-Market/Stop-Limit order, *Ack Type*=Stop Triggered Ack.
It is an unsolicited message which notifies the client that its stop order previously submitted (identified by the *Order ID*) has been triggered and it specifies the *Order Side*, *Order Price* (if any), *Order Quantity* and *Order Priority* for which the system has processed the order.

As a notification of a triggered Valid For Uncrossing and Valid For Closing Uncrossing orders, *Ack Type*= VFU/VFC Triggered Ack.
It is an unsolicited message which notifies the client that its VFU/VFC order previously submitted (identified by the *Order ID*) has been triggered and it specifies the *Order Side*, *Order Price* (if any), *Order Quantity* and *Order Priority* for which the system has processed the order.

As a notification of a refilled Iceberg order, *Ack Type*=Refilled Iceberg Ack.
It is an unsolicited message which notifies the client that its Iceberg order has been refilled and it specifies the *Order Side*, *Order Price*, *Order Quantity* and *Order Priority* for which the system has processed the refilled order. Note that the *Order Quantity* is the total order quantity originally submitted by the client and not the quantity shown to the market nor the leaves quantity.

As a notification of a resting MTL order transformed into Limit order during uncrossing, *Ack Type*=MTL Second Ack.
It is an unsolicited message which notifies the client that its MTL has been transformed into a Limit order. It specifies the *Order Side*, *Order Price*, *Order Quantity* for which the system has processed the order. The *Order Price* is the price of the transformed Limit order and the *Order Quantity* is the total order quantity submitted by the client and not the leaves quantity.
It occurs if at the end of an Uncrossing trading phase:

- the instrument switches to a Continuous trading phase, all MTL orders (partially or not executed) always become Limit orders at the Uncrossing price for their remaining quantity;
- the instrument switches to a Call trading phase, all MTL orders partially executed become Limit orders at the Uncrossing price for their remaining quantity.

Notification using Ack Type= Order Creation By Market Operations is for Future use only. Currently not supported

As a notification of a Dark Sweep Order being swept from Dark Order Book to COB:

- Ack Type=Move Dark to COB as Limit -> It is an unsolicited message which notifies the client that its Dark Sweep Order, submitted to the Dark Order Book, failed to find a counterpart in that Book and was swept to the Central Order Book where it became a regular Limit Order
- Ack Type= Move Dark to COB as Market -> It is an unsolicited message which notifies the client that its Dark Sweep Order, submitted to the Dark Order Book, failed to find a counterpart in that Book and was swept to the Central Order Book where it became a regular Market Order

As internal notification of a parked order (Warrant GTD Order hidden temporarily from the Order Book at the end of the Trading Session Validity for which the order is eligible), *Ack Type*=Parked due to end of Session.

As a notification of triggered AVD order, *Ack Type*=AVD Triggered Ack

- AVD Orders are triggered (become active) depending of the TIF (Time In Force) selected at Order Entry and their compatibility with Uncrossing Price:
  - If Opening Uncrossing, only AVD Orders with TIF = Valid For Uncrossing and with Order Price compatible with Uncrossing Price are triggered;
  - If Closing Uncrossing, AVD Orders with TIF = Valid For Uncrossing or TIF = Valid For Closing Uncrossing and with Order Price compatible with Uncrossing Price are triggered.
- An AVD Order Price compatible with Uncrossing Price definition is:
  - A Buy AVD order has a price compatible with Uncrossing Price if its price is greater than or equal to the Uncrossing Price.
  - A sell AVD order has a price compatible with Uncrossing Price if its price is lower than or equal to the Uncrossing Price.
  - An unpriced AVD is always compatible with Uncrossing Price.

Short Codes in Outbound messages

The **Ack** (03) message echoes back to clients the following MIFID Short code fields

- ClientIdentificationShortCode
- ExecutionWithinFirmShortCode
- MiFIDIndicators

The values provided in these fields are populated with the originally submitted information in the **New Order** (01) message. If a modification of these fields is submitted, it is ignored by the system, and the **Ack** (03) message will still reply only the originally submitted values.

The **MiFIDFields** repeating section should be used for Optiq Derivatives while it is not used for Optiq Cash.

Private & Public by order feed reconciliation (when applicable)

For the Cash Markets the **Ack** (03) message allows the clients to reconcile their orders with the Market Data feed by using the field *Order Priority*.

This mechanism is explained in the Cash Market Kinematics document in Section *1.2.5.1 Private and Public feed reconciliation*.

This allows the clients to identify their orders in public feed as the *Order Priority* is also provided in the public **OrderUpdate** (1002) message. The *Order Priority* is thus used as an order identifier.

Please note that the field *Order Priority* is provided in private message for all orders on the market. List below identifies the cases in which it is provided:

- In the **Ack** (03) message as a response to a **NewOrder** (01) (*including Stop-market/Stop-limit orders*);
- In the **Ack** (03) message for a triggered Stop-market/Stop-limit and VFU/VFC orders;
- In the **Ack** (03) message for a refilled Iceberg Order.

Modifications of non-triggered stop orders should not result in modification of their priority.

For the Derivatives Markets the **Ack** (03) message provides the Order Priority. It is provided to indicate the Order Priority, as indicated in the section 2.4 Order ID.

5.4.2.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Original Client Order ID	Client order ID of the original order.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Conditional
Ack Type	Indicates the type of the Ack message	Enumerated	1	(See field description)	Mandatory
Ack Phase	Indicates the trading phase during which the Matching Engine has processed the event that has triggered this Ack (03) message.	Enumerated	1	(See field description)	Conditional
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-1	Conditional
Order Priority	Rank giving the priority of the order. The order with the lowest value of Order Priority has the highest priority.	Numerical ID	8	0..2^64-2	Conditional
Order Price	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Conditional
Order Quantity	Total order quantity, per quantity unit. (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-1	Conditional
Ack Qualifiers	Field used to provide additional information on the corresponding order. 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.	Bitmap	1	(See field description)	Mandatory
Order Tolerable Price	Allows the RFC Initiator to provide an improving tolerable price on the non-client side of the cross. This tolerable price is intended to anticipate possible price improvements, generated by RFC Reactors. In case RFC Initiator does not want to match RFC Reactors improved prices, this field must be provided with the Null value. (to be calculated with Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Optional
MiFIDFields length		Numerical	1	9	Mandatory
MiFIDFields occurrences		Numerical	1	1	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Conditional

5.4.3 Fill (04)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.3.1 Message Description

The **Fill** (04) message is an unsolicited message sent by the matching engine and is used to relay order execution reports. It notifies the issuers of orders that their orders have been partially or completely filled.

The order that has matched is identified by its *Order ID*; in case of Quotes the *Order ID* field is used for the *Bid Order ID* and *Offer Order ID*, the side is identified by the *Order Side*.

The message specifies the price (*Last Traded Price*), the quantity (*Last Traded Quantity*), the execution type (*Trade Type*) and the time (*Trade Time*) of the execution along with the *Execution ID* assigned by the matching engine. It also provides the remaining quantity of the order (*Leaves Quantity*).

For TRF and MOC contracts, the field *Evaluated Price* can contain either the Temporary Price or the Final Price. To identify which type of trade message is sent, customers may rely on the value in the field *Trade Type*.

If field *Trade Type* is equal to one of the provisional price values (100, 101 or 102) then the message is providing a Temporary Price.

If field *Trade Type* is equal to one of the conventional trade values (1, 2 or 4) then the message is providing the Final Price.

For TAS contracts, the field *Last Traded Price* can contain either the provisional Price or the final Price. To identify which type of trade message is sent, customers may rely on the value in the field *Trade Type*.

If field *Trade Type* is equal to one of the provisional price values (100 or 106) then the message is providing the provisional Price.

If field *Trade Type* is equal to one of the conventional trade values (1 or 11) then the message is providing the final Price (re-evaluated after Settlement prices determination).

Note: for the **Fill** (04) message, the field *Client Order ID* is always set to the null value.

Trading Venue Transaction Identification Code (TVTIC)

The *Trading Venue Transaction Identification Code* (*TVTIC*) is the unique identifier of a trade in the EU and UK MiFID II framework. Each individual trade has a corresponding *TVTIC*. As a reminder, MiFID II reporting is at leg level.

The different ways to get a trade *TVTIC* are:

For Cash / Outright trades:

- Using the public Market Data feed, getting the *Trade Unique Identifier* in the **Full Trade Information** (1004) message;

- Using the private Order Entry feed:
  - In SBE **Fill** (04) or SBE **Declaration Notice** (42): getting the *Trade Unique Identifier;*
  - In FIX **ExecutionReport** (8) or FIX **TradeCaptureReportAck** (AR) : getting the *Regulatory Trade ID* with *Regulatory Trade ID Type* equals 5 (*TVTIC*);
- Retrieving the *TVTIC* field from the EOD Day Trade file (**FTRRM**).

For Strategies:

- Using the private Order Entry feed:
  - In SBE **Fill** (04): getting the *Trade Unique Identifier* in Strategy fields section to get the "Leg" Trade Unique Identifier;
  - In FIX **ExecutionReport** (8): getting the *Regulatory Trade ID* with *Regulatory Trade ID Type* equals 5 (*TVTIC*) where *RegulatoryLegRefID* equals the corresponding *Leg ID* in NoLegs section.

For APA Trades:

- Using the public Market Data feed, getting the *Trade Unique Identifier* in the **APA Full Trade Information** (1028) message.

Executions Wholesales and Strategies (for the Derivatives markets)

The executions for wholesale transactions done on strategies send individual **Fill** (04) messages for each leg of the strategy. This mean that for Delta-Neutral with a Cash underlying, submitted as a wholesale transaction clients receive a private message for the Cash instrument that is part of the Delta-neutral strategy.

Repeating Section Usage

The message may contain **four repeating sections:**

- **Additional Execution Data repeating section:** the first repeating section can be populated only once and contains only one field used by the Cash matching engine: *Counterpart Firm ID*. Possible number of repeating groups: 0, 1.
- **Strategy Execution Data repeating section:** the second repeating section is only used by the Derivatives matching engine.
- **MiFID Shortcodes repeating section:** the third repeating section contains the MiFID shortcodes. Possible number of repeating groups: 0,1. This repeating section should be used for Optiq Derivatives while it is not used for Optiq Cash.
- **Optional Derivatives fields repeating section:** the fourth repeating section contains optional data for Derivatives. Possible number of repeating groups: 0,1.

5.4.3.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Trade Time	Time of the trade.	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Optional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Mandatory
Trade Type	Type of trade.	Enumerated	1	(See field description)	Mandatory
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.	Bitmap	1	(See field description)	Mandatory
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Mandatory
Last Traded Price	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with the Price/Index Decimals).	Price	8	-2^63+1..2^63-1	Mandatory
Last Traded Quantity	The Last Traded Quantity indicates the quantity of last fill on an instrument (to be calculated with the Quantity Decimals).	Quantity	8	0..2^64-2	Mandatory
Leaves Quantity	Indicates the remaining quantity of an order, i.e. the quantity open for further execution.	Quantity	8	0..2^64-2	Mandatory
Execution ID	The Execution ID is unique per instrument and per day. It is the unique identifier of a trade per instrument. This field is provided in case of fill, partial fill or trade cancellation.	Numerical ID	4	0..2^32-2	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Execution Phase	Indicates the trading phase during which the trade has occurred.	Enumerated	1	1 = Continuous Trading Phase 2 = Uncrossing Phase 3 = Trading At Last Phase 4 = Continuous Uncrossing Phase	Mandatory
LIS Transaction ID	ID that can be used to associated Executions belonging to the same LIS Transaction	Numerical ID	4	0..2^32-2	Conditional
ESCBMembership	Indicates if the trade is submitted by a member of the European System of Central Bank (ESCB) in performance of monetary, foreign exchange and financial stability policy.	Boolean	1	0 = False 1 = True	Optional
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)	Mandatory
OptionalFieldsFill length		Numerical	1	32	Mandatory
OptionalFieldsFill occurrences		Numerical	1	0 .. 1	Mandatory
Counterpart Firm ID	ID of the clearing house in case of a CCP clearable transaction – also in the specific case of Internal Matching Service (IMS) with clearing:	Alphanumerical ID	8	(See field description)	Conditional
Underlying Last Traded Price	*Deprecated*	*Price*	*8*	*Deprecated*	*Conditional*
Package ID	*Deprecated*	*Alphanumerical ID*	*12*	*Deprecated*	*Conditional*
Underlying Instrument ID	*Deprecated*	*Numerical ID*	*4*	*Deprecated*	*Conditional*
StrategyFields length		Numerical	1	41	Mandatory
StrategyFields occurrences		Numerical	1	0..254	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Leg Last Traded Price	Leg Last Traded Price	Price	8	-2^63+1..2^63-1	Conditional
Leg Last Traded Quantity	Leg Last Traded Quantity	Quantity	8	0..2^64-1	Conditional
Leg Instrument ID	Numerical leg instrument identifier (SymbolIndex) valid for the life of the instrument.	Numerical ID	4	0..2^32-1	Conditional
Leg Side	Indicates the side of the trade leg.	Enumerated	1	1 = Buy 2 = Sell	Conditional
Execution ID	The Execution ID is unique per instrument and per day. It is the unique identifier of a trade per instrument. This field is provided in case of fill, partial fill or trade cancellation.	Numerical ID	4	0..2^32-1	Conditional
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)	Conditional
MiFIDFields length		Numerical	1	9	Mandatory
MiFIDFields occurrences		Numerical	1	0 .. 1	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Conditional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Conditional
OptionalFieldsDerivatives length		Numerical	1	17	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OptionalFieldsDerivatives occurrences		Numerical	1	1	Mandatory
Evaluated Price	This field is used for Total Return Future and Market On Close Future trading. The Price is calculated by ME in index point notation. It can contain the provisional price calculated in intra-day or the final price calculated at the end of the day. The Trade Type value will enable user to know if the field contains provisional price or final price.	Price	8	From -2^63-1 to 2^63-1	Conditional
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	1 = Price 2 = Spread in basis points 3 = Spread	Conditional
Final Symbol Index	This field is used for the Market On Close (MOC) contracts to provide the symbol index of the final future instrument.	Numerical ID	4	0..2^32-1	Conditional
Final Execution ID	This field is used for the Market On Close (MOC) contracts to provide the exec ID of the original trade on the final future instrument.	Numerical ID	4	0..2^32-1	Conditional

5.4.4 Kill (05)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.4.1 Message Description

The **Kill** (05) message is a message sent by the matching engine to notify the order issuer that his or her order is no longer active.

The **Kill** (05) message is sent by the matching engine in the following situations:

- Responses to **CancelRequest** (12) requests in case of acceptation;
- Responses to **MassCancel** (13) requests for each order successfully cancelled;
- Notifications of the cancellation of the remaining quantity of IOC orders;
- Notifications of the cancellation of the remaining quantity of RFC orders;
- Notification of orders cancelled by STP;
- Notifications of expired orders;
- Notifications of killed orders due to the Cancel On Disconnect mechanism;
- Notifications of killed orders due to a Kill command;
- Notifications of killed orders due cancellations triggered by Risk Guard commands;
- Notifications of killed orders due to Order Price Control Collar breach;
- Notifications of orders eliminated due to Corporate Events;

- Notifications of orders cancelled by Market Operations;
- Notifications of MTL orders cancelled at the end of an Uncrossing trading phase when switching to a Continuous trading phase if the order book on the opposite side is empty;
- Notifications of cancelled orders when an instrument is moving into Payment After Knock-Out (PAKO) period;
- Notifications of cancelled quotes when an instrument is Knock-Out;
- On Euronext Block platform, notifications of conditional orders cancelled due to potential matching; this should be interpreted as a Firm-Up request;
- For Derivatives markets notifications of the cancellation of the unexecuted FOK orders;
- For Derivatives markets notifications of the cancellation of the Market orders that are not immediately executed on entry.
- The **MiFIDFields** repeating section should be used for Optiq Derivatives while it is not used for Optiq Cash.
- Notifications of orders killed due to incompatibility with Uncrossing Price.

In the block of the message the field *Client Order ID* identifies the request originally sent by the client that triggered the **Kill** (05) message, thus it is filled only if the **Kill** (05) message was solicited (e.g. as a response to a **CancelRequest** (06) message). It represents the data provided by the client and does not identify the id used by the system to kill the order, for these purposes the system uses the Order ID.

The killed order is identified by its *Order ID* and a *Kill Reason* is always provided for each killed order.

Handling of cancellation messages in case of different events and ownership or order messages:

- For an individual order cancellation message sent by the same Logical access and OE session that sent the order, a **Kill** (05) message is sent to that Logical Access and OE session.

  Example: LA1 / OE1 sends the order, then LA1 / OE1 sends a cancellation. Kill message is sent to the LA1 / OE1

- For an individual order cancellation message sent by a different Logical access or OE session than the one that sent the original order, a **Kill** (05) message is sent to the Logical Access or OE session that submitted the cancellation

  Example: LA1 / OE1 sends the order, then LA2 / OE2 sends a cancellation. Kill message is sent to the LA2 / OE2

- For a Mass cancel command (with granularity of a firm) while the Mass Cancel Ack message is sent to the Logical Access and/or OE session that submitted it, the **Kill** (05) messages for individual impacted orders are sent to the Logical Accesses and OE sessions that originally submitted the orders.

  Example: LA1 / OE1 sends order1, LA3 / OE3 sends order2. Then LA2 / OE2 sends a Mass Cancel request. Mass Cancel Ack is sent to LA2 / OE2

- Cancellation of Orders at the Close of Business:

  The dissemination of messages indicating automatic cancellation of orders by the system that have reached end of their validity at the end of the trading session only cover the orders with Day validity. For orders with validities of (1) Good Till Cancelled (GTC) and cancelled on the current date and (2) Good Till Date (GTD) with expiration date set to the current date, as well as cancellation of orders triggered by corporate actions (for Cash markets), elimination messages is disseminated at the start of the session on the next business day.

  The messages for expired Day orders is disseminated at the beginning of the last Closed (Closing) phase at the end of the trading session without any expected additional delay. These messages are not re-disseminated at the start of the next trading session.

5.4.4.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Original Client Order ID	Client order ID of the original order.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Kill Reason	Order Kill Reason	Enumerated	2	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Ack Qualifiers	Field used to provide additional information on the corresponding order. 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.	Bitmap	1	(See field description)	Optional
MiFIDFields length		Numerical	1	9	Mandatory
MiFIDFields occurrences		Numerical	1	1	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Conditional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Conditional

5.4.5 Cancel Replace (06)

Client ▶ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.5.1 Message Description

The **CancelReplace** (06) message is used to modify **active orders in the order book**, note that only the originating Firm (regardless of the Logical Access) is authorized to modify its orders.

Please see the description of behavior under the Ack message for the cross LA sending of CancelReplace

All the **fields in the block of the message must be populated** for each **CancelReplace** (06) otherwise the message will be immediately rejected by the Order Entry Gateway (OEG).

The MiFID short codes included in this message concern the **CancelReplace** (06) itself; it will not lead to any modification on the MiFID short codes previously submitted and associated to the live order to be modified.

Please note that the field *Client Order ID* is an identifier of the **CancelReplace** (06) request, and may not be equal to the value of the Client Order ID submitted in the original order message.

Important Note: An active order can be modified by specifying the *Order ID* of the original order or the *Original Client Order ID*:

- If the **CancelReplace** (06) message contains both *Order ID* and *Original Client Order ID*, the matching engine uses the *Order ID* to cancel the order. If the *Order ID* specified in the message is not found in the active orders list, the order modification is rejected. If the Order ID specified in the message is found the matching engine does not check that the Client Order ID of the order found ("modified" order) matches with the *Original Client Order ID* contained in the **CancelReplace** (06) message.

CancelReplace (06) message is subject to inflight control mechanism (please see the Inflight Control Mechanism section for more details).

Currently the Inflight control mechanism is activated only on the Cash markets.

Handling of fields not available for modification

- *Account Type, LP Role* and *Dark Execution Instruction* fields present in this message will always be ignored by the system, which means that clients are not able to modify *Account Type/ LP Role/ Dark Execution Instruction* of their live orders. If modification is required clients must cancel their existing order and submit a new one with a **NewOrder** (01) message. In the case where the *Dark Execution Instruction* values in the **CancelReplace** (06) message do not match with of the targeted order it will lead to the rejection of the request with the *Error Code* 2279 "Modification of DarkExecutionInstruction is not allowed"*Order Side* and *Order Type* fields present in this message are not available for modification, but the values provided must match the values originally set on submission of the order. In the case where the values in the **CancelReplace** (06) message do not match with the *Order Side* and *Order Type* of the targeted order it will lead to the rejection of the request with the *Error Code* 2101 "Unknown Order". (For triggered Stop orders, the value in field *Order Type* must be equal to Limit (2), for Stop-limit, or Market (1) for Stop-market order, corresponding to the type of stop order originally submitted.)
- Modification of Time In Force
  - For the Cash Markets - modification of *Time In Force* results in rejection of the request in case orders are modified from a validity that is against market rules or cannot be executed. Such cases include modification of 'Valid for Closing Uncrossing' (7) or 'Valid for Uncrossing' (2) to any other validity.
  - For the Derivatives Markets – modification of *Time In Force* is not permitted. If **CancelReplace** (06) message is submitted with a different value for *Time In Force* then the original order, the modification request will be rejected.
- *For Cash,* in the context of the Tax ID functionality (part of the IPO market model), *Long Client ID* field present in this message will always be ignored by the system. If modification is required clients must cancel their existing order and submit a new one with a **NewOrder** (01) message.
- Modification of Trading Session Validity
  - For Optiq Segment 'SP' – On Warrants, the modification of *Trading Session Validity* is rejected when *Time In Force* value is 0 = Day or 6 = Good till Date (GTD), with *Error Code* 2587 'Modification of Trading Session Validity is not allowed'. For other values of the field *Time In Force,* the modification is ignored by the system.
  - For other Optiq Segments - The modification of *Trading Session Validity* is ignored by the system.

Repeating Section Usage: the message contains **five optional repeating sections**:

- **FreeText repeating section:** the first repeating section contains only the field *FreeText*. It can be populated only once and will override the previously submitted value if populated, if not populated the previously submitted value will be deleted. Possible number of repeating groups: 0, 1.
- **Additional Order Characteristics repeating section:** the second repeating can be populated only once and contains optional order characteristics. If some optional fields are populated those values will override the previously submitted values, otherwise if not populated the previously submitted value will be deleted. Possible number of repeating groups: 0, 1.
- **Clearing Data repeating section:** the third repeating section contains the clearing fields. If some values are populated, they will override the previously submitted values, otherwise if not populated the previously submitted value will be deleted. Possible number of repeating groups: 0, 1.
- **NotUsedGroup1 Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".
- **NotUsedGroup2 Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".

5.4.5.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Conditional
Original Client Order ID	Client order ID of the original order.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Order Price	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Conditional
Order Quantity	Total order quantity, per quantity unit. (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Mandatory
Order Type	Type of Order.	Enumerated	1	(See field description)	Mandatory
Time In Force	Specifies the maximum validity of an order.	Enumerated	1	(See field description)	Mandatory
Account Type	[N/A] 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.	Enumerated	1	(See field description)	Optional
LP Role	[N/A] Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	Enumerated	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider 12 = RFQ Liquidity Provider	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Execution Instruction	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory
Dark Execution Instruction	Field used as instruction for dark order handling. 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.	Bitmap	1	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Dark STP Indicator 6 = Dark Passive Order Indicator	Mandatory
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory
STP ID	Identifier of a group of Users or Traders sharing the same business activity at the same Firm.	Numerical ID	2	0..2^16-1	Optional
FreeTextSection length		Numerical	1	18	Mandatory
FreeTextSection occurrences		Numerical	1	0..1	Mandatory
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(Free Text)	Optional
OptionalFields length		Numerical	1	34	Mandatory
OptionalFields occurrences		Numerical	1	0..1	Mandatory
Stop Trigger Price	Stop Trigger Price is mandatory for stop orders.	Price	8	-2^63+1..2^63-1	Conditional
Peg Offset	Tick offset for a pegged order.	Numerical ID	1	-128 .. 127	Conditional
Undisclosed Price	[N/A] Optional price for the hidden part of an Iceberg order.	Price	8	-2^63+1..2^63-1	Optional
Disclosed Quantity	Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)	Quantity	8	0..2^64-2	Conditional
Order Expiration Time	*[N/A] Field used as time of order expiration for GTT orders.*	*Numerical ID*	*4*	*0..2^32-2*	*Conditional*

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Order Expiration Date	Field used as date of order expiration for GTD orders.	Date	2	0..2^16-2	Conditional
Trading Session Validity	Trading Session Validity. 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.	Bitmap	1	Bit 1 = Session 1 Bit 2 = Session 2 Bit 3 = Session 3 Bit 4 = Session 4	Conditional
Triggered Stop Time In Force	Specifies the maximum validity of an triggered stop order.	Enumerated	1	0 = Day 1 = Good Till Cancel 6 = Good till Date	Conditional
Undisclosed Iceberg Type	[N/A] Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.	Enumerated	1	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Optional
ClearingFields length		Numerical	1	33	Mandatory
ClearingFields occurrences		Numerical	1	0..1	Mandatory
Clearing Firm ID	Clearing firm ID.	Alphanumerical ID	8	(See field description)	Optional
Client ID	Field used to identify the client (investor). This field is part of the clearing aggregate	Alphanumerical ID	8	(See field description)	Optional
Account Number	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	12	(See field description)	Optional
Technical Origin	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	1	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	Optional
Open Close	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Bitmap	2	(See field description)	Optional
Clearing Instruction	Clearing Instruction.	Enumerated	2	(See field description)	Optional
NotUsedGroup1 length		Numerical	1	0	Mandatory
NotUsedGroup1 occurrences		Numerical	1	0	Mandatory
NotUsedGroup2 length		Numerical	1	0	Mandatory
NotUsedGroup2 occurrences		Numerical	1	0	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
AdditionalInfos length		Numerical	1	16	Mandatory
AdditionalInfos occurrences		Numerical	1	0..1	Mandatory
Long Client ID	Field used to identify the Client (investor), or trader's reference / posting order number for a pre-posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives. For Cash Markets this field is ignored except for IPO where this field is used to provide the information of the tax code.	Alphanumerical ID	16	(See field description)	Optional

5.4.6 Reject (07)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.6.1 Message Description

The **Reject** (07) message is a message sent by the matching engine to notify the request issuer that his or her request is not processed by the matching engine. It is a possible response to every application message sent by the client.

The **Reject** (07) message is sent by the matching engine in the following situations:

- **For technical reasons**: Symbol Index is unknown, message is wrongly formatted, unknown value, client not authorized to send messages, etc.
- **For functional reasons**: type of order forbidden for this trading phase, type of order not authorized for the client, quantity to modify no longer available, last traded price better than the stop trigger price, collars breached, invalid strategy definition code, type of strategy not authorized for the contract, etc.

Please refer to the Error Code list for an exhaustive list of those cases.

The *Client Order ID* provided in the Reject message identifies the request which is rejected; it does not refer to an order of the order book. Hence in case of a rejection of a **CancelReplace** (06) message, the *Client Order ID* field will refer to the *Client Order ID* provided in the rejected **CancelReplace** (06) request, not to the targeted order.

In case of a functional rejection of a **NewOrder** (01) the matching engine will assign an *Order ID* to the rejected order.

If a client sends an Invalid value in an enumerated field, then in place of this value the Reject messages will contain a Null value (note: the *Firm ID* behaves as an enumerated field).

The reason of the rejection is provided by the *Error Code*, and a text message explaining the error is provided in the Error Code list file (.csv).

All application messages are rejected by the **Reject** (07) message, unless for very specific cases (please refer to **Quotes** (08) and **TechnicalReject** (108) messages).

Rejection Behaviour

In Optiq orders are identified by multiple characteristics as follows: *Order ID* / *Original Client Order ID*, *Order Side*, *Order Type* and *Firm ID*. If any of the characteristics are not met, the order is considered "Unknown".

In case an attempt is made to modify or cancel an order that results in a rejection, whether this order is considered to be "Known" or "Unknown", in such rejection message the same *Order ID* is echoed back, as the one provided by the client in the inbound message, in all cases.

In cases where the inbound message receives a rejection with functional or technical error code client should review the error code to identify what needs to be fixed in the submitted message.

In some cases, an "Unknown" order will not receive an *Error Code* identifying the issue, but rather code 2101 (Unknown order). In this case client should review the fields identified as mandatory order characteristics before resubmitting the request.

Repeating Section Usage

In this message there are two repeating sections CollarFields and MiFIDFields. They are populated only once.

CollarFields is used for Derivatives only and is populated only in the case of a rejection due to a breached collar. It provides the details related to the breached collar (high or low) and its price. Possible number of repeating groups: 0, 1.

MiFIDFields is provided when MIFID II short code information can be decoded. Possible number of repeating groups: 0, 1. This repeating section should be used for Optiq Derivatives while it is not used for Optiq Cash.

ClientIdentificationShortCode Usage

ClientIdentificationShortCode MiFIDField is not populated for Cross Orders.

5.4.6.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Conditional
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-1	Conditional
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Conditional
Rejected Message	*[N/A] Deprecated Field.*	*Numerical ID*	*1*	*0..2^8-1*	*Conditional*
Error Code	Error code in case of rejection.	Numerical ID	2	0..2^16-2	Mandatory
Rejected Message ID	Provides the ID (Template ID) of the rejected message.	Numerical ID	2	0..2^16-1	Conditional
Ack Qualifiers	Field used to provide additional information on the corresponding order. 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.	Bitmap	1	(See field description)	Optional
CollarFields length		Numerical	1	9	Mandatory
CollarFields occurrences		Numerical	1	0..1	Mandatory
Collar Rejection Type	Hit collar type (high or low) in case of order rejection due to collar breach.	Enumerated	1	1 = Low dynamic collar 2 = High dynamic collar	Conditional
Breached Collar Price	Breached collar price in case of collar rejection.	Price	8	-2^63+1..2^63-1	Conditional
MiFIDFields length		Numerical	1	9	Mandatory
MiFIDFields occurrences		Numerical	1	1	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Conditional

5.4.7 Quotes (08)

Client ▶ OEG
Available for: SP EQD IDD CMO

5.4.7.1 Message Description

This message is used by Liquidity Providers (LP) / Market Makers (MM) to send several quotes (bid and ask orders) on different instruments in one unique message.

- For the Warrants & Certificates segment (SP), a LP / MM is represented by the Firm ID.
- For the Derivatives segments (EQD, IDD, FID, CMO), a LP / MM is represented by the combination of Firm ID and short code.

A given LP / MM using Quotes messages is permitted to have only one bid quote and one ask quote on a given instrument at a given time to be present in the market. Consequently, any quotes received after the first one from the same LP for a single instrument cancel and replace the previous ones.

During all trading phases, quotes are considered as normal orders, managed as Limit orders with a side (Buy or Sell), a price, a quantity and a Day validity.

- For the Warrants & Certificates segment (SP), A **Quotes** (08) message can include from 1 to 150 double-sided quotes (300 individual quotes).
- For the Derivatives segments (EQD, IDD, FID, CMO), A **Quotes** (08) message can include from 1 to 30 double-sided quotes (60 individual quotes).

As a consequence, the **Quotes** (08) message has a variable size. Each quote occurrence includes the *Symbol Index* and the *EMM*, a *Bid Price* and *Bid Quantity* or an *Offer Price* and *Offer Quantity* or both.

- For the Warrants & Certificates segment (SP) – In a single **Quotes** (08) message, clients must only use instruments belonging to the same Partition as the one to which they sent the message.
- For the Derivatives segments (EQD, IDD, FID, CMO) – In a single **Quotes** (08) message, **clients must only use instruments belonging to the same Contract**.

Quotes that are sent for instruments that either do not belong to the current Partition or Contract, depending on the segment, will be individually rejected by the matching engine with the applicable error code.

Quantities must be a multiple of the instrument's lot size, prices must be populated and have to be a multiple of the instrument's tick size[6]. For a given instrument the bid price must be strictly less than the ask price.

The Quote message may also be used to modify or cancel quotes:

- A valid quote submitted in an instrument that already has a quote from the same liquidity provider in the order book is considered as a modification. Quote modifications lead to the same loss of priority rules as order modifications.
- A valid quote with a quantity set to zero (0) is considered as a cancellation. Hence when a quantity equal to zero (0) is sent, the price field is not checked.

[6] For Derivatives, while trading may occur sub-tick, on order entry prices must be multiples of the instrument tick size

- To modify/create only one side of a Quote, the Price and Quantity of the side to be ignored have to be set to the Null Value. Null Value will **not be** considered as a cancellation.

RFE Answer

- For the Warrants & Certificates segment (SP), In the block of the message the *RFE Answer* specifies whether the double sided quote is a direct response to a **RequestForExecution** (34) message or not. This way if a Liquidity provider submits a **Quotes** (08) message with the *RFE Answer* set to "Yes" after a **RequestForExecution** (34), it will immediately trigger executions in the associated instrument. The immediate execution applies only to the quotes that are possible matches to the client's orders. In case where the quotes are not a possible match the RFE confirmation is ignored and the quote is processed normally. If the *RFE Answer* is set to "No" in the **Quotes** (08) message - it will not immediately trigger the executions.
- For the Derivatives segments (EQD, IDD, CMO), In the block of the message the *RFE Answer* field is always ignored by Optiq..

Responses to Quotes, Rejection & Errors

When the message is technically valid, the matching engine responds to the request with the **QuoteAck** (09) message.

When the message is technically invalid, or has any technical or functional issues, the rejections and error messages are provided as following based on the applicable case:

- When a technical error is detected in any field, including those in a repeated field, the matching engine responds with the **Reject** (07) message, and rejects the entire content of the **Quotes** (08) message.
- In the following cases the matching engine responds with the **QuoteAck** (09) message, and rejects only the invalid quotes (see message usage in **QuotesAck** (09)):
  - When a functional error is detected that impacts all repeating groups (e.g. Firm is not authorized to trade on the instrument or contract, Firm is not an LP / MM for the instrument or contract, or the identified Account Type is set to a value other than Liquidity Provider).
  - When functional errors are detected in one or several repeated fields,
  - When a given Symbol Index quote is duplicated in a **Quotes** (08) message, only the last occurrence of the quote containing the instrument is taken into account. The earlier occurrences are ignored by the engine, and get an individual *Error Code*.
  - If the field *Execution Instruction* is populated with value 1 for any positions other than those for STP service, the message will be fully rejected

Repeating Section Usage

The message contains **three repeating sections:**

- **MiFID Shortcodes repeating section:** the first repeating section contains the MiFID short codes. Possible number of repeating groups: 0, 1.
- **Clearing Data repeating section:** the second repeating section contains the clearing fields. Possible number of repeating groups: 0, 1.
- **Quotes repeating section:** the third repeating section is used to submit quotes.
  - For the Warrants & Certificates segment (SP): Possible number of repeating groups: from 1 to 150.
  - For the Derivatives segments (EQD, IDD, CMO): Possible number of repeating groups: from 1 to 30.

Clearing Data and Short Codes management

- For the Warrants & Certificates segment (SP) - The Clearing Data and MiFID Short Codes associated to the Quotes are submitted once per message, and are assigned and managed for each instrument within the message as follow:
  - When the first quote(s) of the day is submitted for an instrument, the clearing data and short codes set in the message containing these quotes will be stored and be associated to this instrument.
    - If clearing data and/or short codes are not provided or provided set with the Null Value, the clearing data and/or short codes associated to this instrument will be set to blank.
  - After the submission of the first quote(s) for an instrument, all following quote(s) modifications and updates for this instrument will not lead to any modifications of clearing data and short codes previously

associated to the instrument (even if they were set to blank). Clearing data and short codes contained in the messages used for updates and modifications will be ignored for instruments as it is already set based on the original quote messages.

- Even after quotes are fully matched, submission of quotes will not lead to an update of the clearing data and short codes associated to the instrument to be updated.

- In order to reset the clearing data and short codes associated to an instrument, the liquidity provider must fully cancel the previously sent quote by submitting a **Quotes** (08) message with **both** *Bid Quantity* **and** *Offer Quantity* set to zero (0). As identified above, this behaviour equally applies when the quote has been totally matched.

  Please note that **MassCancel** (13), Cancel on Disconnect mechanism, PAKO / KO and beginning of a One Side only (Bid Only and Offer Only) period also lead to a reset of the clearing data and short codes associated to an instrument.

- After the quote is fully cancelled, submitting a new quote for this instrument will result in the newly provided clearing data and short codes being set for the instrument; as it is done for the first quote(s) of the day.
  - A successful reset of the clearing data and short codes associated to an instrument leads to new order IDs assigned to the next submitted quotes.

- For the Derivatives segments (EQD, IDD, CMO)

  - Clearing data for the Quotes on the Derivatives segments is managed within the **MM Sign-in** (47) message.

    If the clearing data repeating group is submitted in the **Quotes** (08) message on the Derivatives segments, such message, and all its component individual quotes, will be rejected using **Reject** (07) message. Nontheless, according to the SBE standards the header of this repeating group must still be provided.

  - MIFID Short codes data follows the same rules as those described above for the Warrants & Certificates segment, with the single repeating group provided per message, and applied to each instrument identified in the message.

5.4.7.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
Trading Capacity	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
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.	Enumerated	1	(See field description)	Mandatory
LP Role	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	Enumerated	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider 12 = RFQ Liquidity Provider	Mandatory
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory
RFE Answer	Indicate whether the Quotes message is an answer to a RequestForExecution (34) message or not. (0: No [False] ; 1: Yes [True])	Boolean	1	0 = False 1 = True	Mandatory
Execution Instruction	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Optional
STP ID	Identifier of a group of Users or Traders sharing the same business activity at the same Firm.	Numerical ID	2	0..2^16-1	Optional
MiFIDShortcodes length		Numerical	1	12	Mandatory
MiFIDShortcodes occurrences		Numerical	1	0..1	Mandatory
InvestmentDecisionWFirmShortCode	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	Numerical ID	4	-2^31+1..2^31-1	Conditional
NonExecutingBrokerShortCode	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	Numerical ID	4	-2^31+1..2^31-1	Optional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
ClearingDataset length		Numerical	1	51	Mandatory
ClearingDataset occurrences		Numerical	1	0..1	Mandatory
Clearing Firm ID	Clearing firm ID.	Alphanumerical ID	8	(See field description)	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client ID	Field used to identify the client (investor). This field is part of the clearing aggregate	Alphanumerical ID	8	(See field description)	Optional
Account Number	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	12	(See field description)	Optional
Technical Origin	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	1	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	Optional
Open Close	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Bitmap	2	(See field description)	Optional
Clearing Instruction	Clearing Instruction.	Enumerated	2	(See field description)	Optional
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(Free Text)	Optional
QuotesRep length		Numerical	1	37	Mandatory
QuotesRep occurrences		Numerical	1	1..30 or 1..150	Mandatory
Bid Quantity	Quote bid quantity, (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-1	Optional
Bid Price	Quote bid price, (To be calculated with Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Optional
Offer Quantity	Quote offer quantity, (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-1	Optional
Offer Price	Quote offer price, (To be calculated with Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Optional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory

5.4.8 Quote Ack (09)

Client ◀ OEG
Available for: SP EQD IDD CMO

5.4.8.1 Message Description

This message is used by the matching engine to respond to a **Quotes** (08) message sent by Liquidity Providers (LP) / Market Makers (MM) when no error is detected in any non-repeated field of the Quotes request. In case of error in any non-repeated field in the Quotes request, the matching engine rejects the Quotes request with a **Reject** (07) message.

For each occurrence of the Quotes aggregate provided in the request (from 1 to 30 occurrences), a related occurrence of the **QuotesAck** (09) aggregate per *Symbol Index* and *EMM* may be found in the **QuotesAck** (09) message. As a result, the **QuotesAck** (09) message has a variable size.

If there are some duplicates of *Symbol Index* and *EMM* provided in the inbound **Quotes** (08) message, only the last occurrence of this *Symbol Index and EMM* is taken into account by the system, and then the earlier ones are provided in the **QuotesAck** (09) message with *Error Code* 1066 "The same Symbol Index is repeated more than once in the repeating sections for Quotes. Earlier duplicates are ignored".

The **QuotesAck** (09) aggregate includes the *Symbol Index* and the *EMM*, a *Bid Error Code* and an *Offer Error Code* along with a Buy and Sell Order IDs and Revision Indicators. The matching engine populates the error codes as follows:

- If an error has been detected in the *Symbol Index* of the input Quotes aggregate, both the *Bid Error Code* and *Offer Error Code* are provided in the associated **QuotesAck** (09) aggregate.
- If an error is detected in the *Bid Quantity* or *Bid Price* field, the error code is provided in the *Bid Error Code* field.
- If an error is detected in *Offer Quantity* or *Offer Price* field, the error code is provided in the *Offer Error Code* field.
- When no error is detected in these fields, *Bid Error Code* and *Offer Error Code* are provided with the null value.

In the QuotesAck (09) message the field *ExecutionWithinFirmShortCode* should be used for Optiq Derivatives while it is not used for Optiq Cash**.**

Repeating Section Usage

The message contains **one repeating section.**

Quotes repeating section: this repeating section provides the result of the previously submitted quotes

- For the Warrants & Certificates segment (SP): Possible number of repeating groups: from 1 to 150.
- For the Derivatives segments (EQD, IDD, FID, CMO): Possible number of repeating groups: from 1 to 30.

5.4.8.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
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.	Enumerated	1	(See field description)	Mandatory
LP Role	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	Enumerated	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider 12 = RFQ Liquidity Provider	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Optional
Ack Qualifiers	Field used to provide additional information on the corresponding order. 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.	Bitmap	1	(See field description)	Optional
QuoteAcks length		Numerical	1	27	Mandatory
QuoteAcks occurrences		Numerical	1	1..30 or 1..150	Mandatory
Bid Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Offer Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-1	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Buy Revision Indicator	Indicates whether the bid quote is a new quote, a replacement of a previous quote or a cancellation.	Enumerated	1	0 = New 1 = Replacement 2 = Cancellation	Conditional
Sell Revision Indicator	Indicates whether the offer quote is a new quote, a replacement of a previous quote or a cancellation.	Enumerated	1	0 = New 1 = Replacement 2 = Cancellation	Conditional
Bid Error Code	Error code returned when quote contains an invalid bid.	Numerical ID	2	0..2^16-1	Conditional
Offer Error Code	Error code returned when a quote contains an invalid offer. See Error List for details of error codes.	Numerical ID	2	0..2^16-1	Conditional

5.4.9 Quote Request (10)

Client ▶ OEG
Available for: FND FXI EQD IDD CMO

5.4.9.1 Message Description

The **Quote Request** (10) message is used by the clients to indicate that they have interest in the specified instrument.

For the Cash Markets, this message is sent to the Liquidity Providers registered for the specified instrument and will not lead to a publication in the market data.

For the Derivatives Markets this message is used to request quotes / liquidity for a specific instrument. Submission of this message for the Derivatives segments results in dissemination of a private **Ack** (03) in case of acceptance and a public message via MDG from a trading perspective. Upon reception of this Market Data message, registered Responsive Market Makers, if there any for the contract, are expected to provide liquidity. **Ack** (03) is sent only as acknoweldgement of receipt of the message by OEG for dissemination to MDG, no other processing of the Quote Request is done.

.

For more details on behaviour and handling on the Cash and Derivatives markets clients should review the Kinematics documents associated to the individual markets.

Field *Order Side* is optional as the client may specify, or not, those parameters depending of the nature of the request. In case of *RFQ Type* set to '2 - Auto-RFQ' this field is mandatory and must be populated; if it is not, the QuoteRequest is rejected with *Error Code* "2273 - Side must be provided".

For the Derivatives Markets :

- if the client does not wish to indicate quantity, the field *Order Quantity* should be filled with zero (0) and will be ignored, and
- the field *Dark Execution Instruction* should be filled with all positions set to zero (0).

The field *Minimum Order Quantity* is conditional as the client must enter a quantity when the field *Dark Execution Instruction,* bit in position 5 from the left (corresponding to Minimum Quantity Type) is equal to 1 (MES); else the quote request could never be executed during the RFQ matching mechanism.

The field *RFQ Type* is optional as the client can decide whether to rely on the Auto-RFQ functionality (automatic confirmation of the QuoteRequest by Optiq system) or not. To do so, the *RFQ Type* field must be set to '2 – Auto RFQ'; else in case it is valued with '1- Manual RFQ' or left empty, the standard manual confirmation procedure is performed.

Once *RFQ Type* is valued with '2 -Auto' the following fields are mandatory and must be populated:

- *RFQ Type*
- *Limit Matching Price*
- *Minimum Number of LPs*
- *Expiration Delay*
- *Trading Capacity*
- *Mifid Indicators*
- *Free Text Section*
- *Investment Decision W Firm Short Code*
- *Non-Executing Broker Short Code*
- *Clearing Firm ID*
- *Client ID*
- *Account Number*
- *Technical Origin*
- *Open Close*

Clearing Instruction

Even if RFQ is enabled on Funds and Fixed Incomes Optiq segments, the Auto-RFQ functionality is only made available for Funds Optiq Segment.

As Auto-RFQ is applicable only for Funds Cash Market if the fields above are populated and provided for Derivatives Market or any other Cash Market where Auto-RFQ is not supported, they will be ignored by the system as they are considered not relevant.

5.4.9.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Order Quantity	Total order quantity, per quantity unit. (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell 3 = Cross	Conditional
Firm ID Publication	[N/A] Indicates whether the client accept or not to provide its Firm ID to the RFQ recipients. (0:No ; 1:Yes)	Boolean	1	*0 = False* 1 = True	Optional
End Client	[N/A] Optional field the client may use to provide the BIC of the End Client of the RFQ.	Alphanumerical ID	11	(See field description)	Optional
Dark Execution Instruction	Field used as instruction for dark order handling. 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.	Bitmap	1	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Dark STP Indicator 6 = Dark Passive Order Indicator	Mandatory
Minimum Order Quantity	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Conditional
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.	Enumerated	1	(See field description)	Conditional
Trading Capacity	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity	Enumerated	1	(See field description)	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Conditional
InvestmentDecisionWFirmShortCode	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	Numerical ID	4	(See field description)	Conditional
NonExecutingBrokerShortCode	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	Numerical ID	4	(See field description)	Conditional
Clearing Firm ID	Clearing firm ID.	Alphanumerical ID	8	(See field description)	Conditional
Client ID	Field used to identify the client (investor). This field is part of the clearing aggregate	Alphanumerical ID	8	(See field description)	Conditional
Account Number	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	12	(See field description)	Conditional
Technical Origin	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	1	(See field description)	Conditional
OpenClose	Open Close Indicator, Posting action. This field is part of the clearing aggregate. The first bit will be used to indicate whether this field is being actively used or not (1 = Actively Used ; 0 = Field Not Used). For each Leg 0 means Open and 1 means Close. Leg 2 to Leg 9 are applicable for Derivatives strategy instruments (not for cash instruments).	Numerical	2	(See field description)	Conditional
Clearing Instruction	Clearing Instruction.	Enumerated	2	(See field description)	Conditional
RFQ Type	For Cash Market: Indicates the choice of the RFQ Issuer on the type of RFQ confirmation.	Enumerated	1	1 = Manual RFQ 2 = Auto RFQ	Optional
FreeTextSection length		Numerical	1	18	Mandatory
FreeTextSection occurrences		Numerical	1	0..2	Mandatory
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(Free Text)	Optional
RFQOptionalFields length		Numerical	1	9	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
RFQOptionalFields occurrences		Numerical	1	0..1	Optional
Limit Matching Price	For Cash Market: Defines the price from which the RFQ can be executed, as the RFQ must only be executed if the best price available among the LP answers and COB orders is better than or equal to the RFQ's limit matching price. The Limit Matching Price is provided by the RFQ Issuer.	Price	8	-2^63+1..2^63-1	Conditional
Minimum Number of LPs	For Cash Market: Defines the minimum number of distinct LPs (distinct Firm ID) that submit a valid answer to the RFQ	Numerical	1	(See field description)	Conditional
Expiration Delay	For Cash Market: Defines the duration in seconds beyond which the RFQ will be executable from the time the RFQ was submitted. If the Delay is reached and conditions for the triggering are not satisfied, the RFQ is cancelled	Numerical	4	(See field description)	Conditional

5.4.10 Cancel Request (12)

Client ▶ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.10.1 Message Description

The **CancelRequest** (12) message is used to request the cancellation of the entire remaining quantity of **an active order in the order book**, note that only the originating Firm is authorized to cancel its own orders.

Please see the description of behavior under the **Kill** (05) message for the cross LA sending of CancelRequest

An order cancellation only applies to the remaining quantity of an order in the book. If the order to be cancelled was partially filled, the cancellation has no effect on the previous trades (or any previously executed quantity).

An active order can be cancelled by specifying the *Client Order ID* of the original order:

- If the **CancelRequest** (12) message contains both *Order ID* and *Original Client Order ID*, the matching engine uses the *Order ID* to cancel the order. If the *Order ID* specified in the message is not found in the active orders list, the order modification is rejected. If the *Order ID* specified in the message is found the matching engine does not check that the Client Order ID of the order found ("cancelled" order) matches with the *Original Client Order ID* contained in the **CancelRequest** (12) message.

In the case where the values of the *Order Side* and/or *Order Type* provided in the **CancelRequest** (12) message do not match with the *Order Side* and *Order Type* of the targeted order it will lead to the rejection of the request with the *Error Code* 2101 "Unknown Order". (For triggered Stop orders, the value in field *Order Type* must be equal to Limit (2), for Stop-limit, or Market (1) for Stop-market order, corresponding to the type of stop order originally submitted.)

Repeating Section Usage:

The message contains **two optional repeating sections**:

- **NotUsedGroup1 Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".
- **NotUsedGroup2 Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".

Note regarding Dark Orders:

- For Dark (Not Sweep) Orders, the field *Order Category* of a **CancelRequest** (12) is mandatory and must be set to '2' (LIS Order) to properly identify a Dark Not Sweep Order.
- For Dark (Sweep) Orders, the field *Order Category* of a **CancelRequest** (12) is not mandatory (LIT Order) to properly identify a Dark Sweep Order (set to Null or to '1') – as they can only be cancelled once they've swept to COB

CancelRequest (12) message is subject to inflight control mechanism (please see the Inflight Control Mechanism section for more details).

Currently the Inflight control mechanism is activated only on the Cash markets.

5.4.10.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Conditional
Original Client Order ID	Client order ID of the original order.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Mandatory
Order Type	Type of Order.	Enumerated	1	(See field description)	Mandatory
Order Category	Field used as instruction for order handling. When not provided or provided at the Null Value, it is assumed to be set at value 1 "Lit Order".	Enumerated	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Optional
NotUsedGroup1 length		Numerical	1	0	Mandatory
NotUsedGroup1 occurrences		Numerical	1	0	Mandatory
NotUsedGroup2 length		Numerical	1	0	Mandatory
NotUsedGroup2 occurrences		Numerical	1	0	Mandatory

5.4.11 Mass Cancel (13)

Client ▶ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.11.1 Message Description

The **MassCancel** (13) message is used to request the cancellation of the entire remaining quantity of **all active orders** matching the specified criteria(s), note that only the originating Firm is authorized to cancel its own orders.

An order cancellation only applies to the remaining quantity of an order in the book. If the order to be cancelled was partially filled, the cancellation has no effect on the previous trades (or any previously executed quantity).

The scope of the mass cancellation request is defined by the value populated in one of the two fields: *Symbol Index* (instrument on cash markets, instrument or contract on derivatives markets) or *Instrument Group Code* (cash markets only). If one of these fields is not populated, the Mass Cancel message will be rejected.

- To cancel orders assigned to an instrument or Contract the *Symbol Index* field must be populated with the symbol index of the instrument concerned.
- (Cash only) To cancel orders assigned to instruments attached to a given trading group the *Instrument Group Code* field must be populated with the code of the trading group concerned.

Optional additional criteria can be specified: *EMM*, *Order Side*, *Logical Access ID*, *TargetExecutionWithinFirmShortCode* and *OE Partition ID*, and be used as filters for the Mass Cancel processing. If provided, those filters are used to restrict the scope of the Mass Cancel request. (Please note that *OE Partition ID* is not taken into account if *Logical Access ID* is not populated).

In the field *TargetExecutionWithinFirmShortCode* clients may specify the value of *ExecutionWithinFirmShortCode* with which orders were originally submitted, and if provided would cover the scope of the orders and quotes submitted by the Firm and specified Short code. Value provided in this field may differ from the value specified in the field *ExecutionWithinFirmShortCode* within the **MassCancel** (13) message.

Repeating Section Usage

The message contains **two optional repeating sections**:

- **NotUsedGroup1 Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".
- **NotUsedGroup2 Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".

Mass Cancellation Processing

MassCancel (13) request message is subject to inflight control mechanism (please see the Inflight Control Mechanism section for more details).

Currently the Inflight control mechanism is activated only on the Cash markets.

As a consequence, for the messages on the Cash segments a counterpart order can be sent to one of the affected books *after* the mass cancel request at group level but *before* the cancellation request is queued for the book; in this situation, it is possible for an order in scope of the mass cancellation to match against the entering counterpart order *before* being actually cancelled.

5.4.11.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-1	Conditional
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Optional
Instrument Group Code	Instrument Group / Class Identifier.	Alphanumerical ID	2	(See field description)	Conditional
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Optional
Logical Access ID	Identifier of the Logical Access.	Numerical ID	4	0..2^32-1	Optional
OE Partition ID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Numerical ID	2	0..2^16-1	Optional
Contract ID	*Deprecated*	*Alphanumerical ID*	*4*	*Deprecated*	*Conditional*
Maturity	[N/A] Scope of active orders to be cancelled according the selected maturity, expressed in YYYYMMDD format. (Future Use)	Alphanumerical ID	8	(See field description)	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
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.	Enumerated	1	(See field description)	Optional
Option Type	[N/A] Type of the option. (Future Use)	Enumerated	1	1 = Call 2 = Put 3 = Other	Optional
Order Category	Field used as instruction for order handling. When not provided or provided at the Null Value, it is assumed to be set at value 1 “Lit Order”.	Enumerated	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Optional
TargetExecutionWithinFirmShortCode	Value of the target Execution Within Firm Short Code used as a filter to reduce scope of the Mass Cancel request	Numerical ID	4	0..2^32-1	Optional
NotUsedGroup1 length		Numerical	1	0	Mandatory
NotUsedGroup1 occurrences		Numerical	1	0	Mandatory
NotUsedGroup2 length		Numerical	1	0	Mandatory
NotUsedGroup2 occurrences		Numerical	1	0	Mandatory

5.4.12 Mass Cancel Ack (14)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.12.1 Message Description

The **MassCancelAck** (14) message is sent twice by the matching engine to confirm that the **MassCancel** request has been taken into account. The first **MassCancelAck** (14) message has *Total Affected Orders* set to -1, and repeats all the fields as they were submitted in the **MassCancel** (13) request.

The client will receive a **Kill** (05) message per successfully cancelled order (if any). Please note that **Kill** (05) messages are sent to the OE Session that owns the cancelled order.

When the mass cancel request is completely processed the client will receive a last **MassCancelAck** (14) message to notify them of the *Total Affected Orders*. The number provided by *Total Affected Orders* field could be different than the number of killed order notifications received by the issuer of the Mass Cancel request if some killed orders belonged to other OE Sessions. (Please refer to the Kinematics for further details).

In this message , the **MiFIDFields** repeating section should be used for Optiq Derivatives while it is not used for Optiq Cash.

5.4.12.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Total Affected Orders	Number of orders affected following a global request. It is set to -1 to indicate that the request is processed.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-1	Conditional
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Conditional
Instrument Group Code	Instrument Group / Class Identifier.	Alphanumerical ID	2	(See field description)	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Conditional
Logical Access ID	Identifier of the Logical Access.	Numerical ID	4	0..2^32-1	Conditional
OE Partition ID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Numerical ID	2	0..2^16-1	Conditional
Contract ID	*Deprecated*	*Alphanumerical ID*	*4*	*Deprecated*	*Conditional*
Maturity	[N/A] Scope of active orders to be cancelled according the selected maturity, expressed in YYYYMMDD format. (For Future Use)	Alphanumerical ID	8	(See field description)	Conditional
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.	Enumerated	1	(See field description)	Conditional
Option Type	[N/A] Type of the option. (For Future Use)	Enumerated	1	1 = Call 2 = Put	Conditional
Order Category	Field used as instruction for order handling. When not provided or provided at the Null Value, it is assumed to be set at value 1 “Lit Order”.	Enumerated	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Optional
Ack Qualifiers	Field used to provide additional information on the corresponding order. 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.	Bitmap	1	(See field description)	Optional
TargetExecutionWithinFirmShortCode	Value of the target ExecutionWithinFirmShortCode used as a filter to reduce scope of the Mass Cancel request	Numerical ID	4	0..2^32-1	Optional
MiFIDFields length		Numerical	1	9	Mandatory
MiFIDFields occurrences		Numerical	1	1	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Conditional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Conditional

5.4.13 Open Order Request (15)

Client ▶ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.13.1 Message Description

The **OpenOrderRequest** (15) message is used by the clients to request the status of the target order (*Order ID* or *Original Client Order ID*):

- If there is a corresponding live order in the Order Book, the system will acknowledge the request with an **Ack** (03) message (*Ack Type* = 17);
- If there is no corresponding order in the Order Book, the system will reject the request with a **Reject** (07) message (*Error Code* = 2101 'Unknown Order').

Note regarding Dark Orders:

- For Dark (Not Sweep) Orders, the field *Order Category* of an OpenOrderRequest (15) is mandatory and must be set to '2' (LIS Order) to properly identify a Dark Not Sweep Order.
- For Dark (Sweep) Orders, the field *Order Category* of an OpenOrderRequest (15) is not mandatory (LIT Order) to properly identify a Dark Sweep Order (set to Null or to '1').

OpenOrderRequest (15) message is subject to inflight control mechanism (please see the Inflight Control Mechanism section for more details).

Currently the Inflight control mechanism is activated only on the Cash markets.

5.4.13.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-1	Conditional
Original Client Order ID	Client order ID of the original order.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Category	Field used as instruction for order handling. When not provided or provided at the Null Value, it is assumed to be set at value 1 “Lit Order”.	Enumerated	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Optional

5.4.14 Ownership Request (18)

Client ▶ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.14.1 Message Description

The **OwnershipRequest** (18) message is used by the clients to change the ownership of an active order from one OE Session to another OE Session belonging to the same Firm. Ownership migration is used to define the OE Session that will receive all outbound messages associated to the targeted order.

Please note that modifying an order (**CancelReplace** (06)) by a different OE session also leads to an ownership migration.

The scope of the ownership can be a single order by specifying the *Order ID* and *Symbol Index* of the targeted order. It could also be all orders of the specified *Symbol Index* belonging to the targeted Logical Access (*Logical Access ID*).

The **OwnershipRequest** (18) is acknowledged by the **OwnershipRequestAck** (17), and by **Ack** (03) message(s) which provides the affected order(s).

OwnershipRequest (18) message is subject to inflight control mechanism (please see the Inflight Control Mechanism section for more details).

Currently the Inflight control mechanism is activated only on the Cash markets.

Note regarding Dark Orders:

- For Dark (Not Sweep) Orders, the field *Order Category* of an **OwnershipRequest** (18) is mandatory and must be set to ‘2’ (LIS Order) to properly identify a Dark Not Sweep Order.
- For Dark (Sweep) Orders, the field *Order Category* of an **OwnershipRequest** (18)] is not mandatory (LIT Order) to properly identify a Dark Sweep Order (set to Null or to ‘1’).

5.4.14.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-1	Conditional
Original Client Order ID	Client order ID of the original order.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Logical Access ID	Identifier of the Logical Access.	Numerical ID	4	0..2^32-1	Conditional
OE Partition ID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Numerical ID	2	0..2^16-1	Optional
Order Category	Field used as instruction for order handling. When not provided or provided at the Null Value, it is assumed to be set at value 1 “Lit Order”.	Enumerated	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Optional

5.4.15 Ownership Request Ack (17)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.15.1 Message Description

The **OwnershipRequestAck** (17) message is sent twice by the matching engine to confirm that the **OwnershipRequest** (18) has been taken into account. The first **OwnershipRequestAck** (17) message has *Total Affected Orders* set to -1, and repeats all the fields as they were submitted in the **OwnershipRequest** (18).

Subsequently the client will receive an **Ack** (03) message per order affected by the command.

When the Ownership request is totally processed the client will receive a last **OwnershipRequestAck** (17) message to notify the client of the *Total Affected Orders*.

5.4.15.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
Logical Access ID	Identifier of the Logical Access.	Numerical ID	4	0..2^32-1	Conditional
OE Partition ID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Numerical ID	2	0..2^16-1	Conditional
Total Affected Orders	Number of orders affected following a global request. It is set to -1 to indicate that the request is processed.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
Order Category	Field used as instruction for order handling. When not provided or provided at the Null Value, it is assumed to be set at value 1 “Lit Order”.	Enumerated	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Optional

5.4.16 Trade Bust Notification (19)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.16.1 Message Description

This message is sent to both counterparts of a trade if Market Operations busts a trade.

Please note that *Last Traded Price* and *Last Traded Quantity* refer to Price and Quantity of the cancelled trade.

For the Derivatives Markets

For Strategy trades the **Trade Bust Notification** (19) message is sent for each individual leg of the strategy. In such cases, fields *Parent Execution ID* and *Parent Trade Unique Identifier* identify respectively the *Execution ID* and the *Trade Unique Identifier* provided in the block of the **Fill** (04) message for the original trade. This allows to map all cancellations of individual legs to the original **Fill** (04) message sent for the strategy trade. The individual *Execution ID / Trade Unique Identifier* in such **Trade Bust Notification** (19) messages is the ‘leg’ *Execution ID* / ‘leg’ *Trade Unique Identifier* of each individual leg provided in the repeating group of the **Fill** (04) message.

For cancellation of a LIS wholesale trade the bust messages include the *LIS Transaction ID* to help map the individual cancellation to the overall wholesale transaction.

Note: Trade Unique Identifer aims to replace the Execution ID. It is strongly recommended to reconcile using the Trade Unique Identifier instead of the Execution ID.

5.4.16.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Execution ID	The Execution ID is unique per instrument and per day. It is the unique identifier of a trade per instrument. This field is provided in case of fill, partial fill or trade cancellation.	Numerical ID	4	0..2^32-2	Mandatory
Last Traded Price	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with the Price/Index Decimals).	Price	8	-2^63+1..2^63-1	Mandatory
Last Traded Quantity	The Last Traded Quantity indicates the quantity of last fill on an instrument (to be calculated with the Quantity Decimals).	Quantity	8	0..2^64-2	Mandatory
LIS Transaction ID	ID that can be used to associated Executions belonging to the same LIS Transaction	Numerical ID	4	0..2^32-2	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Parent Execution ID	Unique identifier of a parent trade executed on the strategy	Numerical ID	4	0..2^32-2	Optional
Parent Symbol Index	Exchange identification code used to point to the strategy in the leg specific messages	Numerical ID	4	0..2^32-2	Optional
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)	Mandatory
Parent Trade Unique Identifier	The Parent Trade Unique Identifier is the Trade Unique Identifier of the strategy trade.	Alphanumerical ID	16	(see field decription)	Conditional

5.4.17 Price Input (28)

Client ▶ OEG
Available for: EQ FND FXI SP

5.4.17.1 Message Description

The **PriceInput** (28) message is used by the clients to inject prices into the matching engine, disseminate price in Market Data and update the reference price of an instrument.

The type of price is specified in the *Input Price Type* field:

- 1 – Valuation Price: for this type the *Price* must not be provided. If the message is accepted by the matching engine a public **PriceUpdate** (1003) message will be disseminated to the market for one lot size at the reference price with Market Data Price Type equals to '23' Valuation Price.
- 2 – Alternative Indicative Price: for this type the Price must be provided. If the message is accepted by the matching engine a **PriceUpdate** (1003) message will be disseminated to the market participants at the price provided by the client and it will accordingly update the instrument's reference price. The Dynamic Collars are updated around the price specified in the **PriceInput** (28) message and a public **MarketUpdate** (1001) message is sent to the market to disseminate the new collars.

For specific use and authorizations per Instrument Group (Class) please refer to the Trading Manual.

PriceInput (28) message is subject to inflight control mechanism (please see the Inflight Control Mechanism section for more details).

Currently the Inflight control mechanism is activated only on the Cash markets.

5.4.17.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Input Price Type	Type of input price.	Enumerated	1	1 = Valuation Price 2 = Alternative Indicative Price (AIP)	Mandatory
Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Conditional

5.4.18 Liquidity Provider Command (32)

Client ▶ OEG
Available for: SP

5.4.18.1 Message Description

This message is used by a Liquidity Provider to:

- Activate a Warrant instrument upon its creation. It removes the need for further validation by Issuers of Knock-Ins (KI) in the trading system, and streamlines the overall KI process. (Knock In By Issuer functionality "KIBI").
- Trigger a Knock-Out (KO) of an instrument independently from, and in place of, the KO system managed by Euronext. Reason for suspension (KO or not) is published in the market data and if the reason is KO, origin (KOBI or not) is provided. (Knock Out By Issuer KOBI-functionality).
- Trigger a Payment After Knock Out (PAKO) phase after a Knock-Out has been triggered, this phase enables clients to redeem leveraged Knock-Outs. (Payment After Knock Out PAKO-functionality). After PAKO is triggered the instrument is forced into a Bid Only state, even if no additional message is sent to indicate this, and remains in this state for the duration of this phase.
- Trigger a Bid Only or Offer Only period. These action codes are not accepted during PAKO phase.

The Matching Engine acknowledges the request by sending back an **Ack** (03) message.

5.4.18.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
LP Action Code	Action the LP wants to apply on the specified instrument of warrant type.	Enumerated	1	1 = Knock-In By Issuer (KIBI) 2 = Knock-Out By Issuer (KOBI) 3 = Payment After Knock-Out (PAKO) 4 = Bid Only 5 = Offer Only	Mandatory

5.4.19 Ask For Quote (33)

Client ◀ OEG
Available for: SP

5.4.19.1 Message Description

This message is used only for the Warrants on the New Market Model and sent by the matching engine to the Liquidity Provider when a quote of the latter is required. *AFQ Reason* identifies the case that triggers this request.

5.4.19.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
AFQ Reason	Reason why the AFQ (33) has been sent.	Enumerated	1	1 = Quote cancelled by the Liquidity Provider 2 = Quote cancelled by Market Control 3 = No quote M minutes before an uncrossing 4 = No quote S seconds before an uncrossing 5 = Quote completely matched	Mandatory

5.4.20 Request For Execution (34)

Client ◀ OEG
Available for: SP

5.4.20.1 Message Description

This message is used by the matching engine to offer the Liquidity Provider the opportunity to confirm or modify the quote of an instrument before completing any trade.

Upon reception of this message the Liquidity Provider can either send a new Quote to update the price or ignore the request (and thus trades within the timeframe). Please refer to the **Quotes** (08) message for further explanations.

5.4.20.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory

5.4.21 RFQ Notification (35)

Client ◀ OEG
Available for: FND FXI

5.4.21.1 Message Description

The **RFQ Notification** (35) message is sent by the matching engine to inform Liquidity Providers about the new RFQ characteristics previously received from an RFQ issuer (Client who send the RFQ) through the **Quote Request** (10) message.

This message is sent to Liquidity Providers registered for the dedicated instrument.

5.4.21.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Mandatory
Order Quantity	Total order quantity, per quantity unit. (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Mandatory
Counterpart Firm ID	[N/A] ID of the clearing house in case of a CCP clearable transaction – also in the specific case of Internal Matching Service (IMS) with clearing :	Alphanumerical ID	8	(See field description)	Optional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
RFQ Update Type	[N/A] Indicates the current status of the RFQ.	Enumerated	1	1 = New 2 = Cancelled by the RFQ issuer 3 = Expired 4 = Partially or Fully Matched	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Optional
End Client	[N/A] Optional field the client may use to provide the BIC of the End Client of the RFQ.	Alphanumerical ID	11	(See field description)	Optional
Dark Execution Instruction	Field used as instruction for dark order handling. 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.	Bitmap	1	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Dark STP Indicator 6 = Dark Passive Order Indicator	Mandatory
Minimum Order Quantity	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Optional
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.	Enumerated	1	(See field description)	Optional

5.4.22 RFQ Matching Status (36)

Client ◀ OEG
Available for: FND FXI BLK

5.4.22.1 Message Description

The **RFQMatchingStatus** (36) message is sent by the matching engine to inform RFQ issuer about the potential matching situation at the time the message is sent.

5.4.22.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Mandatory
Potential Matching Price	The Potential Matching Price indicates to the RFQ issuer the matching price for the “Potential Matching Quantity”.	Price	8	-2^63..2^63-1	Conditional
Potential Matching Quantity	The potential matching quantity indicates the maximum volume that would be matched in case of an RFQ validation.	Quantity	8	0..2^64-2	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Mandatory
Number Of LPs	Indicates the number of LP answers to the RFQ (whether they can be executed or not)	Numerical	1	0..2^8-1	Conditional
Recipient Type	[N/A] Indicates whether the message is sent to the RFQ issuer or the Liquidity Provider.	Enumerated	1	1 = RFQ Issuer 2 = RFQ recipient (LP)	Mandatory

5.4.23 RFQ LP Matching Status (37)

Client ◀ OEG
Available for: FND FXI

5.4.23.1 Message Description

The **RFQLPMatchingStatus** (37) message is sent by the matching engine to inform Liquidity Providers about their potential matching situation at the time the message is sent.

The field *Potential Matching Quantity* will contain the potential aggregated matching quantity for all the concerned LP's answers for the identified RFQ (provided by the *QuoteReqID*).

5.4.23.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Mandatory
Potential Matching Quantity	The potential matching quantity indicates the maximum volume that would be matched in case of an RFQ validation.	Quantity	8	0..2^64-2	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Mandatory

5.4.24 User Notification (39)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.24.1 Message Description

User Notification (39) is used to notify clients of actions taken on their connections by exchange's Kill Switch action, or by their risk manager using Euronext RiskGuard (ERG) service.

- For Kill Switch and RiskGuard the User Notifications sent to the clients might be triggered due to compliance with supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying organisational requirements of trading venues, as well as for the services provided for such purposes for the investment firms engaged in algorithmic trading, Euronext Market operations, or authorized representatives of the investment firms, may suspend a member's or trader's access to the trading system or trigger the use of kill functionality in order to prevent disorderly trading conditions.
  - The message is sent if client's access has been Suspended / Killed, or if their suspension / kill status has been lifted.

  In order to allow Sponsor Firms to monitor the Sponsored Firms activity, a new feature has been introduced within Drop Copy Members Gateway. The feature enables to automatically send a Kill Switch command targeting a Sponsored Firm when his Sponsor Firm loses connection with Drop Copy. Similarly, once the Sponsor Firm successfully (re)connects to Drop Copy, an Unsuspension command is triggered which will lift the suspension. Both of these commands lead to the standard sending of the User Notification (39) with the already known *User Status* values.[7]

  After the sending of the notification for the suspension, and until this suspension is cleared, any following messages are rejected either with *Error Code* 2512 "Suspended by EMS" or 2582 "Suspended by Risk Manager".

- For RiskGuard the User Notification is sent:
  - if client's access has been Blocked or Unblocked on a given contract, and it includes the scope for which this action has been applied;
  - if for Derivatives, Order Size Limit has been activated or deactivated on a given contract, and the scope on which this action has been applied.
  - For Derivatives, for Maximum Exposure Position control if MEP has been activated or deactivated on a given Firm, and if a Breach Action has kicked in/kicked out;
    - when the action in place is Block (User Status MEP Threshold Action Activated: Incoming requests are blocked or MEP Threshold Action Activated: Book was purged and incoming requests are blocked) the *Exposure Side* field indicates, as for other actions, the side which was breached **BUT**, despite that, as the action is block, the block applies to all incoming requests and not only to the ones on the side of the breach.
    - Exposure Side **isn't** populated when the notification is sent to indicate MEP Activation/Deactivation
  - For Cash markets, if the Order Amount Limit has been activated or deactivated on a given instrument or globally for all instrument in scope of the Risk Manager/ Firm ID monitoring authorizations, and the scope on which this action has been applied. In case of "Global OAL" the *Symbol Index* is set to SBE Null value.
    - Please Note that:
      - For Non-Sponsored Firms, where only "individual OAL" is allowed, a **User Notification** (39) is sent for each activation/deactivation;
      - For Sponsored Firms, where both "global and individual OAL" can be submitted and live in parallel:
        1. When a command is sent to activate "global OAL" then a single **User Notification** (39) is triggered to indicate it to the firm and NO message is sent to indicate the explicit removal of any "individual OAL" which was previouslyactivated and got overridden by the sending of the "global OAL";
        2. When there is the activation of "global OAL" followed by the activation of the "individual OAL" on different instruments then the following happens:

           - One **User Notification** (39) is sent to indicate the activation of "global OAL" AND

[7] Please note this mechanism is only triggered for the Drop Copy accesses which have been configured with "Automatic Kill Switch and Unsuspension" set to Yes.

- Upon reception of "individual OAL", one **User Notification** (39) is sent, per Firm ID and Symbol index, to indicate the activation of it;

– For Cash markets, if Unpriced Orders Restriction has been activated or deactivated on a given Firm ID or Logical Access ID.

Overall, the Members notification, through the **User Notification** (39) message is managed as following:

- sent when MEP is activated or deactivated;
  - in case MEP is activated/deactivated, for a given firm, through multiple risk managers then **User Notification** (39) is sent per Risk Manager which sent the MEP command;
  - in case upon activation/deactivation there is an immediate triggering of a threshold breach or the removal of a threshold currently in use, respectively, then the **User Notification** (39) to indicate activation/deactivation and only after the notification of the threshold breach triggering or threshold breach removal;
- when the Risk Manager adjusts the initial submitted MEP command (threshold values, or breach actions or all – as described in section Message Description of **ERGCommand** (U68))
  - no notification is sent as the indication that MEP was activated had already been sent. In case the adjustment leads to a threshold breach then that is communicated;
- in case the Firm breaches thresholds set by different risk managers **which have different breach actions**
  - a single User Notification (39) is sent, with the most restrictive action *(as it is the one in place to validate the incoming requests from the trading member)*
  - in case the action is Block or Pull and Block then the different risk managers have to remove the block for the firm to be able to trade again;
- in case the Firm breaches thresholds set by different risk managers **which have the same breach action**
  - a single User Notification (39) is sent
  - in case the action is Block or Pull and Block then the different risk managers have to remove the block for the firm to be able to trade again;
- in case the Firm breaches thresholds which may have been set by different risk managers (or by a single risk manager) and lead to the same action, meaning same action already triggered once the other threshold is breached
  - no User Notification (39) is sent,
  - in case the action is Block or Pull and Block then the different risk managers have to remove the block for the firm to be able to trade again;
- for the specific case created by block either because of action Block or action Pull and Block, where notifications are sent to the risk manager indicating that, in normal situations, another action would have been activated once the exposure moves, no notification is sent to the trading firm. In further details:
  - if there is no action in place or an action that is not Block or Pull and Block and there is a breach of the threshold that leads to Block or Pull and Block - **a User Notification (39) is sent** to indicate the new action in place;
  - if the trading firm is in Block state following a breach of a threshold which had the action "Block" associated and then there is a breach of the threshold that leads to Pull and Block - **a User Notification (39) is sent** to indicate the new action in place;
  - if the trading firm is breaching the threshold with the action "pull and block" associated and there is an exposure adjustment which leads to the breach of the threshold with action "block" - **no User Notification (39) is sent** to indicate the new action in place;
  - if the trading firm is breaching a threshold which has the action pull and block or Block and there is an exposure adjustment which leads to breach down, which would move to any of the other actions (going down means theoretically, because practically the block is persisted so the action doesn't change) - **no User Notification (39) is sent** to indicate the new action in place;

- **Once a limit is breached or multiple limits are breached simultaneously**, either the MEP 100% or one/multiple of the three individual thresholds, the following messages are triggered:
  - User Notification (39) is sent to the Firm in case the breach of the threshold has triggered a *"breach action"* ;
    - Please note that in case of successive breach of individual thresholds no message is sent to clear the previous breached threshold, only a message to indicate the new threshold in place is sent;

- Concerning the "Clearing" of previously breached thresholds (i.e, when the exposure is recomputed and it's no longer breaching the defined threshold):

- In case the recomputation leads to a clear of the current threshold to a lower one:
  - User Notification (39) is sent to the Firm to indicate the new threshold and action which are activated;

- In case the recomputation leads to "no threshold is longer being breached":
  - User Notification (39) is sent to the Firm to indicate no threshold neither action are activated;

After notification of one of the above events and until the restriction is lifted, any of the inbound messages (for derivatives: except for strategies creation, open order request, mass cancelations, ownership request, request for implied execution and quote request) are rejected with an appropriated *Error Code*.

Note: RiskGuard service allows Risk Managers to act on a given Firm, Logical Access, and one of the two short codes: ExecutionWithinFirmShortCode or ClientIdentificationShortCode. This granularity is provided via the flag in the inbound message, however user notification doesn't provide this granularity in the *User Status* field.

The field *User Status i*n this message indicates the nature of action and the case of Kill functionality or Risk Guard the scope taken on the access and/or orders. In case of block or order size limit activation the scope is provided either in the field *Symbol Index or Family ID.*

The text in the field *User Status* associated to each value provides for the following possible actions and granularities.

Actions:

SERVICE	ACTION	DESCRIPTION
Kill Switch and Risk Guard	Suspended	access to the trading system has been suspended
Kill Switch and Risk Guard	Suspension Cleared	access to the trading system has been restored after a Suspension
Kill Switch	Killed	access to the trading system has been suspended and all unexecuted orders submitted have been cancelled
Kill Switch	Kill Cleared	access to the trading system has been restored after a Kill functionality was initiated. Orders cancelled upon initiation of Kill functionality will NOT be restored
Risk Guard	Blocked	access to the trading system, on a given contract, has been blocked. All unexecuted orders previously submitted might have been cancelled
Risk Guard	Unblocked	access to the trading system, on a given contract, has been unblocked. Orders cancelled upon initiation of Block functionality will NOT be restored
Risk Guard	Order Size Limit (Derivatives Only)	orders submitted on a given contract cannot have a quantity higher than the Order Size Limit defined per contract. The limit is applied per individual order and not globally.
Risk Guard	Order Amount Limit (Cash Only)	orders submitted on a given instrument cannot have an amount higher than the Order Amount Limit defined per instrument or globally for all instruments, of an Optiq segment, on which the Risk Manager is authorized to monitor the Firm ID – only applicable to Sponsored Firms. The limit is applied per individual order and not cumulative cross orders.
Risk Guard	Maximum Exposure Limit (Derivatives only)	orders (excluding Wholesales, RFC)/quotes/trades (excluding TRF temporary trades) are taken into account to validate if the maximum allowed position for the contract is being respected or not.
Risk Guard	Unpriced Orders Restriction (Cash only)	unpriced orders (Market, Stop Market and Dark Sweep without Order Price orders) cannot be submitted and are rejected at Order Entry. The command can be entered by a Risk manager authorized to monitor the Firm ID (only Sponsored Firm) and/or the Logical Access ID.

Scope:

For Kill Switch*: Firm ID* is always provided, and it represents the scope of the kill only in case the action has been taken when specified by *User Status* as Firm;

For RiskGuard: *Firm ID* is always provided, and it represents the scope of the action only in case the *User Status* references Firm, Trader – Algo, DEA or Order Size Limit;

Please note – All Risk Guard messages are submitted and replied on the Optiq segment level.

SCOPE	DESCRIPTION	IDENTIFIER FIELD PROVIDED
Trader-Algo	**For Kill Switch:** Scope of a trader or an algorithm, applied based on the value specified in the field *ExecutionWithinFirmShortCode.* In this case the field *ExecutionWithinFirmShortCode* in the message will be populated with the value set by Market Operations. **For Risk Guard:** Scope of a trader or an algorithm (identified by *ExecutionWithinFirmShortCode)*, applied based on the value specified in the field used to provide the *ExecutionWithinFirmShortCode.* In this case the field *ExecutionWithinFirmShortCode* in the message will be populated with the value received on the inbound message from the Risk Manager.	*ExecutionWithinFirmShortCode*
Firm	**For Kill Switch:** Scope of member, including all of the physical connections and orders associated to the Firm ID. When submitted by Market operations, Kill switch applies to all Euronext Optiq segments, and client receives a message per Optiq segment. **For Risk Guard:** Scope of member, including all of the physical connections and orders associated to the Firm ID. Risk manager submits RiskGuard commands for each individual optiq segment, and client receives a message per Optiq segment, and only for the segment for which Risk manager has submitted the command.	Firm ID
DEA / ClientIdentificationShortCode	**For Kill Switch:** Scope is the sub-set of orders / messages flagged as being submitted via a Direct Electronic access (DEA) provided by members to their own clients either for Sponsored Access or Direct Market Access (DMA). In case of Kill command is being done for Sponsored access (usually applied to the wholes Logical Access), the Status will identify "DEA" and the field *ClientIdentificationShortCode* is not populated. In case the Kill command is done for the DMA, the command is applied based on the value specified in the field *ClientIdentificationShortCode*; then the field *ClientIdentificationShortCode* in the message will be populated with the value set by Market Operations. **For Risk Guard:** Scope is the sub-set of orders/messages submitted under the *TargetClientIdentificationShortCode* are killed or the access of the *TargetClientIdentificationShortCode* is suspended, blocked or checked against the order size limit, depending on the command submitted by the Risk Manager to the Exchange.	*ClientIdentificationShortCode*

SCOPE	DESCRIPTION	IDENTIFIER FIELD PROVIDED
Logical Access	**For Risk Guard:** Scope is the sub-set of orders/messages submitted under the *TargetLogicalAccessID* are killed or the access of the *TargetLogicalAccessID* is suspended or blocked, depending on the command submitted by the Risk Manager to the Exchange. In case the action is applied at Logical Access level, only the Firm that owns the connection receives the **User Notification** (39).	Logical Access ID

- **Once a limit is breached or multiple limits are breached simultaneously**, either the MEP 100% or one/multiple of the three individual thresholds, the following messages are triggered:

  UserNotification (39) is sent to the Firm in case the breach of the threshold has triggered a "breach action" ;

  Note: In case of successive breach of individual thresholds no message is sent to clear the previous breached threshold, only a message to indicate the new threshold in place is sent;

The message contains **one optional repeating section**:

- **SuspensionScope Repeating Section:** this repeating section is for future use and must not be used for now; the two fields of the header must be set to zero "0".

5.4.24.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Conditional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Family ID	Identifier of the family. (For Future Use)	Alphanumerical ID	8	(See field description)	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-1	Conditional
User Status	Status of the user.	Enumerated	1	(See field description)	Mandatory
Logical Access ID	Identifier of the Logical Access.	Numerical ID	4	0..2^32-1	Conditional
Order Size Limit	Indicates the Maximum Order Size above which all orders will be rejected by the Matching Engine.	Quantity	8	0..2^64-2	Conditional
Order Amount Limit	Indicates the Maximum Order Amount above which all orders will be rejected by the Matching Engine.	Amount	8	0..2^64-2	Conditional
Exposure Side	Indicates the side of the exposure. This field must always be populated for Derivatives and not be sent for Cash.	Enumerated	1	(See field description)	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Market Condition	Indicates the mode during which the Unpriced Orders Restriction is applied.	Bitmap	1	(See field description)	Conditional
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Conditional
Market Place	(Market Place 2) It defines the Market place.	Alphanumerical ID	3	(See field description)	Conditional
SuspensionScope length		Numerical	1	0	Mandatory
SuspensionScope occurrences		Numerical	1	0	Mandatory

5.4.25 Instrument Synchronization List (50)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.25.1 Message Description

The **InstrumentSynchronizationList** (50) message is sent in order to associate each instrument with a *ResynchronizationID.* This ID is used only in case of failover of the matching engine.

Please refer to message **SynchronizationTime** (51) for further details.

5.4.25.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Optional
Resynchronization ID	Each instrument is assigned to a Resynchronization ID, that is use in case of failover.	Numerical ID	2	0..2^16-2	Mandatory
InstrumentSynchronizationSection length		Numerical	1	5	Mandatory
InstrumentSynchronizationSection occurrences		Numerical	1	1..254	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory

5.4.26 Synchronization Time (51)

Client ◀ OEG
Available for: EQ FND FXI SP EQD IDD CMO BLK

5.4.26.1 Message Description

The **SynchronizationTime** (51) message is sent after a disruptive incident affecting the trading chain to help the clients assess whether the messages received immediately before the disruptive incident are valid and stored state or if they must be discarded.

This message provides a timestamp (*Last Book In Time*) of the last known valid and stored message, and is sent by the system for the associated resynchronization ID (*Resynchronization ID*).

Upon the reception of the message, clients must check the list of all instruments associated to the field *Resynchronization ID* and analyze all messages received before the **Synchronization Time** (51) message, related to these instruments. Messages having *Book In Time* or *Trade Time* higher than the associated *Last Book In Time* must be discarded.

For example, upon the reception of a **Synchronization Time** (51) message, if a client previously received a **Fill** (04) message with the *Trade Time* higher than the *Last Book In Time*, then this **Fill** (04) message must be ignored and the order fill must be reversed in client system; the trade is considered as if it has never happened (i.e. the quantity has not been traded, and the order may still be present in the order book for further execution).

Similarly, if a client previously received a **Kill** (05) message with a *Book In Time* higher than the *Last Book In Time,* then the Kill notification must be ignored (meaning that the order may still present in the order book for further execution).

All the messages received after the **SynchronizationTime** (51) messages must be processed normally.

5.4.26.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-2	Optional
Resynchronization ID	Each instrument is assigned to a Resynchronization ID, that is use in case of failover.	Numerical ID	2	0..2^16-2	Mandatory
Last Book IN Time	Last Matching Engine IN time (in ns) processed on the associated Resynchronization ID.	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory

5.4.27 Security Definition Request (60)

Client ▶ OEG
Available for: EQD IDD CMO

5.4.27.1 Message Description

This message is used to create a user-defined strategy during the trading session. Any logical access of type Trading or Market Making can initiate strategy creation.

The strategy creation request is acknowledged or rejected by the system using a **Security Definition Ack** (61) message. In case of positive acknowledgement, message provides the *Symbol Index* of the created (or existing) strategy.

The strategy to be created must respect the strategy definition corresponding to its code specified with the *Strategy Code* field. It must also be defined from the buy side perspective. For example, the strategy definition of a Future Calendar Spread must follow the following constraints:

- Two future legs within the same contract;
- Ratio 1 for the first leg L_1 as a buy;
- Ratio 1 for the second leg L_2 as a sell;
- Front leg expiry precedes second leg expiry.

This corresponds to the definition of the spread strategy L_1-L_2.

If the strategy to be created does not fully respect its strategy definition, then the strategy creation request is rejected by the system through a **Reject** (07) message.

For the list of the recognised strategies and high level description of their structures client should refer to the *Annexe 2 to Notice n° 5-01 Trading Procedures: Recognised Strategies* document.

For COB, a strategy must be created before any orders or quotes for that strategy can be submitted.

Delta-Neutral Strategies:

For Delta-Neutral (DN) strategies, creation of the strategy using **Security Definition Request** (60) messages, is required prior to submission of the order. For creation of Stock contingent DN trades at least one leg of the created strategy the field *Leg Security Type* must be set to 'Cash', *Leg Symbol Index* is filled with the *Symbol Index* of the Cash instrument, Leg Price is populated with the Cash underlying price and the Leg Ratio specifies the Delta.

For Wholesale Facility prior creation of strategies is not required, except when submitting a Delta-neutral strategy, in which case this creation is mandatory.

5.4.27.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Security Request ID	ID of a strategy security definition request	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Contract Symbol Index	Exchange identification code of the Contract.	Numerical ID	4	0..2^32-2	Mandatory
Strategy Code	Exchange-recognized strategy code	Alphanumerical ID	1	(See field description)	Mandatory
StrategyLegs length		Numerical	1	35	Mandatory
StrategyLegs occurrences		Numerical	1	1..32	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Leg Symbol Index	MDG proprietary identification code of the instrument leg for the strategy.	Numerical ID	4	0..2^32-2	Mandatory
Leg Ratio	Ratio of lots for the leg. For contingent trades, the delta.	Numerical	4	0..99999	Mandatory
Leg Security Type	Defines the type of instrument of the Leg	Enumerated	1	0 = Future 1 = Option 2 = Cash	Mandatory
Leg Put Or Call	Type of the option as leg.	Enumerated	1	1 = Call 0 = Put	Optional
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
Leg Strike Price	The strike price of an option/warrant is the specified price at which the underlying can be bought (in the case of a call/right to buy) or sold (in case of a put/right to sell) by the holder (buyer) of the option/warrant contract, at the moment he exercises his right against a writer (seller) of the option/warrant.	Price	8	-2^63+1..2^63-1	Optional
Leg Last Trading Date	Last Trading Date of the leg of the strategy (text formatted as YYYYMMDD).	Numerical ID	8	YYYYMMDD	Conditional
Leg Side	Indicates the side of the trade leg.	Enumerated	1	1 = Buy 2 = Sell	Mandatory

5.4.28 Security Definition Ack (61)

Client ◀ OEG
Available for: EQD IDD CMO

5.4.28.1 Message Description

This message is used to respond to the client's inbound **Security Definition Request** (60) message. It is an acknowledgement of strategy creation (if the request is rejected, the system sends a **Reject** (07) message).

If a client submits a creation for an already existing strategy, then the system acknowledges the request and returns the S*ymbol Index* of the existing one.

In case of acknowledgement of a strategy creation, the strategy is created with the status 'Suspended New Listing' and the MDG **Strategy Standing Data** (1012) and **Market Status Change** (1005) messages are published to all market participants. Another **Market Status Change** (1005) message is published when the strategy changes its state to be available to trading after a predefined period of time (e.g. 30 seconds).

5.4.28.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Security Request ID	ID of a strategy security definition request	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory

5.4.29 New Wholesale Order (64)

Client ▶ OEG
Available for: EQD IDD CMO

5.4.29.1 Message Description

This message enables wholesale initiators to enter a new wholesale order, and in case of LIS transaction, reactors to respond to the initiated wholesale order. A wholesale order is made up of one pre-matched half trade, also called "intention" to trade. The matching of a buy intention and a sell intention satisfying the matching criteria leads to the generation of a wholesale trade.

The initiator must provide the wholesale type by populating the *WholesaleTradeType* field. Optiq supports the following wholesale trade types:

- Large In Scale (LIS)
- Against Actuals (AA)
- Exchange For Swaps (EFS)
- Block Standard
- Block NFC Auction
- Block Historical.

The available wholesale trade types are defined on the standing data and configurable on a per contract basis.

The wholesale trade facility is accessible via the Exchange Market Mechanism (EMM) '4'. This EMM provides the timetable and tick table used for wholesales on a per contract basis. The message doesn't contain the field for this and is always assumed to be for this EMM only. And for this EMM this is the only inbound message that can be received.

The initiator of a wholesale trade does not provide any *LIS Transaction ID* information. Optiq provides a Transaction ID upon validation of this first intention through the **Wholesale Order Ack** (65) message. The initiator then transmits the transaction ID to the (potentially multiple) counterpart(s). When counterparts submit their intention, they must populate the *LIS Transaction ID* with the transaction ID provided by the initiator. Counterparts can submit their intentions for an individual outright instrument, for one single leg of a strategy defined by the initiator or on the whole strategy.

For submission of a wholesale transaction on a strategy, Optiq relies on the strategy structure provided by the client, that must match the exchange-recognized strategy specified in the *Strategy Code* field. This field is not provided for transaction a single Outright instrument.

- For a wholesale transaction on a single instrument, the initiator provides either the buy or sell side, or both. In this case, no *Strategy Code* nor overall *Price* or *Quantity* are provided. The initiator populates a single order with either the buy side, sell side or both (self-reaction order).
- For a wholesale transaction on an exchange-recognized strategy, the initiator must provide the *Strategy Code*, as well as the overall *Price* and *Quantity*. The overall quantity must be the sum of the legs' quantities and the overall price must be consistent with the legs' price based on the strategy scheme.
- The same policy as per strategy creation is applied: strategy codes structure applies from the buy side perspective and the number and sequence of legs' Symbol Indexes as in the strategy must be respected.

The strategy structure must respect the strategy definition corresponding to its code specified with the *Strategy Code* field. It must also be defined from the buy side perspective.

WHOLESALE SIDE	LEG SIDE	EFFECTIVE ORDER SIDE
Buy	Buy	Bid
Buy	Sell	Offer
Sell	Buy	Offer
Sell	Sell	Bid

Effective Order Side reflects which field Bid Quantity or Offer Quantity is used.

For LIS transations each individual strategy leg may be submitted within the message as Buy, Sell or Cross.

Side of the Wholesale and Large In Scale (LIS) threshold:

The field *Wholesale Side* in the block of the message identifies the side the initiator is choosing to submit the Wholesale Order for, and carries the following conditions:

- If submitted as Cross, the initiator must provide information for all sides of the order, that would match against each other. If identified, no reactor can submit messages to complete such wholesale order. If any information or quantity does not correspond between the submitted sides – it will be fully rejected.

- If submitted as Buy or Sell with the field *Wholesale Trade Type* set to 0 = Large In Scale Trade, then the submitted order for the identified side, either for individual Outright or the side of the Strategy, must meet the minimum LIS threshold, according to the conditions for the contract type and the type of liquidity of the strategy.
  - For Illiquid instruments, no checks of LIS threshold are done
  - For liquid Futures – each leg must meet the LIS threshold minimum volume
  - For liquid Options:
    - for liquid strategies, each leg must meet the LIS threshold minimum volume
    - for illiquid strategies, at least one leg must meet the LIS threshold minimum volume

Executions Wholesales and Strategies (for the Derivatives markets)

The executions for wholesale transactions done on strategies send individual **Fill** (04) messages for each leg of the strategy. This mean that for Delta-Neutral with a Cash underlying, submitted as a wholesale transaction clients receive a private message for the Cash instrument that is part of the Delta-neutral strategy.

Use of Repeating groups:

Repeat group **WholesaleLegsRep** is used to define the structure of the Strategy submitted for the Large In Scale Trade type. Wholesales orders submitted with strategies, are allowed to be submitted only for strategies that contain up to 7 legs for each side of the transaction.

Repeat group **WholesaleClientRep** is used to provide the clearing data, short codes and non-execution client id for each leg of the strategy, for each submitted side. If this data is submitted, then the fields *Side* and *Leg Symbol Index* must be populated. If submitting data in this repeating group, it should be submitted as following:

- For a New Wholesale order message for a single side of an Outright, or as a response on a single leg of a strategy, a single repeating group for clearing data and short codes is to be submitted.
- For a Cross for an Outright then the clearing data and short codes can be submitted once for the Buy side, and once for the Sell side, as required. The field *Side* will allow to indicate the side for which data is submitted.
- For a message for the strategy – clearing and short code data repeating group may be provided for each leg of the strategy, and for each side of the associated trade, if required.

The WholesaleClientRep repeating group is provided with data only if required, and as such may not be provided for all the instruments / legs specified in the WholesaleLegsRep repeating group. In order to ensure that the clearing data is correctly linked between the provided repeating groups the value of symbol index in the WholesaleClientRep repeating group (in field *Symbol Index*) should match the symbol index of the instrument / leg (in field *Leg Symbol Index*) for which it is to be provided.

Delta-Neutral Strategies:

When submitting a Wholesale LIS transaction for Delta-Neutral (DN) strategies, this strategy must be created before submittion of the New Wholes Order, using **Security Definition Request** (60) message. The symbol index that is provided by the system for this strategy creation must be provided in the field *Contract Symbol Index*. For more details on creation of delta-neutral strategies please see the **Security Definition Request** (60) message description.

For the creation of DN trades with a Future leg, the field *Contract Symbol Index* is populated with the symbol index of the Option contract. For the creation of Stock contingent DN trades at least one leg of the created strategy the field *Leg Security Type* must be set to 'Cash', *Leg Symbol Index* is filled with the symbol index of the Cash instrument, *Leg Price* is populated with the Cash underlying price and the *Leg Ratio* specifies the Delta.

Following additional rules apply for the DN strategy submission in wholesales:

- The Ratio and Price of the DN hedging leg (provided via fields *Leg Price* and *Leg Ratio*) must be identical to what is submitted in the definition of the strategy. The same applies to the Initiator and Reactor messages.
- Customer cannot submit volume for the hedging leg (Cash or Future). If submitted, the volume submitted for the hedging leg will be ignored.
- Aggregation of reactor messages is allowed, however *only with reactions being done on all the legs* of the DN strategy. Partial response per individual legs of the DN strategy will be rejected.

For Wholesale Facility prior creation of strategies is not required, except when submitting a Delta-neutral strategy, for which this creation is mandatory.

5.4.29.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Contract Symbol Index	Exchange identification code of the Contract.	Numerical ID	4	0..2^32-2	Mandatory
Wholesale Trade Type	Type of the Wholesale trade.	Enumerated	1	0 = Large in Scale Trade 1 = Against Actual 2 = Exchange For Swaps 3 = Block Standard 4 = Block NFC Auction 5 = Block Historical	Mandatory
LIS Transaction ID	ID that can be used to associated Executions belonging to the same LIS Transaction	Numerical ID	4	0..2^32-2	Conditional
Strategy Code	Exchange-recognized strategy code	Alphanumerical ID	1	(See field description)	Conditional
Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Mandatory
Quantity	Number of traded or ordered units (to be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory
Wholesale Side	Indicates the side of the Wholesale order.	Enumerated	1	1 = Buy 2 = Sell 3 = Cross	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ESCBMembership	Indicates if the trade is submitted by a member of the European System of Central Bank (ESCB) in performance of monetary, foreign exchange and financial stability policy.	Boolean	1	0 = False 1 = True	Optional
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	1 = Price 2 = Spread in basis points 3 = Spread	Conditional
WholesaleLegsRep length		Numerical	1	51	Mandatory
WholesaleLegsRep occurrences		Numerical	1	1..32	Mandatory
Leg Symbol Index	MDG proprietary identification code of the instrument leg for the strategy.	Numerical ID	4	0..2^32-2	Mandatory
Leg Price	Price of corresponding strategy leg (to be calculated with the Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Mandatory
Bid Quantity	Quote bid quantity, (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Conditional
Offer Quantity	Quote offer quantity, (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Conditional
Leg Side	Indicates the side of the trade leg.	Enumerated	1	1 = Buy 2 = Sell	Conditional
Leg Strike Price	The strike price of an option/warrant is the specified price at which the underlying can be bought (in the case of a call/right to buy) or sold (in case of a put/right to sell) by the holder (buyer) of the option/warrant contract, at the moment he exercises his right against a writer (seller) of the option/warrant.	Price	8	-2^63+1..2^63-1	Conditional
Leg Ratio	Ratio of lots for the leg. For contingent trades, the delta.	Numerical	4	0..99999	Conditional
Leg Put Or Call	Type of the option as leg.	Enumerated	1	1 = Call 0 = Put	Conditional
Leg Security Type	Defines the type of instrument of the Leg	Enumerated	1	0 = Future 1 = Option 2 = Cash	Mandatory
Leg Last Trading Date	Last Trading Date of the leg of the strategy (text formatted as YYYYMMDD).	Numerical ID	8	YYYYMMDD	Conditional
WholesaleClientRep length		Numerical	1	80	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
WholesaleClientRep occurrences		Numerical	1	1..64	Mandatory
Symbol Index	MDG proprietary identification code of the instrument leg for the strategy.	Numerical ID	4	0..2^32-2	Mandatory
Side	Indicates the Executing Side	Enumerated	1	1 = Buy 2 = Sell	Mandatory
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.	Enumerated	1	(See field description)	Mandatory
Clearing Firm ID	Clearing firm ID.	Alphanumerical ID	8	(See field description)	Optional
Long Client ID	Field used to identify the Client (investor), or trader's reference / posting order number for a pre-posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives. For Cash Markets this field is ignored except for IPO where this field is used to provide the information of the tax code.	Alphanumerical ID	16	(See field description)	Optional
Account Number	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	12	(See field description)	Optional
Technical Origin	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	1	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	Optional
Open Close	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Bitmap	2	(See field description)	Optional
Clearing Instruction	Clearing Instruction.	Enumerated	2	(See field description)	Optional
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(Free Text)	Optional
Non Executing Client ID	This field will be used as unique client Key. Field indicating the client ID of the participant in a commercial package.	Numerical ID	2	0..2^16-1	Optional
InvestmentDecisionWFirmShortCode	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	Numerical ID	4	-2^31+1..2^31-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
NonExecutingBrokerShortCode	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	Numerical ID	4	-2^31+1..2^31-1	Optional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Trading Capacity	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Conditional

5.4.30 Wholesale Order Ack (65)

Client ◀ OEG
Available for: EQD IDD CMO

5.4.30.1 Message Description

This message is sent by Optiq to acknowledge or indicate rejection of a client's inbound wholesale order submitted via **New Wholesale Order** (64) message.

Acknowledgement message is not a validation of the trade execution, but only of the submission of the wholesale instruction. Execution of a wholesale trade is communicated to the clients using **Fill** (04) message.

If that wholesale order is sent by the initiator of the trade (i.e. without *LIS Transaction ID*), the system provides a *LIS Transaction ID* upon validation of this first intention through this message. It is up to the initiator to provide that *LIS Transaction ID* to counterparts for them to complete the trade (by providing the *LIS Transaction ID*), either by sending an order against a single leg, or by sending an order against the whole strategy.

The field *Response Type* indicates if the message is sent as an acknowledgement or rejection, and in case of a rejection the *Error Code* contains the specific reason for the rejection.

Pre-negotiated off-book on-exchange business is not published to the market data, until execution of the trade.

5.4.30.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Conditional
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Contract Symbol Index	Exchange identification code of the Contract.	Numerical ID	4	0..2^32-2	Mandatory
Wholesale Trade Type	Type of the Wholesale trade.	Enumerated	1	0 = Large in Scale Trade 1 = Against Actual 2 = Exchange For Swaps 3 = Block Standard 4 = Block NFC Auction 5 = Block Historical	Mandatory
LIS Transaction ID	ID that can be used to associated Executions belonging to the same LIS Transaction	Numerical ID	4	0..2^32-1	Conditional
Strategy Code	Exchange-recognized strategy code	Alphanumerical ID	1	(See field description)	Conditional
Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Conditional
Quantity	Number of traded or ordered units (to be calculated with Quantity Decimals).	Quantity	8	0..2^64-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory
Wholesale Side	Indicates the side of the Wholesale order.	Enumerated	1	1 = Buy 2 = Sell 3 = Cross	Mandatory
ESCBMembership	Indicates if the trade is submitted by a member of the European System of Central Bank (ESCB) in performance of monetary, foreign exchange and financial stability policy.	Boolean	1	0 = False 1 = True	Optional
Response Type	Indicates if incoming message is accepted or rejected.	Enumerated	1	0 = Accept 1 = Reject	Mandatory
Error Code	Error code in case of rejection.	Numerical ID	2	0..2^16-2	Mandatory
Ack Qualifiers	Field used to provide additional information on the corresponding order. 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.	Bitmap	1	(See field description)	Mandatory
WholesaleAckLegsRep length		Numerical	1	23	Mandatory
WholesaleAckLegsRep occurrences		Numerical	1	1..32	Mandatory
Leg Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
Bid Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Conditional
Offer Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Conditional
Leg Side	Indicates the side of the trade leg.	Enumerated	1	1 = Buy 2 = Sell	Conditional
Let Error Code	Error code in case of rejection for the leg	Numerical ID	2	0..2^16-2	Conditional
WholesaleClientRep length		Numerical	1	19	Mandatory
WholesaleClientRep occurrences		Numerical	1	0..64	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Symbol Index	MDG proprietary identification code of the instrument leg for the strategy.	Numerical ID	4	0..2^32-2	Mandatory
Side	Indicates the Executing Side	Enumerated	1	1 = Buy 2 = Sell	Mandatory
InvestmentDecisionWFirmShortCode	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	Numerical ID	4	-2^31+1..2^31-1	Conditional
NonExecutingBrokerShortCode	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	Numerical ID	4	-2^31+1..2^31-1	Optional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
Non Executing Client ID	This field will be used as unique client Key. Field indicating the client ID of the participant in a commercial package.	Numerical ID	2	0..2^16-1	Optional

5.4.31 MM Sign-In (47)

Client ▶ OEG
Available for: EQD IDD CMO

5.4.31.1 Message Description

This message allows Market Makers to be identified as Market Makers with their Execution within firm short codes, and then to use the following Market Maker's functionalities:

- Submission of Quotes by different Market Makers, from same firm, on the same instruments, with each Market Maker being identified with different short codes;
- Configuration of Market Maker Protections, on short code level.

In addition, the **MM Sign-In** (47) message allows Market Makers to submit clearing data before being able to trade on a contract and to specify in which logical access the member wants to receive unsolicited Market Maker Protection messages. It allows the member to send a lighter **Quotes** (08) message since it will not contain clearing data.

The member will not be able to send quotes or Market Maker protection messages without first submitting a **MM Sign-In** (47) message.

The member has to sign in once a day and can also override the sign in by sending again the message.

5.4.31.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Logical Access ID	Identifier of the Logical Access.	Numerical ID	4	0..2^32-2	Mandatory
OE Partition ID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Numerical ID	2	0..2^16-2	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
Clearing Firm ID	Clearing firm ID.	Alphanumerical ID	8	(See field description)	Optional
Account Number	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	12	(See field description)	Optional
Technical Origin	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	1	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	Optional
Open Close	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Bitmap	2	(See field description)	Optional
Clearing Instruction	Clearing Instruction.	Enumerated	2	(See field description)	Optional
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(Free Text)	Optional
Long Client ID	Field used to identify the Client (investor), or trader's reference / posting order number for a pre-posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives. For Cash Markets this field is ignored except for IPO where this field is used to provide the information of the tax code.	Alphanumerical ID	16	(See field description)	Optional

5.4.32 MM Sign-In Ack (48)

Client ◀ OEG
Available for: EOD IDD CMO

5.4.32.1 Message Description

This message is sent as an acknowledgement of a **MM Sign-In** (47) message used by Market Makers to declare the short code(s) under which they will submit **Quotes** (08) and use MM protection messages. It contains the same fields as the request.

5.4.32.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Logical Access ID	Identifier of the Logical Access.	Numerical ID	4	0..2^32-2	Mandatory
OE Partition ID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Numerical ID	2	0..2^16-2	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
Clearing Firm ID	Clearing firm ID.	Alphanumerical ID	8	(See field description)	Optional
Account Number	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	12	(See field description)	Optional
Technical Origin	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	1	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	Optional
Open Close	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Bitmap	2	(See field description)	Optional
Clearing Instruction	Clearing Instruction.	Enumerated	2	(See field description)	Optional
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(Free Text)	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Long Client ID	Field used to identify the Client (investor), or trader's reference / posting order number for a pre-posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives. For Cash Markets this field is ignored except for IPO where this field is used to provide the information of the tax code.	Alphanumerical ID	16	(See field description)	Optional

5.4.33 MM Protection Request (62)

Client ▶ OEG
Available for: EQD IDD CMO

5.4.33.1 Message Description

This message enables a Market Maker to set, adjust, reset or request the currently set configuration of a Market Maker protection against the execution of their quotes, and orders with account type set to Liquidity Provider, on a derivative contract.

Protection is defined by specifying a limit on:

- Volume;
- Delta.

When the protection limit is breached, the action specified when defining the protection is triggered.

5.4.33.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Request Type	This field gives the type of request made by the Market Maker for the Market Maker Protection. At the time of activation, the Market Maker (MM) is able to Set (1) Protection Limits and Limit Breach actions for each protection type activated on a contract. MM can also Get (2) the current reached value of the limits, and breach actions can be updated by submitting an Adjust (3) at any time while the facility is active.	Enumerated	1	1 = Set 2 = Get 3 = Adjust	Mandatory
MMP Section length		Numerical	1	10	Mandatory
MMP Section occurrences		Numerical	1	1..2	Mandatory
Protection Type	Type of Market Maker protection.	Enumerated	1	1 = Delta 2 = Volume	Mandatory
Protection Threshold	Limit of the MM protection.	Quantity	8	0..2^64-2	Conditional
Breach Action	Type of action to trigger when a MM protection limit is breached.	Enumerated	1	0 = Ignore 1 = Pull	Conditional

5.4.34 MM Protection Ack (63)

Client ◀ OEG
Available for: EQD IDD CMO

5.4.34.1 Message Description

This message is sent under different circumstances for Market Maker Protection:

- It can be provided as a solicited response to a **MM Protection Request** (62) message. Depending on the Request Type, it provides:
  - either an acknowledgement for Market Maker protection definition, adjustment or reset,
  - or the limits and current positions of the protections set by the Market Maker on the requested contract.
- It can also be sent as an unsolicited message when a Market Maker Protection position is breached; in that case, the *MMP Execution Type* provides the action triggered.

Note: If a trade occurs that goes above the MM Protection threshold, such a trade would still occur, and the **MM Protection Ack** (63) messages will be sent with the current position that is higher than the threshold. MM Protection action will be triggered after this based on the selection made by the client.

5.4.34.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Optional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Optional
OEG OUT To ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Optional
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Optional
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Optional
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Optional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Optional
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Optional
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MMP Execution Type	Type of MM Protection Execution.	Bitmap	1	0 = Notification 1 = Acknowledgement 2 = Pull	Mandatory
MMP Section 2 length		Numerical	1	19	Mandatory
MMP Section 2 occurrences		Numerical	1	0..2	Mandatory
Protection Type	Type of Market Maker protection.	Enumerated	1	1 = Delta 2 = Volume	Optional
Protection Threshold	Limit of the MM protection.	Quantity	8	0..2^64-2	Optional
Breach Action	Type of action to trigger when a MM protection limit is breached.	Enumerated	1	0 = Ignore 1 = Pull	Optional
Current MMP Position	Current (Delta or Volume) position for MMP monitoring.	Quantity	8	-2^63+1..2^63-1	Optional
Breach Status	Indicator of whether the MMP has been triggered due to limit breach (0: Not breached; 1: Breached)	Boolean	1	0 = False 1 = True	Optional

5.4.35 Request For Implied Execution (66)

Client ▶ OEG
Available for: EQD IDD CMO

5.4.35.1 Message Description

The **Request For Implied Execution** (66) message may be used by clients to trigger the generation of Implieds in a strategy book to increase matching opportunities for their order, for the contracts setup with the Event Driven Implied Matching (EDIM) model.

In order to be able to submit an RFIE in a strategy, client must have an active order in that Strategy order book at any price level, otherwise the request will be rejected by Optiq.

The *Order ID* field should be populated with the ID of this already existing order in the strategy order book.

Upon reception and processing of the RFIE message, Optiq will trigger generation of Implieds in the targeted Strategy book, which may result in a match of everything possible within the book, based only on the book's priority rules. This disregards which participant issued the request.

In addition to the condition of having an order in the book, the request will be accepted only if all of the following conditions are met:

- the effective state of the Strategy book is **Continuous**;
- the Implied model of the Derivative Contract is the EDIM Model (not "No Implieds" or "SIM - Spontaneous Implied Matching");
- even if EDIM is active on the contract, the strategy type must also have EDIM enabled which allows generation of Implieds in the Strategy book.

The RFIE message is acknowledged by an **Ack** (03) message with the *Ack type* set to "Request for Implied Execution Ack", and is rejected by **Reject** (07) message.

5.4.35.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-1	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order ID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-1	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	-2^31+1..2^31-1	Mandatory
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory

5.4.36 Cross Order (67)

Client ▶ OEG
Available for: EQD IDD CMO

5.4.36.1 Message Description

The **Cross Order** (67) message is used to submit orders within the "Request for Cross" (RFC) trading facility, and available for designated products.

RFC Initiator submits a message that represents a committed cross trade against a client, and must contain both Buy and Sell sides of the RFC trade. The initiator submission starts a short auction period during which RFC Reactors may submit orders to price-improve the cross, and participate in the cross trade. For more details on the behaviour of the messages for the RFC trading facility clients should review the Derivatives Kinematics document.

The same message is used by the Initiators and Reactors, and account type information is always provided with clearing data repeating group, in field *Account Type Cross*.

The RFC facility is accessible via the Exchange Market Mechanism (EMM) '7', which is the only allowed value to be populated in this message in the field *EMM*. This EMM provides the timetable and tick table used for wholesales on a per contract basis.

The cross Order messages may be submitted only during Continuous and it is acknowledged by an **Ack** (03) message and rejected by **Reject** (07) message.

For the submission of Cross Order on strategies, the value of the created strategy's *Symbol Index* should be provided in the *Symbol Index* of Cross Order.

Repeating Section Usage

The message contains **four optional repeating sections:**

- **FreeText repeating section:** the first repeating section contains only the field *FreeText*. It can be populated once for Buy and Sell orders and twice for Cross orders, respectively for the buy side and the sell side. Please note that data in the *FreeText* is part of the Clearing Data section, which aggregates the clearing-related data (clearing aggregate) but it is set in a dedicated repeating section for performance purpose. Possible number of repeating groups: 0, 1, 2.
- **MiFID Shortcodes repeating section:** the second repeating section contains the MiFID shortcodes and can be populated once for Buy and Sell orders. It can be repeated twice by the Initiator, respectively for the buy side and then for the sell side. Possible number of repeating groups: 0, 1, 2.
- **Clearing Data X repeating section:** the third repeating section contains the clearing data fields. Possible number of repeating groups: 0, 1, 2.

  If provided by the Initiator, two occurrences are mandatory; the first one for the buy side and the second one for the sell side.

  If provided by the Reactor, the occurrence is optional and contains all the clearing data of the order.
- **Strategy Execution Data repeating section:** this repeating section is used to provide details on trades for legs of a strategy trade. Possible number of repeating groups: 0..32.

  The field *Leg Last Traded Price* represents the price of the leg. It enables to check the consistency of the strategy sent by the RFC Initiator (For instance. In case of a Calendar Spread Strategy (A-B) a check is done to ensure that order price is equal to leg last traded price from outright A minus leg last traded price from outright B).

  The field *Leg Last Traded Quantity* represents the quantity traded of the leg. No consistency checks are applied on this field.

5.4.36.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	From 0 to 2^64-2	Mandatory
Client Order ID	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	8	From -2^63-1 to 2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Order Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell 3 = Cross	Mandatory
Order Type	Type of Order.	Enumerated	1	(See field description)	Mandatory
Order Price	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	Price	8	From -2^63-1 to 2^63-1	Mandatory
Order Quantity	Total order quantity, per quantity unit (To be calculated with Quantity Decimals).	Quantity	8	From 0 to 2^64-2	Mandatory
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	From -2^31-1 to 2^31-1	Mandatory
MiFID Indicators	Field used as instruction for order handling. 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.	Bitmap	1	(See field description)	Mandatory
Non Executing Client ID	This field will be used as unique client Key. Field indicating the client ID of the participant in a commercial package.	Numerical ID	2	From 0 to 2^16-2	Optional
Order Actor Type	Member role for RFC.	Enumerated	1	1 = Initiator 2 = Reactor	Mandatory
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	1 = Price 2 = Spread in basis points 3 = Spread	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Order Tolerable Price	Allows the RFC Initiator to provide an improving tolerable price on the non-client side of the cross. This tolerable price is intended to anticipate possible price improvements, generated by RFC Reactors. In case RFC Initiator does not want to match RFC Reactors improved prices, this field must be provided with the Null value. (to be calculated with Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	Optional
FreeTextSection length		Numerical	1	18	Mandatory
FreeTextSection occurrences		Numerical	1	0..2	Mandatory
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(Free Text)	Optional
MiFIDShortcodes length		Numerical	1	12	Mandatory
MiFIDShortcodes occurrences		Numerical	1	0..2	Mandatory
InvestmentDecisionWFirmShortCode	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	Numerical ID	4	-2^31+1..2^31-1	Conditional
NonExecutingBrokerShortCode	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	Numerical ID	4	-2^31+1..2^31-1	Optional
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	-2^31+1..2^31-1	Conditional
ClearingFieldsX length		Numerical	1	43	Mandatory
ClearingFieldsX occurrences		Numerical	1	0..2	Mandatory
Clearing Firm ID	Clearing firm ID.	Alphanumerical ID	8	(See field description)	Optional
Long Client ID	Field used to identify the Client (investor), or trader's reference / posting order number for a pre-posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives. For Cash Markets this field is ignored except for IPO where this field is used to provide the information of the tax code.	Alphanumerical ID	16	(See field description)	Optional
Account Number	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	12	(See field description)	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Technical Origin	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	1	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	Optional
Open Close	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Bitmap	2	(See field description)	Optional
Clearing Instruction	Clearing Instruction.	Enumerated	2	(See field description)	Optional
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.	Enumerated	1	(See field description)	Mandatory
Trading Capacity	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Conditional
StrategyFields length		Numerical	1	20	Mandatory
StrategyFields occurences		Numerical	1	0..32	
Leg Last Traded Price	Leg Last Traded Price	Price	8	From -2^63-1 to 2^63-1	Optional
Leg Last Traded Quantity	Leg Last Traded Quantity	Quantity	8	From 0 to 2^64-2	Conditional
Leg Instrument ID	Numerical leg instrument identifier (SymbolIndex) valid for the life of the instrument.	Numerical ID	4	From 0 to 2^32-2	Conditional

5.4.37 RFQ Audit (72)

Client ◀ OEG
Available for: FND FXI

5.4.37.1 Message Description

The **RFQ Audit** (72) message is sent by OEG to the RFQ issuer enabling him to have a summary about all orders and LP answers involved in the RFQ response.

This message is used only for the Cash Markets, it is sent only after the RFQ confirmation and all **Fill** (04) message reception.

In case the RFQ is not confirmed; because it is expired or cancelled, the **RFQAudit** (72) message is not sent.

The **RFQAudit** (72) message generation do not lead to a specific market data publication.

For more details in behaviour and handling on the Cash market clients should review the associated Kinematics in kinematics specification document.

5.4.37.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Book IN Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
Book OUT Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Mandatory
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Mandatory
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Mandatory
QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	8	0..2^64-2	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
RFQ Counterparts		Numerical	1	1..50	Mandatory
Order Origin	Indicates the origin of the order	Enumerated	1	(See field description)	Optional
Order Price	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	Price	8	-2^63+1..2^63-1	optional
Last Traded Quantity	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with the Price/Index Decimals).	Price	8	-2^63+1..2^63-1	Optional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Dark Execution Instruction	Field used as instruction for dark order handling. 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.	Bitmap	1	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Dark STP Indicator 6 = Dark Passive Order Indicator	Optional
Minimum Order Quantity	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-1	Optional

5.4.38 Wave For Liquidity (73)

Client ▶ OEG
Available for: BLK

5.4.38.1 Message Description

Wave For Liquidity (73) message is used by Buy Side to trigger a search for liquidity, onto the Euronext Block MTF, by targeting a specific group of counterparties or several. OEG acknowledges or rejects it with **Wave For Liquidity Notification** (74).

This message is allowed on the Block segment only and might be sent as:

- An indication of interest – *IOI Transaction Type* set to "New";
  - All Mandatory fields should be provided with a value different than SBE Null value as well as the conditional that became mandatory depending on what's provided in other fields, e.g*, IOI Qty* and *Order Quantity*;

- Cancellation of a previous indication of interest - *IOI Transaction Type* set to "Cancel";
  - All Mandatory fields should be provided with a value different than SBE Null value as well as the conditional that became mandatory depending on what's provided in other fields **plus** the *Original IOI ID* – please note this message should be a reflection of the original request that was submitted (apart from the *IOI ID* and *IOI Transaction Type*) and is now being targeted to be cancelled;
  - Please note that the system identifies uniquely the indication of interest based on *Firm ID*, *Original IOI ID*, *Symbol Index* and *EMM*. All other fields are ignored (if populated with values that successfully pass the technical checks) for the purpose of cancelling the indication of interest and returned in the acknowledgement message exactly as received. Please note that the counterparties cancellation notifications will contain the information of the original indication of interest or of the indication of interest after the modification.

- Modification of a previous indication of interest - *IOI Transaction Type* set to "Replace"
  - All Mandatory fields should be provided with a value different than SBE Null value as well as the conditional that became mandatory depending on what's provided in other fields **plus** the *Original IOI ID* – please note this message should be a reflection of the original request that was submitted (apart from the *IOI ID*, *IOI Transaction Type* and the fields being targeted for modification) and is now being targeted to be replaced;
  - Please note it's possible to modify several fields at the same time, if they are part of the list of fields available for modification – below the list:
    - *IOI Side*;
    - *Order Quanity*;
    - *IOI Quantity*;
    - *IOI Quality Indication*;

- Any attempt to modify any of the other parameters leads to the rejection of the modification and the original indication of interest remains active;

IOI ID Management

- Clients must provide an indication of interest id in every inbound application message (**Wave for Liquity *(73)***), otherwise the message will be immediately rejected by the OEG. Clients may provide any value that respects the *IOI ID* format, which is an 8-byte signed integer. The Exchange recommends setting a unique ID per Indication of Interest, Firm and Symbol Index. For Indication of interest submission, the indication of interest ID value is not checked by the Exchange, it is simply returned in the corresponding outbound message to allow clients to reconcile the response message with their original inbound request. For modification and cancellation using the *Original IOI ID* as unique identifier, the value is checked by the Exchange for possible duplicates, that would represent different live indications of interest originally submitted with the same indication of interest id. In case of duplicates, the inbound request is rejected with the associated *Error Code*.
- Upon reception of an indication of interest Optiq assigns a unique ID, provided within *Exchange IOI ID* – valid for the lifetime of the indication of interest and used:
  - To notify counterparties;
  - As the unique identifier to link the orders submitted by the members *(as a reply to the indication of interest)* to the original indication of interest;

Notes

- While attempting to cancel or replace an existing indication of interest the *Original IOI ID* must be populated with the value provided within the Indication of interest id of the **Wave For Liquidity** (73) message – if the *Original IOI ID* specified in the message is not found in the active indication of interest list, the modification is rejected with "Unknown Indication of Interest";
- In case the member submitting the **Wave For Liquidity** (73) decides to cancel it or modify it:
  - In case no order has yet been submitted as an answer to the indication of interest: counterparties are notified of the indication of interest cancellation;
  - In case one or several orders had already been submitted as an answer to the indication of interest: counterparties are notified of the indication of interest cancellation or modification. Once counterparties receive the notification that the indication of interest was cancelled it's their responsibility to cancel or modidy any order they might have previously submitted as a response to that same indication of interest;

- *IOI ID*: unique ID of the **Wave for Liquidity** (73), returned by the Exchange in the **Wave For Liquidity Notification** (74) – unicity of it it's not checked by Optiq;
- *Original IOI ID*: ignored by the system in all cases where *IOI Transaction Type* is different than "Cancel" or "Replace" - must be filled with the *IOI ID* provided in the **Wave for Liquidity** (73) previously sent with *IOI Transaction Type* set to "New". If provided in other cases, will be ignored, as long as it respects the field technical format – otherwise a rejection will be triggered. In this case ignored means that the value will not be considered for the functional processing of the indication of interest but will be provided back to the member within the **Wave For Liquidity Notification** (74).
- Target Counterparties: used to identify which counterparties must be notified of the **Wave for Liquidity** (73) submission – in case all bits are set to zero no notification is sent;
- Side: used to indicate if the **Wave for Liquidity** submitter intends to Buy or Sell – in case the intention is not to disclose this information, the field must be set to "Undisclosed";
- *IOI Quantity*: used by the **Wave for Liquidity** submitter to give a qualitative indication of the "Size" of the **Wave for Liquidity** (73) – in case it's set to "Undisclosed Qty" then *Order Quantity* must not be provided. If provided, will be ignored, as long as it respects the field technical format – otherwise a rejection will be triggered. In this case ignored means that the value will not be considered for the functional processing of the indication of interest but will be provided back to the member within the **Wave For Liquidity Notification** (74).
- *Order Quantity*: used to specify the volume of the indication of interest – required only when *IOI Quantity* is different than "Undisclosed Qty". If provided, will be ignored meaning, the value will not be considered for the functional processing of the indication of interest, but will be provided back to the member within the **Wave For Liquidity Notification** (74).
- *IOI Quality Indication*: used to provide a qualitative indication of the quality of the indication of interest – No special processing or logic is attached to the field for now – *it's for future use*;

- There is a restriction on the number of indications of interest that can be submitted by a given *Firm ID*. The maximum number is controlled per Session for the combination of Optiq Segment/EMM/Symbol Index. When the maximum number is reached the **Wave For Liquidity** (73) is rejected with **Wave For Liquidity Notification** (74) and the *Error Code "Maximum number of Indication of Interest for the session exceeded".*

5.4.38.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	0..2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	0..2^64-2	Mandatory
IOI ID	An identifier of a message assigned by the Client when submitting an indication of interest to the Exchange.	Numerical ID	8	-2^63+1..2^63-1	Mandatory
IOI Transaction Type	Identifies IOI message transaction type	Enumerated	1	1 = New 2 = Cancel 3 = Replace	Mandatory
Original IOI ID	Reference identifier used with CANCEL and REPLACE, transaction types.	Numerical ID	8	-2^63+1..2^63-1	Conditional
Target Counterparties	Allows members to specify the targeted counterparties of the submitted indication of interest.	Bitmap	2	0 = Euronext Data Driven 1 = Interest Lists 2 = Holdings 3 = Buy Side 4 = Sell Side 5 = Quality of Sell Side Counterparty 6 = Local Community of Specialist AMS 7 = Local Community of Specialist PAR 8 = Local Community of Specialist BRU 9 = Local Community of Specialist LIS	Mandatory
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	0..2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
IOI Side	Indicates the side of the indication of interest.	Enumerated	1	1 = Buy 2 = Sell 4 = Undisclosed	Mandatory
Order Quantity	Total order quantity, per quantity unit. (To be calculated with Quantity Decimals).	Quantity	8	0..2^64-2	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
IOI Quantity	Indication of the size of the indication of interest.	Enumerated	1	1 =Small 2 = Medium 3 = Large 4 = Undisclosed Qty	Mandatory
IOI Quality Indication	Relative Quality of the indication of interest.	Enumerated	1	1 = High 2 = Low 3 = Medium	Optional

5.4.39 Wave For Liquidity Notification (74)

Client ◀ OEG
Available for: BLK

5.4.39.1 Message Description

Wave For Liquidity Notification (74) is issued by Optiq to:

- **Acknowledge** an incoming **Wave for Liquidity** *(73)* message;
  - Please note that, in this case, all fields will be provided with a value different than SBE Null Value, except for the *Error Code*;

- **Reject** an incoming **Wave for Liquidity** *(73)* message;
  - Please note that, in this case, all fields will be provided with a value different than SBE Null Value – in some specific cases its possible not all OEG timestamps are provided – it depends on the reason of the rejection;

- **Notify**:
  - Counterparties that a given **Wave for Liquidity** *(73)* message **was submitted** onto the Euronext Block MTF with a given set of characteristics and targeting one or several groups of counterparties to which those members belong;
    - Please note that, in this case, all fields will be provided with a value different than SBE Null Value except for the *Error Code*;
  - Counterparties that a given **Wave for Liquidity** *(73)* message, targeting one or several groups of counterparties to which those members belong and previously submitted, **was modified**;
    - Please note that, in this case, only the following fields will be provided with a value different than SBE Null Value:
      - OEG Timestamps;
      - *IOI ID;*
      - *Original IOI ID;*
      - *IOI Type;*
      - *Symbol Index;*
      - *EMM;*
      - Fields representing the parameters that were modified. Any of the parameters available for modification but not impacted will not be provided;
  - Counterparties that a given **Wave for Liquidity** *(73)* message, targeting one or several groups of counterparties to which those members belong and previously submitted, **was cancelled**;
    - Please note that, in this case, only the following fields will be provided with a value different than SBE Null Value:
      - OEG Timestamps;
      - *IOI ID;*
      - *Original IOI ID: in case the indication of interest being cancelled had been modified;*
      - *IOI Type;*
      - *Symbol Index;*
      - *EMM;*
      - *IOI Side;*
      - *Order Quantity: only for the cases where the indication of interest disclosed the quantity;*
  - Member submitting the indication of interest that a member just **placed an order** as response to his **Wave for Liquidity** *(73)* message;
    - Please note that, in this case, all fields will be provided with a value different than SBE Null Value, except for the *Error Code*;

- Please note the notification will be sent while receiving a conditional order and while receiving a firm order – so notification can be sent 2 times for the same broker;

- In case the message is sent as an acknowledgement the field *IOI Type* is set to '1' (Ack);

- In case the message is sent to indicate functional rejection, the field *IOI Type* is set to '2' (Reject) and *Error Code* is filled with the reason for the rejection;

- In case the message is sent to notify counterparties that a **Wave for Liquidity** *(73)* message was just submitted onto the Euronext Block MTF, *IOI Type* is set to '3' (New IOI Notification);

- In case the message is sent to notify counterparties that a **New Order** (01), sent as an answer to a **Wave for Liquidity** *(73)*, was just successfully accepted by the Euronext Block MTF, *IOI Type* set to '4' (IOI Reply Notification); Please note no notification is issued when the order is modified or even cancelled;

- In case the message is sent to notify counterparties that a **Wave for Liquidity** *(73)* message, previously submitted, was just cancelled, *IOI Type* set to '5' (IOI Cancellation Notification);

- In case the message is sent to notify counterparties that a **Wave for Liquidity** *(73) message*, previously submitted, was just modified, *IOI Type* set to '6' (IOI Replacement Notification).

5.4.39.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumeric al ID	8	(See Field Description)	Conditional
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC) Epoch Time in Nanoseconds	Epoch Time in Nanoseconds	8	From 0 to 2^64-1	Conditional
OEG IN From Member	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	From 0 to 2^64-1	Conditional
OEG OUT TO ME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	From 0 to 2^64-1	Conditional
Book In Time	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	From 0 to 2^64-1	Conditional
Book Out Time	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	From 0 to 2^64-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
OEG IN From ME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	8	From 0 to 2^64-1	Conditional
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	From 0 to 2^64-1	Conditional
IOI ID	Unique identifier of IOI message.	Numerical ID	8	From -2^63+1 to 2^63-1	Conditional
Exchange IOI ID	Unique identifier of IOI message.	Numerical ID	8	From -2^63+1 to 2^63-1	Conditional
IOI Type	Identifies the reason why the Wave for Liquidity Notification (U74) is being sent.	Enumerated	1	1 = Ack 2 = Reject 3 = New IOI Notification 4 = IOI Reply Notification 5 = IOI Cancellation Notification 6 = IOI Replacement Notification	Mandatory
Original IOI ID	Reference identifier used with CANCEL and REPLACE, transaction types.	Numerical ID	8	From -2^63+1 to 2^63-1	Conditional
Symbol Index	Exchange identification code of the instrument/contract.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Conditional
IOI Side	Indicates the side of the order.	Enumerated	1	1 = Buy 2 = Sell	Mandatory
Order Quantity	Total order quantity, per quantity unit.(To be calculated with Quantity Decimals).	Quantity	8	From 0 to 2^64-2	Conditional
IOI Quantity	Indication of the size of the indication of interest.	Enumerated	1	1 =Small 2 = Medium 3 = Large 4 = Undisclosed Qty	Mandatory
IOI Quality Indication	Relative Quality of indication	Enumerated	1	1 = High 2 = Low 3 = Medium	Optional
Error Code	Error code in case of rejection.	Numerical ID	2	From 0 to 2^16-2	Conditional

5.4.40 Clear Book (75)

Client ◄ OEG
Available for: EQ FND FXI BDL SP EQD IDD CMO BLK

5.4.40.1 Message Description

Under certain circumstances (Trading Chain Failover for example), Market Operations team will trigger the sending of **Clear Book** (75) message. The **Clear Book** (75) message is sent for each impacted instrument regardless of the presence of orders.

5.4.40.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	From 0 to 2^32-2	Mandatory
OEG OUT To Member	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	Epoch Time in Nanoseconds	8	0..2^64-1	Conditional
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Conditional

5.4.41 Declaration Entry (40)

Client ▶ OEG
Available for: TCS

5.4.41.1 Message Description

The **Declaration Entry** (40) message is used for the sending of a TCS Declaration.

For Cross orders two instances of fields listed below are provided, to identify the information for each side of the cross order. The description of each field identifies whether the field is to be used for identification of the buy or sell side, but as a general rule fields containing "Cross" in the name, are used for provision of the information for the sell side: *Account Number*, *Account Number Cross*, *Account Type*, *Account Type Cross*, *Free Text*, *Free Text Cross*, *Principal Code*, *Principal Code Cross*, *Trading Capacity*, *Trading Capacity Cross*.

For Cross Orders, *Trading Capacity* is filled by Members as follows:

- Either in the block of the message via the field *Trading Capacity* when the value of the Trading Capacity on the Buy side is equal to the value of the Trading Capacity on the Sell side.
- OR in the block of the message via the field Trading Capacity for the Buy Side and via the field Trading Capacity Cross in the second occurrence (the sell side occurrence) when the value of the Trading Capacity on the Buy side is different from the value of the Trading Capacity on the Sell side . As a consequence, the *Trading Capacity Cross* field of the first occurrence is never used and is thus ignored (or rejected in case content is invalid) by the OEG.

Note: The following combinations of Trading Capacity and Trading Capacity Cross values are rejected for Cross orders:

- DEAL vs. DEAL
- DEAL vs. MTCH
- MTCH vs. DEAL
- MTCH vs. MTCH

5.4.41.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumeric al ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Timestamp	8	From 0 to 2^64-2	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Order ID	Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG.	Numerical ID	8	From -2^63+1 to 2^63-1	Mandatory
Operation Type	Type of Operation.	Enumerated	1	(See field description)	Mandatory
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Entering Counterparty	Identifies the counterpart of the transaction.	Alphanumeric al ID	8	(See field description)	Optional
Side	Indicates the Executing Side.	Enumerated	1	1 = Buy 2 = Sell 3 = Cross	Mandatory
Quantity	Number of traded or ordered units (to be calculated with Quantity Decimals).	Quantity	8	From 0 to 2^64-2	Conditional
Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Conditional
ExecutionWithinFirmShortCode	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	Numerical ID	4	From -2^31+1 to 2^31-1	Mandatory
ClientIdentificationShortCode	MiFID II short code, Client identification code.	Numerical ID	4	From -2^31+1 to 2^31-1	Conditional
MIC of Secondary Listing	Identifies the secondary listing place to which an instrument belongs by its MIC (Market Identification Code.), segment MIC according to ISO 10383.	Alphanumeric al ID	4	(See field description)	Conditional
Centralisation Date	Centralisation Date.	Alphanumeric al ID	10	(See field description)	Optional
Clearing Firm ID	Clearing firm ID.	Alphanumeric al ID	8	(See field description)	Optional
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.	Enumerated	1	(See field description)	Mandatory
Account Type Cross	Indicates the account type for which the sell side of a cross order is entered.	Enumerated	1	(See field description)	Conditional
Trading Capacity	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Trading Capacity Cross	Indicates for the sell side of a cross order whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Conditional
Settlement Period	[N/A] Indicates the settlement delay in trading days, from 0 to 30 days. (TCS is using the Settlement Period defined in the referential at instrument level)	Numerical	1	From 0 to 30	Mandatory
Settlement Flag	Indicates whether the declaration must be settled or not. (0: [indicated as False] means "Not Settled" ; 1: [indicated as True] means "Settled")	Boolean	1	0 = False 1 = True	Mandatory
Guarantee Flag	Indicates if the trade is guaranteed or not (for clearing purposes).	Enumerated	1	1 = Cleared but not Guaranteed 2 = Cleared and Guaranteed	Mandatory
MiFID Indicators	Field used as instruction for order handling. Values indicated (in 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.	Bitmap	1	(See field description)	Mandatory
Transaction Price Type	Contribution to price formation or the price discovery process.	Enumerated	1	1 = Plain Vanilla Trade 2 = Non Price Forming Trade (NPFT) *3 = Trade Not Contributing to Price Discovery Process* 4 = Dark Trade (For Future Use)	Optional
Principal Code	Identifies the beneficiary of the transaction when trading on behalf of another establishment.	Alphanumerical ID	8	(See field description)	Optional
Principal Code Cross	Identifies the beneficiary of the transaction when trading on behalf of another establishment, for the sell side of a cross order.	Alphanumerical ID	8	(See field description)	Optional
Start Time Vwap	Start time for the Volume Weight Average price computation period (Number of seconds since the beginning of the day – UTC Time).	Intraday Time in Seconds	4	From 0 to 2^32-2	Conditional
End Time Vwap	End time for the Volume Weight Average price computation period (Number of seconds since the beginning of the day – UTC Time).	Intraday Time in Seconds	4	From 0 to 2^32-2	Conditional
Gross Trade Amount	Total amount of a Declaration.	Amount	8	From -2^63+1 to 2^63-1	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Account Number	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Alphanumeric al ID	12	(See field description)	Optional
Account Number Cross	Account Number Cross. Client account number identifying the investor's account for the sell side of a cross order. This field is part of the clearing aggregate.	Alphanumeric al ID	12	(See field description)	Optional
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(See field description)	Optional
Free Text Cross	Free Text Cross is manually entered by the trader issuing the order in case of a cross order and concerns the sell side. This field is part of the clearing aggregate.	Text	18	(See field description)	Optional
InvestmentDecisionWFirmShortCode	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	Numerical ID	4	From -2^31 to 2^31-1	Conditional
ClientIdentificationShortCodeCross	MiFID II short code, Client identification code.	Numerical ID	4	From -2^31+1 to 2^31-1	Conditional
CommercialDeclaration length	Defines the length in bytes of the repeating section 1.	Header	1	0	Mandatory
CommertialDeclaration occurrences	Defines how many times the repeating section 1 is repeated.	Header	1	0	Mandatory

5.4.42 Declaration Entry Ack (41)

Client ◀ OEG
Available for: TCS

5.4.42.1 Message Description

The **DeclarationEntryAck** (41) message is sent in response to the **DeclarationEntry** (40) message. This message informs clients of the acknowledgement of positive status of their submission.

5.4.42.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumeric al ID	8	(See field description)	Mandatory
Declaration ID	Numerical declaration identifier assigned by the Exchange.	Numerical ID	8	From 0 to 2^64-2	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Order ID	Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG.	Numerical ID	8	From -2^63+1 to 2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Conditional
MIC of Secondary Listing	Identifies the secondary listing place to which an instrument belongs by its MIC (Market Identification Code.), segment MIC according to ISO 10383.	Alphanumeric al ID	4	(See field description)	Conditional
Operation Type	Type of Operation.	Enumerated	1	(See field description)	Mandatory
Pre Matching Type	Pre-matching delay indicator for a TCS Declaration.	Enumerated	1	(See field description)	Conditional
Waiver Indicator	Waiver Indicator. Values indicated (in 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.	Bitmap	1	(See field description)	Conditional
OEGTimestamps length	Defines the length in bytes of the repeating section 1.	Header	1	0	Mandatory
OEGTimestamps occurrences	Defines how many times the repeating section 1 is repeated.	Header	1	0	Mandatory

5.4.43 Declaration Notice (42)

Client ◀ OEG
Available for: TCS

5.4.43.1 Message Description

The **DeclarationNotice** (42) message is sent to provide the status of a previously submitted declaration to counterparties.

The message is sent as:

- Declaration notification to the counterparty;
- Declaration refusal notice;
- Pre-match Notice;
- Matching Notice;
- Expiration Notice;
- Trade Cancellation Notice.

Please note that the following fields are provided only in case the notice is issued for a Fill or a Pre-Match (*Declaration Status* = '7' or '13') and only to the concerned member if the corresponding necessary values were submitted in the original declaration: *Trade Time*, *Clearing Firm ID*, *Account Type*, *Account Type Cross*, *Trading Capacity*, *Trading Capacity Cross*, *Principal Code*, *Principal Code Cross*, *Account Number*, *Account Number Cross*, *Free Text*, *Free Text Cross*, *Waiver Indicator*.

Trading Venue Transaction Identification Code (TVTIC)

The *Trading Venue Transaction Identification Code (TVTIC)* is the unique identifier of a trade in the MiFID II framework. Each individual trade has a corresponding *TVTIC*.

For TCS trades

The different ways to get a TCS trade *TVTIC* are:

- Using the public Market Data feed, getting the *Trade Unique Identifier* in the **Full Trade Information** (1004) message;
- Using the private Order Entry feed, getting the *Trade Unique Identifier* in the SBE **Declaration Notice** (42) message.

5.4.43.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumeric al ID	8	(See field description)	Mandatory
Client Order ID	Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG.	Numerical ID	8	From -2^63+1 to 2^63-1	Conditional
Declaration ID	Numerical declaration identifier assigned by the Exchange.	Numerical ID	8	From 0 to 2^64-2	Mandatory
Declaration Status	Provides status of the Declaration.	Enumerated	1	(See field description)	Mandatory
Operation Type	Type of Operation.	Enumerated	1	(See field description)	Mandatory
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Entering Counterparty	Identifies the counterpart of the transaction.	Alphanumeric al ID	8	(See field description)	Conditional
Side	Indicates the Executing Side.	Enumerated	1	1 = Buy 2 = Sell 3 = Cross	Conditional
Quantity	Number of traded or ordered units (to be calculated with Quantity Decimals).	Quantity	8	From 0 to 2^64-2	Conditional
Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Conditional
Pre Matching Type	Pre-matching delay indicator for a TCS Declaration.	Enumerated	1	(See field description)	Conditional
Trade Time	Time of the trade.	Timestamp	8	From 0 to 2^64-2	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MIC of Secondary Listing	Identifies the secondary listing place to which an instrument belongs by its MIC (Market Identification Code.), segment MIC according to ISO 10383.	Alphanumeric al ID	4	(See field description)	Conditional
Centralisation Date	Centralisation Date.	Alphanumeric al ID	10	(See field description)	Optional
Clearing Firm ID	Clearing firm ID.	Alphanumeric al ID	8	(See field description)	Conditional
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.	Enumerated	1	(See field description)	Conditional
Account Type Cross	Indicates the account type for which the sell side of a cross order is entered.	Enumerated	1	(See field description)	Conditional
Trading Capacity	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Conditional
Trading Capacity Cross	Indicates for the sell side of a cross order whether the order submission results from trading as matched principal, on own account or as any other capacity.	Enumerated	1	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Conditional
Settlement Flag	Indicates whether the declaration must be settled or not. (0: [indicated as False] means "Not Settled" ; 1: [indicated as True] means "Settled")	Boolean	1	0 = False 1 = True	Conditional
Settlement Period	[N/A] Indicates the settlement delay in trading days, from 0 to 30 days. (Not relevant anymore, TCS is using the Settlement Period defined in the referential at instrument level)	Numerical	1	From 0 to 30	Conditional
Guarantee Flag	Indicates if the trade is guaranteed or not (for clearing purposes).	Enumerated	1	1 = Cleared but not Guaranteed 2 = Cleared and Guaranteed	Conditional
Transaction Price Type	Contribution to price formation or the price discovery process.	Enumerated	1	1 = Plain Vanilla Trade 2 = Non Price Forming Trade (NPFT) *3 = Trade Not Contributing to Price Discovery Process* 4 = Dark Trade (For Future Use)	Conditional
Principal Code	Identifies the beneficiary of the transaction when trading on behalf of another establishment.	Alphanumeric al ID	8	(See field description)	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Principal Code Cross	Identifies the beneficiary of the transaction when trading on behalf of another establishment, for the sell side of a cross order.	Alphanumeric al ID	8	(See field description)	Conditional
Start Time Vwap	Start time for the Volume Weight Average price computation period (Number of seconds since the beginning of the day – UTC Time).	Intraday Time in Seconds	4	From 0 to 2^32-2	Conditional
End Time Vwap	End time for the Volume Weight Average price computation period (Number of seconds since the beginning of the day – UTC Time).	Intraday Time in Seconds	4	From 0 to 2^32-2	Conditional
Gross Trade Amount	Total amount of a Declaration.	Amount	8	From -2^63+1 to 2^63-1	Conditional
Account Number	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Alphanumeric al ID	12	(See field description)	Conditional
Account Number Cross	Account Number Cross. Client account number identifying the investor's account for the sell side of a cross order. This field is part of the clearing aggregate.	Alphanumeric al ID	12	(See field description)	Conditional
Free Text	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	18	(See field description)	Conditional
Free Text Cross	Free Text Cross is manually entered by the trader issuing the order in case of a cross order and concerns the sell side. This field is part of the clearing aggregate.	Text	18	(See field description)	Conditional
Waiver Indicator	Waiver Indicator. Values indicated (in 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.	Bitmap	1	(See field description)	Conditional
Previous Day Indicator	Flag indicator whether declaration matched at D or D-1. (0: [indicated as False] means "matched at D" ; 1: [indicated as True] means "matched at D-1")	Boolean	1	0 = False 1 = True	Conditional
Miscellaneous Fee Amount	Miscellaneous Fee Value. Total order fees related to the funds share creation or redemption applied by the Asset Manager per order.	Amount	8	From -2^63+1 to 2^63-1	Conditional
CCP ID	ID of the clearing house in case of a CCP clearable transaction	Enumerated	1	(See field description)	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
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)	Conditional
OEGTimestamps length	Defines the length in bytes of the repeating section 1.	Header	1	0	Mandatory
OEGTimestamps occurrences	Defines how many times the repeating section 1 is repeated.	Header	1	0	Mandatory
CommercialDeclaration length	Defines the length in bytes of the repeating section 1.	Header	1	0	Mandatory
CommercialDeclaration occurrences	Defines how many times the repeating section 1 is repeated.	Header	1	0	Mandatory

5.4.44 Declaration Cancel and Refusal (43)

Client ▶ OEG
Available for: TCS

5.4.44.1 Message Description

The **DeclarationCancelandRefusal** (43) message is used to request cancellation of a previously matched declaration, or to refuse a declaration upon declaration notification submitted by the counterparty.

Cancellation of a Declaration previously matched can be sent by either sending the *DeclarationID* with the Declaration ID or either by sending the *TradeUniqueIdentifier* with the Trade Unique Identifier.

Note: Cancellation by Trade Unique Identifier will require *DeclarationID* field to be sent (mandatory field) but in this case the content of the field *DeclarationID* is ignored by Optiq.

5.4.44.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Timestamp	8	From 0 to 2^64-2	Mandatory
Client Order ID	Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG.	Numerical ID	8	From -2^63+1 to 2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Declaration ID	Numerical declaration identifier assigned by the Exchange.	Numerical ID	8	From 0 to 2^64-2	Mandatory
Action Type	Provides the request to be performed on an existing declaration, which is identified by its Declaration ID.	Enumerated	1	1 = Declaration Cancellation Request 2 = Declaration Refusal 3 = Trade Cancellation Request	Mandatory
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

5.4.45 Fund Price Input (44)

Client ▶ OEG
Available for: TCS

5.4.45.1 Message Description

The **FundPriceInput** (44) message is used by the Fund Manager to send a price to TCS matching engine used for Fixing and in order to match declaration, when *Operation Type* = '4' or '6'.

5.4.45.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Message Sequence Number	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Message Sending Time	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Timestamp	8	From 0 to 2^64-2	Mandatory
Client Order ID	Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG.	Numerical ID	8	From -2^63+1 to 2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Mandatory
Bypass Indicator	Control indicator of the price and quantity. Indicates whether it should bypass the price and quantity controls or not. (0: [indicated as False] means "Control" ; 1:[indicated as True] means "No Control")	Boolean	1	0 = False 1 = True	Conditional

5.4.46 Fund Price Input Ack (45)

Client ◀ OEG
Available for: TCS

5.4.46.1 Message Description

The **FundPriceInputAck** (45) message is sent to provide the positive acknowledgement of a previously submitted **FundPriceInput** (44) message.

5.4.46.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Client Order ID	Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG.	Numerical ID	8	From -2^63+1 to 2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Mandatory
Price	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Price	8	From -2^63+1 to 2^63-1	Mandatory
Bypass Indicator	Control indicator of the price and quantity. Indicates whether it should bypass the price and quantity controls or not. (0: [indicated as False] means "Control" ; 1:[indicated as True] means "No Control")	Boolean	1	0 = False 1 = True	Conditional

5.4.47 Declaration Entry Reject (46)

Client ◀ OEG
Available for: TCS

5.4.47.1 Message Description

The **DeclarationEntryReject** (46) message is sent in response to the **DeclarationEntry** (40), **DeclarationCancelandRefusal** (43) and **FundPriceInput** (44) messages. This message informs clients if the status of their submission is negative. If message was rejected due to inconsistency of data / presence of multiple fields or conditions checked, the field *Error Code* will indicate only the first instance of inconsistency encountered in the inbound message.

5.4.47.2 Message Structure

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
Message Sequence Number	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Sequence	4	From 0 to 2^32-2	Mandatory
Firm ID	Identifier of the member firm that sends the message.	Alphanumerical ID	8	(See field description)	Mandatory
Client Order ID	Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG.	Numerical ID	8	From -2^63+1 to 2^63-1	Mandatory
Symbol Index	Exchange identification code of the instrument.	Numerical ID	4	From 0 to 2^32-2	Mandatory
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	1	(See field description)	Conditional

FIELD	SHORT DESCRIPTION	FORMAT	LEN	VALUES	PRESENCE
MIC of Secondary Listing	Identifies the secondary listing place to which an instrument belongs by its MIC (Market Identification Code.), segment MIC according to ISO 10383.	Alphanumerical ID	4	(See field description)	Conditional
Operation Type	Type of Operation.	Enumerated	1	(See field description)	Mandatory
Error Code	Error code in case of rejection.	Numerical ID	2	From 0 to 2^16-2	Mandatory
Rejected Message	[N/A] Deprecated field	Numerical ID	1	0..2^8-1	Conditional
Rejected Message ID	Provides the ID (Template ID) of the rejected message.	Numerical ID	2	0..2^16-1	Conditional
OEGTimestamps length	Defines the length in bytes of the repeating section 1.	Header	1	0	Mandatory
OEGTimestamps occurrences	Defines how many times the repeating section 1 is repeated.	Header	1	0	Mandatory

6. FIELD DESCRIPTION

A

Access Flag

FIELD NAME	ACCESS FLAG
Description	Indicates if it is a DMA Access or not. 0=False 1=True
Format	Boolean (unsigned integer 8)
Length	1
Used In	New Order (01) Cancel Replace (06) Cancel Request (12) Mass Cancel (13)
Used For	Cash and Derivatives

Account Number

FIELD NAME	ACCOUNT NUMBER
Description	Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.
Format	Alphanumerical ID (character)
Length	12
Used In	New Order (01) Cancel Replace (06) Quotes (08) MM Sign-In (47) New Wholesale Order (64) Cross Order (67) Declaration Entry (40) Declaration Notice (42) Quote Request (10)
Used For	Cash and Derivatives

Account Number Cross

FIELD NAME	ACCOUNT NUMBER CROSS
Description	Account Number Cross. Client account number identifying the investor's account for the sell side of a cross order. This field is part of the clearing aggregate.
Format	Alphanumerical ID (character)
Length	12
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

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)
Length	1
Possible Values	1 = Client 2 = House 4 = RO 5 = Assigned Broker 6 = Liquidity Provider 7 = Related Party 8 = Structured Product Market Maker *14 = Omega Client - **Deprecated*** *15 = Ceres Client - **Deprecated***
Conditions	It is mandatory for every NewOrder (01) messages. In CancelReplace (06) message, if provided the value is ignored.
Used In	New Order (01) Cancel Replace (06) Quotes (08) Quote Ack (09) Mass Cancel (13) Mass Cancel Ack (14) New Wholesale Order (64) Quote Request (10) RFQ Notification (35) Declaration Entry (40) Declaration Notice (42) Cross Order (67)
Used For	Cash and Derivatives

Account Type Cross

FIELD NAME	ACCOUNT TYPE CROSS
Description	Indicates the account type for which the sell side of a cross order is entered. Only for Cross orders.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Client 2 = House 4 = RO 5 = Assigned Broker - **Not Applicable** 6 = Liquidity Provider 7 = Related Party

FIELD NAME	ACCOUNT TYPE CROSS
	8 = Structured Product Market Maker *14 = Omega Client - **Deprecated*** *15 = Ceres Client - **Deprecated***
Conditions	For NewOrder (01) message it is mandatory for Cross orders and it qualifies the Sell side. It must be populated in the second occurrence of this repeating section. For Declaration Entry (40) message it is mandatory when Side is equal to Cross.
Used In	New Order (01) Declaration Entry (40) Declaration Notice (42)
Used For	Cash

Ack Phase

FIELD NAME	ACK PHASE
Description	Indicates the trading phase during which the Matching Engine has processed the event that has triggered this Ack (03) message.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Continuous Trading Phase 2 = Call Phase 3 = Halt Phase 4 = Closed Phase 5 = Trading At Last Phase 6 = Reserved 7 = Suspended 8 = Random Uncrossing Phase 9 = Uncrossing Phase
Used In	Ack (03)
Used For	Cash and Derivatives

Ack Qualifiers

FIELD NAME	ACK QUALIFIERS
Description	Field used to provide additional information on the corresponding order. 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. - Dark Indicator: Indicates whether the corresponding order was entered as a dark order or not. (0: LIT ; 1: Dark). For Iceberg Order it indicates whether its undisclosed part is eligible to the Dark pool of liquidity or not. - Queue Indicator: Indicates whether the corresponding inbound message was queued because of throttling or not. (0: No ; 1: Yes) - Request with Client Order ID: Indicates whether the order entry is applied with Client Order ID or not. (0: No; 1: Yes) - Use of Cross Partition: Indicates whether the corresponding message routing is applied in different partition or not. (0: No ; 1: Yes) - Executed Upon Entry: Indicates whether the corresponding entered order generates trade or not. This indicator is on 2 bitmaps: number 6 and 7. (00: Information not provided; 10: No trade generated; 11: Trade generated)
Format	Bitmap (unsigned integer 8)
Length	1

FIELD NAME	ACK QUALIFIERS
Possible Values	0 = Dark Indicator 1 = Queue Indicator 2 = Request with Client Order ID 3 = Use of Cross Partition 4 = Internal1 5 = Internal2 6 = Execution Upon Entry flag Enabled 7 = Executed Upon Entry flag
Used In	Ack (03) Kill (05) Reject (07) Quote Ack (09) Mass Cancel Ack (14) Wholesale Order Ack (65)
Used For	Cash and Derivatives

Ack Type

FIELD NAME	ACK TYPE
Description	Indicates the type of the Ack message
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = New Order Ack 1 = Replace Ack 2 = Order Creation By Market Operations 3 = Stop Triggered Ack 4 = Collar Confirmation Ack (Not used anymore) 5 = Refilled Iceberg Ack 6 = MTL Second Ack 7 = Knock-In By Issuer (KIBI) Ack 8 = Knock-Out By Issuer (KOBI) Ack 9 = Payment After Knock-Out (PAKO) Ack 10 = Price Input Ack 11 = RFQ Ack 12 = Bid Only Ack 13 = Offer Only Ack 14 = Iceberg Transformed to Limit due to Minimum size 15 = Ownership Request Ack 16 = VFU/VFC Triggered Ack 17 = Open Order Request Ack 21 = RFIE Ack 22 = Cross Order Ack 23 = Move Dark to COB – Limit Ack 24 = Move Dark to COB – Market Ack 25 = Parked due to end of Session (For Future Use) 26 = Auto RFQ Confirmation Ack 27 = AVD Triggered Ack
Used In	Ack (03)
Used For	Cash and Derivatives

Action Type

FIELD NAME	ACTION TYPE
Description	Provides the request to be performed on an existing declaration, which is identified by its Declaration ID.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Declaration Cancellation Request 2 = Declaration Refusal 3 = Trade Cancellation Request
Used In	Declaration Cancel and Refusal (43)
Used For	TCS (Cash and Derivatives)

AFQ Reason

FIELD NAME	AFQ REASON
Description	Reason why the AFQ (33) has been sent. Indicates the reason why the AFQ (33) message has been sent to the Liquidity Provider.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Quote cancelled by the Liquidity Provider 2 = Quote cancelled by Market Control 3 = No quote M minutes before an uncrossing 4 = No quote S seconds before an uncrossing 5 = Quote completely matched
Used In	Ask For Quote (33)
Used For	Cash

B

Bid Error Code

FIELD NAME	BID ERROR CODE
Description	Error code returned when quote contains an invalid bid. See Error List for details of error codes
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-1
Used In	Quote Ack (09)
Used For	Cash and Derivatives

Bid Order ID

FIELD NAME	BID ORDER ID
Description	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.
Format	Numerical ID (unsigned integer 64)
Length	8
Possible Values	0..2^64-2

FIELD NAME	BID ORDER ID
Conditions	Provided only if the Quotes (08) message contains a bid quote. The field Order ID in Fill (04) message sent in case of trade resulting from a matching against a (bulk) Quote is filled with value in Bid Order ID field corresponding to the Bid quote that participated in the trade.
Used In	Quote Ack (09) Wholesale Order Ack (65)
Used For	Cash and Derivatives

Bid Price

FIELD NAME	BID PRICE
Description	Quote bid price, (To be calculated with Price/Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In Quotes (08) either Bid Price or Offer Price, or both, must be populated
Used In	Quotes (08)
Used For	Cash and Derivatives

Bid Quantity

FIELD NAME	BID QUANTITY
Description	Quote bid quantity, (To be calculated with Quantity Decimals). Cancels a quote if set to zero "0".
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-1
Conditions	In the New Wholesale Order (64) messages submitted by the Initiator the Bid Quantity must be the maximum volume to match in the transaction, and must be provided when the leading side is Buy.
Used In	Quotes (08) New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Cash and Derivatives

Block Length

FIELD NAME	BLOCK LENGTH
Description	Length of the block. The Block is the message without the repeating sections. This is especially useful for new message versions in the case Exchange adds fields at the end of the block. Clients will remain able to process the block fields and know where the repeating sections starts.
Format	Numerical (unsigned integer 16)
Used In	SBE Header
Used For	Cash and Derivatives

Book IN Time

FIELD NAME	BOOK IN TIME
Description	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	In the Ack (03) message it corresponds to the time at which the event generating the Ack (03) entered the matching engine. In the Kill (05) message it corresponds to the time at which the corresponding order has been killed. In the Reject (07) it is provided only in case of a functional rejection, not in case of a technical rejection. In the Trade Bust Notification (19) it corresponds to the trade cancellation time.
Used In	Ack (03) Kill (05) Reject (07) Quote Ack (09) Mass Cancel Ack (14) Trade Bust Notification (19) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) MM Sign-In Ack (48) Security Definition Ack (61) MM Protection Ack (63) Wholesale Order Ack (65) Wave For Liquidity Notification (74)
Used For	Cash and Derivatives

Book OUT Time

FIELD NAME	BOOK OUT TIME
Description	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Ack (03)

FIELD NAME	BOOK OUT TIME
	Fill (04) Kill (05) Quote Ack (09) Mass Cancel Ack (14) Trade Bust Notification (19) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) MM Sign-In Ack (48) Security Definition Ack (61) MM Protection Ack (63) Wholesale Order Ack (65) Wave For Liquidity Notification (74)
Used For	Cash and Derivatives

Breach Action

FIELD NAME	BREACH ACTION
Description	Type of action to trigger when a MM protection limit is breached.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = Ignore 1 = Pull
Conditions	In message MM Protection Request (62) must be populated if Request Type is Set or Adjust
Used In	MM Protection Request (62) MM Protection Ack (63)
Used For	Derivatives

Breach Status

FIELD NAME	BREACH STATUS
Description	Indicator of whether the MMP has been triggered due to limit breach (0 : Not breached ; 1: Breached)
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	0 = False 1 = True
Used In	MM Protection Ack (63)
Used For	Derivatives

Breached Collar Price

FIELD NAME	BREACHED COLLAR PRICE
Description	Breached collar price in case of collar rejection.
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Used In	Reject (07)
Used For	Derivatives

Buy Revision Indicator

FIELD NAME	BUY REVISION INDICATOR
Description	Indicates whether the bid quote is a new quote, a replacement of a previous quote or a cancellation.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = New 1 = Replacement 2 = Cancellation
Used In	Quote Ack (09)
Used For	Cash and Derivatives

Bypass Indicator

FIELD NAME	BYPASS INDICATOR
Description	Control indicator of the price and quantity. Indicates whether it should bypass the price and quantity controls or not. (0: [indicated as False] means "Control" ; 1:[indicated as True] means "No Control")
Format	Boolean
Length	1
Possible Values	0 = False 1 = True
Conditions	For Fund Price Input (44) message, it indicates whether a NAV+/- should be checked against a percentage deviation from the last known NAV+/-.
Used In	Fund Price Input (44) Fund Price Input Ack (45)
Used For	TCS (Cash and Derivatives)

C

CCP ID

FIELD NAME	CCP ID
Description	Clearing House code
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = LCH SA 2 = Bilateral Settlement Traditional Model 3 = LCH Limite 4 = Euronext Clearing Athens 5 = SIX X Clear 6 = Cboe Clear Europe 7 = Bilateral Settlement Italian Model 9 = Euronext Clearing
Conditions	This field is mandatory when a transaction is cleared by a CCP.
Used In	Declaration Notice (42)
Used For	TCS (Cash)

Centralisation Data

FIELD NAME	CENTRALISATION DATA
Description	Cut-off for the trading cycle / session on the Euronext Funds Service: Paris is not identified by the fund agent; as such there is no technical cut-off of a trading session set for such funds. Centralisation date may be used by the client to inform the fund agent for which session the declaration should be eligible for, and may be used as a criteria by the fund agent to accept, or not, a declaration. When used, the declaration should be automatically accepted for the following order collection cycle / session if: - centralisation date is not specified by the client AND the session has passed its cut-off, OR - centralisation date is specified, and fund agent elects not to acknowledge the declaration during the session identified in the broker's message AND doesn't reject the declaration. Should be provided in binary equivalent of YYYY-MM-DD, where YYYY = 0000-9999, MM = 01-12, DD = 01-31 Should be provided for Euronext Funds Service: Paris instruments only.
Format	Alphanumerical ID (character)
Length	10
Conditions	In outbound DeclarationNotice (42) message, it is always provided to Null value.
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Clearing Account

FIELD NAME	CLEARING ACCOUNT
Description	Client account number identifying the investor's account. This field is part of the clearing aggregate.
Format	Alphanumerical ID (character)
Length	16
Used In	New Order (01) Cancel Replace (06) Declaration Entry (40) Declaration Notice (42)
Used For	Cash and Derivatives

Clearing Account Cross

FIELD NAME	CLEARING ACCOUNT
Description	Client account number identifying the investor's account. This field is part of the clearing aggregate.
Format	Alphanumerical ID (character)
Length	16
Used In	New Order (01) Cancel Replace (06) Declaration Entry (40) Declaration Notice (42)
Used For	Cash and Derivatives

Clearing Firm ID

FIELD NAME	CLEARING FIRM ID
Description	Clearing firm ID. Identifier of the give-up firm when a give-up is executed (a give-up is a trade executed by a firm for the client of another firm, the latter being referred to as the give-up firm).
Format	Alphanumerical ID (character)
Length	8
Used In	New Order (01) Cancel Replace (06) Quotes (08) New Wholesale Order (64) Cross Order (67) Declaration Entry (40) Declaration Notice (42) Quote Request (10)
Used For	Cash and Derivatives

Clearing Instruction

FIELD NAME	CLEARING INSTRUCTION
Description	Clearing Instruction. Indicates the pre-posting and give-up action to be taken by the clearing system when a trade has occurred. ■ Process normally ■ Manual mode (pre-posting and/or pre-give up) ■ Automatic posting mode (trade posting to the position account number specified) ■ Automatic give-up mode (trade give-up to the give-up destination number specified) [C]
Format	Enumerated (unsigned integer 16)
Length	2
Possible Values	0 Process normally (formerly Systematic posting) 8 Manual mode 9 Automatic posting mode 10 Automatic give-up mode *4008 Automatic and account authorization- Deprecated* *4009 Manual and account authorization- Deprecated* *4010 Give-up to single firm- Deprecated*
Used In	New Order (01) Cancel Replace (06) Quotes (08) New Wholesale Order (64) Cross Order (67) Quote Request (10)
Used For	Cash and Derivatives

Client ID

FIELD NAME	CLIENT ID
Description	Field used to identify the client (investor). This field is part of the clearing aggregate
Format	Alphanumerical ID (character)
Length	8

FIELD NAME	CLIENT ID
Used In	New Order (01) Cancel Replace (06) Quotes (08) New Wholesale Order (64) Cross Order (67) Quote Request (10)
Conditions	If the field Client ID is provided in the NewOrder (01) or Cancel Replace (06) message for the Derivatives markets the message will be rejected.
Used For	Cash and Derivatives

Client Message Sequence Number

FIELD NAME	CLIENT MESSAGE SEQUENCE NUMBER
Description	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.
Format	Sequence (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Used In	New Order (01) Quotes (08) Request For Implied Execution (66) Cross Order (67) Wave For Liquidity (73) Declaration Entry (40) Declaration Cancel and Refusal (43) Fund Price Input (44)
Used For	Cash and Derivatives

Client Order ID

FIELD NAME	CLIENT ORDER ID
Description	An identifier of a message assigned by the Client when submitting an order to the Exchange. Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG. Clients may provide any value that respects the Client Order ID format, which is an 8-byte signed integer, and the ranges as defined according to their access. The Exchange recommends setting an unique ID per order, Firm and Symbol Index. For order entry, the Client Order ID value is not checked by the Exchange, it is simply returned in the corresponding outbound message to allow clients to reconcile the response message with their original inbound request. For modification and cancellation using the Original Client Order ID as unique identifier, the value is checked by the Exchange for possible duplicates, i.e. different orders submitted with the same Client Order ID. In case of duplication, the inbound request is rejected with the according error code.
Format	Numerical ID (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In inbound application messages, this field is always mandatory. In outbound application messages, this field is provided for solicited messages and not provided (null value) for unsolicited messages. For the Fill (04) message, it is always set to the null value.

FIELD NAME	CLIENT ORDER ID
	For Reject (07) message: - If message is sent due to breach of collars, as in that case there is an Ack (03) message before, the Client Order ID is set to null in the Reject (07); - In all other cases the Client Order ID is populated in the Reject (07).
Used In	New Order (01) Ack (03) Fill (04) Kill (05) Cancel Replace (06) Reject (07) Quotes (08) Quote Ack (09) Quote Request (10) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request Ack (17) Ownership Request (18) Price Input (28) Liquidity Provider Command (32) MM Sign-In (47) MM Sign-In Ack (48) MM Protection Request (62) MM Protection Ack (63) New Wholesale Order (64) Wholesale Order Ack (65) Request For Implied Execution (66) Cross Order (67) Declaration Entry (40) Declaration Entry Ack (41) Declaration Notice (42) Declaration Cancel and Refusal (43) Fund Price Input (44) Fund Price Input Ack (45) Declaration Entry Reject (46)
Used For	Cash and Derivatives

ClientIdentificationShortCode

FIELD NAME	CLIENTIDENTIFICATIONSHORTCODE
Description	MiFID II short code, Client identification code. ESMA description of the field: Code used to identify the client of the member or participant of the trading venue. In case of DEA, the code of the DEA user should be provided. Where the client is a legal entity, the LEI code of the client shall be used. Where the client is not a legal entity, the {NATIONAL_ID} shall be used. In the case of aggregated orders, the flag AGGR shall be used. In case of pending allocations, the flag PNAL shall be used. This field shall be left blank only if the member or participant of the trading venue has no client.

FIELD NAME	CLIENTIDENTIFICATIONSHORTCODE
Format	Numerical ID (signed integer 32)
Length	4
Possible Values	-2^31+1..2^31-1
Conditions	This field is required for DEA User in every inbound message, and when Account Type = Client. Provided in the User Notification (39) message, if User Status concerns a DEA to identify it. To indicate value of AGGR, “1” shall be used. To indicate value of PNAL, “2” shall be used.
Used In	New Order (01) Ack (03) Fill (04) Kill (05) Cancel Replace (06) Reject (07) Quotes (08) Quote Request (10) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request (18) Price Input (28) Liquidity Provider Command (32) User Notification (39) New Wholesale Order (64) Wholesale Order Ack (65) Request For Implied Execution (66) Cross Order (67) Declaration Entry (40)
Used For	Cash and Derivatives

ClientIdentificationShortCodeCross

FIELD NAME	CLIENTIDENTIFICATIONSHORTCODECROSS
Description	MiFID II short code, Client identification code. ESMA description of the field: Code used to identify the client of the member or participant of the trading venue. In case of DEA, the code of the DEA user should be provided. Where the client is a legal entity, the LEI code of the client shall be used. Where the client is not a legal entity, the {NATIONAL_ID} shall be used. In the case of aggregated orders, the flag AGGR shall be used. In case of pending allocations, the flag PNAL shall be used.
Format	Numerical ID (signed integer 32)
Length	4
Possible Values	-2^31+1..2^31-1
Conditions	This field is required for DEA User in every inbound message. To indicate value of AGGR, “1” shall be used. To indicate value of PNAL, “2” shall be used. For the inbound Declaration Entry (40) message it is to be provided when Side is equal to Cross and if the cross order is being submitted to cover orders of two different clients.

FIELD NAME	CLIENTIDENTIFICATIONSHORTCODECROSS
Used In	Declaration Entry (40)
Used For	TCS (Cash and Derivatives)

Collar Rejection Type

FIELD NAME	COLLAR REJECTION TYPE
Description	Hit collar type (high or low) in case of order rejection due to collar breach.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Low dynamic collar 2 = High dynamic collar 3 = Low Static collar 4 = High Static collar
Conditions	This field is not populated when Reject (07) message is sent in cases of rejection that do not involve collars (e.g. for rejection of creation of strategies)
Used In	Reject (07)
Used For	Derivatives

Contract ID

FIELD NAME	CONTRACT ID
Description	Identifier of a derivatives contract (Symbol Index).
Format	Alphanumerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Used In	Mass Cancel (13) Mass Cancel Ack (14)
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)
Length	4
Possible Values	0..2^32-2
Used In	Security Definition Request (60) New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Derivatives

Counterpart Firm ID

FIELD NAME	COUNTERPART FIRM ID
Description	ID of the clearing house in case of a CCP clearable transaction – also in the specific case of Internal Matching Service (IMS) with clearing :

FIELD NAME	COUNTERPART FIRM ID
	'1 ': LCH SA '2 ': Bilateral Settlement '3 ': LCH Limited '4 ': Euronext Clearing Athens '5 ': SIX x-clear '6 ': Cboe Clear Europe '9 ': Euronext Clearing ID of the Counterpart Firm in specific cases described below. The counterpart identifier is provided in the Fill (04) message in case the notified trade is the result of: ■ the Internal Matching Service (IMS) without clearing, ■ a transaction performed on the Public Auctions Market (VPU), ■ a transaction performed on a non-clearable instrument, ■ a transaction performed under a Bilateral Settlement agreement. ■ This field is left aligned blank padded and not null padded (as the other alphanumerical fields).
Format	Alphanumerical ID (character)
Length	8
Conditions	Provided in the Fill (04) message in case the trade is the result of one of the cases listed above. Else not provided.
Used In	Fill (04) RFQ Notification (35)
Used For	Cash

Current MMP Position

FIELD NAME	CURRENT MMP POSITION
Description	Current (Delta or Volume) position for MMP monitoring.
Format	Quantity (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Used In	MM Protection Ack (63)
Used For	Derivatives

D

Dark Execution Instruction

FIELD NAME	DARK EXECUTION INSTRUCTION
Description	Field used as instruction for dark order handling. 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. - Dark Indicator: indicates whether the client requests its order to benefit from LiS Pre-Transparency waiver to match in the Dark. (0: No ; 1: Yes) - Sweep Order Indicator: indicates whether the client requests his order to sweep between both lit and the hidden pool of liquidity (Dark). (0: No ; 1: Yes) - Minimum Quantity Type: indicates whether the Minimum Quantity for a dark order is MES or MAQ. (0: MAQ ; 1: MES) - Dark STP Indicator: indicates whether the STP mechanism is enabled on Dark Book or not. (0: Dark STP disabled; 1: Dark STP enabled).

FIELD NAME	DARK EXECUTION INSTRUCTION
	- Dark Passive Order: indicates whether the Passive Order mechanism is enabled on Dark Book or not. (0: Passive Order disabled; 1: Passive Order enabled)
Format	Bitmap (unsigned integer 8)
Length	1
Possible Values	0 = Dark Indicator *1 = Deferred Trade Indicator - Deprecated* *2 = Displayed Order Interaction - Deprecated* 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Dark STP Indicator 6 = Dark Passive Order Indicator
Conditions	On ETF MTF: Value 0: No is mandatory for the position 3 (Sweep Order Indicator) for any type of LIT order sent by the client.
Used In	New Order (01) Cancel Replace (06) Quote Request (10) RFQ Audit (72) RFQ Notification (35)
Used For	Cash

Declaration ID

FIELD NAME	DECLARATION ID
Description	Numerical declaration identifier assigned by the Exchange.
Format	Numerical ID (unsigned integer 64)
Length	8
Possible Values	From 0 to 2^64-2
Conditions	In the Declaration Entry Ack (42) message it provides the identifier of the declaration. In the Declaration Notice (41) message it provides the identifier of the declaration. In Declaration Cancel Refusal (43) it provides the ID of the declaration refused/to be cancelled.
Used In	Declaration Entry Ack (41) Declaration Notice (42) Declaration Cancel and Refusal (43)
Used For	TCS (Cash and Derivatives)

Declaration Status

FIELD NAME	DECLARTION STATUS
Description	Provides status of the Declaration.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = New Waiting for Counterparty Confirmation 2 = Confirmed by Counterparty 3 = Refused by Counterparty 4 = Pending Cancellation 5 = Cancelled 6 = Time Out 7 = Filled

FIELD NAME	DECLARTION STATUS
	8 = Restated 9 = Expiration of a pending declaration 10 = Elimination of a pending declaration 11 = Elimination of a pre-matched declaration following a CE 12 = Elimination of a pre-matched declaration by MOC 13 = Pre-Matched
Used In	Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Desk ID

FIELD NAME	DESK ID
Description	Field used to identify the Trading Desk
Format	Alphanumerical ID (character)
Length	11
Conditions	The Disclosed Quantity is mandatory for Iceberg orders. Disclosed quantity should be multiple of the instrument's lot size; otherwise the order will be rejected.
Used In	New Order (01) Cancel Replace (06) Cancel Request (12) Mass Cancel (13)
Used For	Cash and Derivatives

Disclosed Quantity

FIELD NAME	DISCLOSED QUANTITY
Description	Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	The Disclosed Quantity is mandatory for Iceberg orders. Disclosed quantity should be multiple of the instrument's lot size; otherwise the order will be rejected.
Used In	New Order (01) Cancel Replace (06)
Used For	Cash

E

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, Derivatives On Exchange Off Book), 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.

FIELD NAME	EMM
	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)
Length	1
Possible Values	1 = Cash and Derivative Central Order Book (COB) 2 = NAV Trading Facility 4 = Derivative Wholesales 5 = Cash On Exchange Off book 6 = Euronext off-exchange trade reports 7 = Derivative On Exchange Off book 8 = ETF MTF - NAV Central Order Book 9 = Listed-not traded 15 = Delta Neutral Contingency leg 99 = Not Applicable (For indices and iNAV)
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	New Order (01) Ack (03) Fill (04) Kill (05) Cancel Replace (06) Reject (07) Quotes (08) Quote Ack (09) Quote Request (10) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request (18) Trade Bust Notification (19) Price Input (28) Liquidity Provider Command (32) Ask For Quote (33) Request For Execution (34) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) User Notification (39)

FIELD NAME	EMM
	MM Sign-In (47) MM Sign-In Ack (48) Instrument Synchronization List (50) MM Protection Request (62) MM Protection Ack (63) Request For Implied Execution (66) Cross Order (67) Wave For Liquidity (73) Wave For Liquidity Notification (74) Clear Book (75) Declaration Entry (40) Declaration Entry Ack (41) Declaration Notice (42) Declaration Cancel and Refusal (43) Fund Price Input (44) Fund Price Input Ack (45) Declaration Entry Reject (46)
Used For	Cash and Derivatives

End Client

FIELD NAME	END CLIENT
Description	[N/A] Optional field the client may use to provide the BIC of the End Client of the RFQ.
Format	Alphanumerical ID (character)
Length	11
Used In	Quote Request (10) RFQ Notification (35)
Used For	Cash

End Time Vwap

FIELD NAME	END TIME VWAP
Description	End time for the Volume Weight Average price computation period (Number of seconds since the beginning of the day – UTC Time).
Format	Intraday Time in Seconds (unsigned integer 32)
Length	4
Conditions	For Declaration Entry (40) message, it is mandatory for declarations when Operation Type = '5' ; and if not provided it is assumed that the VWAP calculation period lasts until the end of the trading session.
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash)

Entering Counterparty

FIELD NAME	ENTERING COUNTERPARTY
Description	Identifies the counterpart of the transaction. Clients may provide a Member ID or an Euronext Member ID.
Format	Alphanumerical ID (character)
Length	8

FIELD NAME	ENTERING COUNTERPARTY
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS

Error Code

FIELD NAME	ERROR CODE
Description	Error code in case of rejection. Provides the return error code when a request is rejected for a functional or a technical reason.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-2
Used In	Reject (07) Technical Reject (108) Wholesale Order Ack (65) Wave For Liquidity Notification (74) Declaration Entry Reject (46)
Used For	Cash and Derivatives

ESCBMembership

FIELD NAME	ESCBMEMBERSHIP
Description	Indicates if the trade is submitted by a member of the European System of Central Bank (ESCB) in performance of monetary, foreign exchange and financial stability policy.
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	0 = False 1 = True
Used In	Fill (04) New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Derivatives

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)
Length	8
Possible Values	From -2^63-1 to 2^63-1
Conditions	Used only for Total Return Future and Market On Close Future trading
Used In	Fill (04)
User For	Derivatives

Exchange ID

FIELD NAME	EXCHANGE ID
Description	Identifies the exchange in the Logon process
Format	Text (character)
Length	8
Conditions	The field “Exchange ID” should be populated by the client with value “EURONEXT” in all environments. This value is also provided back to the client in this field in the outbound messages.
Used In	Logon Ack (101) Logon Reject (102)
Used For	Cash and Derivatives

Exchange IOI ID

FIELD NAME	EXCHANGE IOI ID
Description	Unique identifier of Wave For Liquidity message, assigned by the Exchange.
Format	Numerical ID (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	Populated with a value different than SBE Null Value when Wave For Liquidity Notification (74) is sent: - to acknowledge the Wave For Liquidity (73); - to reject, due to functional reasons, the Wave For Liquidity (73); - to notify counterparties that a new indication of interest was submitted; - to notify the submitter of the indication of interest that an order was placed as an answer to his indication of interest; - to notify counterparties that an existing indication of interest was cancelled; - to notify counterparties that an existing indication of interest was modified;
Used In	Wave For Liquidity Notification (74)
Used For	Cash

Execution ID

FIELD NAME	EXECUTION ID
Description	The Execution ID is unique per instrument and per day. It is the unique identifier of a trade per instrument. This field is provided in case of fill, partial fill or trade cancellation. For example, let x be the reference identifier of a given trade, x is reported in the two Fill (2) messages generated for the both sides of the trade. x will also be used as reference for this trade in the Drop Copy feed. And if this trade is cancelled, x is again reported in the Trade Bust Notification (19) messages sent for the 2 sides of the trade.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Conditions	For trades on a strategy, in Fill (04) messages, the Execution ID field in the Block of the message contains the execution for the Strategy, and in the repeating group this field contains the Execution ID of the individual strategy leg (i.e. the outright).
Used In	Fill (04) Trade Bust Notification (19)
Used For	Cash and Derivatives

Execution Instruction

FIELD NAME	EXECUTION INSTRUCTION
Description	Field used as instruction for order handling. 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. - STP resting order: indicates whether the STP mechanism is “Cancel resting order” or not. (0: STP Resting Order mechanism deactivated ; 1: STP Resting Order mechanism activated) - STP incoming order: indicates whether the STP mechanism is “Cancel incoming order” or not. (0: STP Incoming Order mechanism deactivated ; 1: STP Incoming Order mechanism activated) - Disclosed Quantity Randomization: indicates whether the client requests or not a randomization for the disclosed quantity of his iceberg order. (0: No ; 1: Yes). To be set to ‘0’ on RFQ Market Model. - Disabled Cancel On Disconnect Indicator: indicates whether the client sets his order to be persisted (is not in scope of the Cancel On Disconnect mechanism) or not. (0: Cancel on Disconnect enabled ; 1: Cancel on Disconnect disabled) - RFQ answer: indicates whether the message is an answer to a Quote Request (10) message or not. (0: No ; 1: Yes) - RFQ confirmation: indicates whether the message is a confirmation of a Quote Request (10) message or not. (0: No ; 1: Yes) - Conditional order: indicates for Block segment whether the order is conditional or not. (0: Firm Order ; 1: Conditional Order) - STP both orders: indicates whether the STP mechanism is “cancel both orders” or not. (0: STP Both Orders mechanism deactivated ; 1: STP Both Orders mechanism activated)
Format	Bitmap (unsigned integer 8)
Length	1
Possible Values	0 = STP resting order 1 = STP incoming order 2 = Disclosed Quantity Randomization 3 = Disabled Cancel On Disconnect Indicator 4 = RFQ Answer 5 = RFQ Confirmation 6 = Conditional Order 7 = STP both orders
Conditions	For the Quotes (08) message on the Derivatives markets, only bits 0, 1, 3 and 7 are applicable. All other bits should be set to zero in all cases.
Used In	New Order (01) Cancel Replace (06) Quotes (08)
Used For	Cash and Derivatives

Execution Phase

FIELD NAME	EXECUTION PHASE
Description	Indicates the trading phase during which the trade has occurred.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Continuous Trading Phase 2 = Uncrossing Phase 3 = Trading At Last Phase 4 = Continuous Uncrossing Phase 5 = IPO

FIELD NAME	EXECUTION PHASE
Used In	Fill (04)
Used For	Cash and Derivatives

ExecutionWithinFirmShortCode

FIELD NAME	EXECUTIONWITHINFIRMSHORTCODE
Description	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making. ESMA description of the field: Code used to identify the person (trader) or algorithm within the member or participant of the trading venue who is responsible for the execution of the transaction resulting from the order. Where a natural person is responsible for the execution of the transaction, the person shall be identified by {NATIONAL_ID} Where an algorithm is responsible for the execution of the transaction, this field shall be populated in accordance with Article 9 of [RTS 22 on transaction reporting under Article 26 of Regulation (EU) No 600/2014] Where more than one person or a combination of persons and algorithms are involved in the execution of the transaction, the member or participant or client of the trading venue shall determine the trader or algorithm primarily responsible as specified in Article 9(4) of [RTS on trading obligations under Article 26 of Regulation (EU) No 600/2014] and populate this field with the identity of that trader or algorithm. To indicate 'NORE', value "3" shall be used.
Format	Numerical ID (signed integer 32)
Length	4
Possible Values	-2^31+1..2^31-1
Conditions	This field is mandatory for every application inbound messages. Always provided in outbound messages Ack (03), Fill (04), Kill (05), MassCancelAck (14) and Reject (07) for the Derivatives segments. Provided in the User Notification (39) message, if User Status concerns a Trader or an Algo to identify it. Guideline for algorithm associated values: When an order message is flagged with the ExecutionAlgoIndicator (position 2) in the MiFID Indicators field set to value "0: No algorithm" involved then all positive values (from 0 to 2^63-1) would represent a human trader. If the indicator is set to "1: Algorithm involved" clients are requested to populate this field with the ranges of values identified below. No technical checks would be performed to validate correctness of the ranges used - In–house algorithms with positive range of values between 0 to 2^31-1 - ISV algorithms : negative range of values between -2^31+1 to -1
Used In	New Order (01) Ack (03) Fill (04) Kill (05) Cancel Replace (06) Reject (07) Quotes (08) Quote Ack (09) Quote Request (10) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request (18) Price Input (28)

FIELD NAME	EXECUTIONWITHINFIRMSHORTCODE
	Liquidity Provider Command (32) User Notification (39) MM Sign-In (47) MM Sign-In Ack (48) MM Protection Request (62) MM Protection Ack (63) New Wholesale Order (64) Wholesale Order Ack (65) Request For Implied Execution (66) Cross Order (67) Declaration Entry (40)
Used For	Cash and Derivatives

Expiration Delay

FIELD NAME	EXPIRATION DELAY
Description	Defines the duration in seconds beyond which the RFQ will be executable from the time the RFQ was submitted. If the Delay is reached and conditions for the triggering are not satisfied, the RFQ is cancelled.
Format	Time in Seconds (unsigned integer 16)
Length	4
Conditions	For Quote Request (10) message, it is mandatory when RFQ Type = '2' (Auto RFQ)
Used In	Quote Request (10)
Used For	Cash

Exposure Side

FIELD NAME	EXPOSURE SIDE
Description	Indicates the side of the exposure. This field must always be populated for Derivatives and not be sent for Cash.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Buy 2 = Sell
Conditions	For User status related to MEP: when value is "35 = MEP Activated by Risk Manager, 36 = MEP Deactivated by Risk Manager" Exposure Side field is never populated with a value different than SBE Null Value. For User status not related to MEP: Exposure Side field is never populated with a value different than SBE Null Value.
Used In	User Notification (39)
Used For	Derivatives

F

Family ID

FIELD NAME	FAMILY ID
Description	Identifier of the family. (For Future Use)
Format	Alphanumerical ID (character)

FIELD NAME	FAMILY ID
Length	8
Conditions	If provided in the User Notification (39) message, it specifies the scope of the action specified in User Status.
Used In	User Notification (39)
Used For	Cash and Derivatives

Final Execution ID

FIELD NAME	FINAL EXECUTION ID
Description	This field is used for the Market On Close (MOC) contracts to provide the exec ID of the original trade on the final future instrument.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Conditions	Used only for Market On Close Future trading.
Used In	Fill (04)
Used For	Derivatives

Final Symbol Index

FIELD NAME	FINAL SYMBOL INDEX
Description	This field is used for the Market On Close (MOC) contracts to provide the symbol index of the final future instrument.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-1
Conditions	Used only for Market On Close Future trading.
Used In	Fill (04)
Used For	Derivatives

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.
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. In User Notification (39): • **For Kill Switch:** Firm ID is always provided but it represents the scope of the kill only in case the action has been taken when specified by User Status as Firm; • **For Risk Guard:** Firm ID is always provided but it represents the scope of the action only in case the User Status references Firm, Trader – Algo, DEA or Order Size Limit;
Used In	New Order (01) Ack (03) Fill (04) Kill (05)

FIELD NAME	FIRM ID
	Cancel Replace (06) Reject (07) Quotes (08) Quote Ack (09) Quote Request (10) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request Ack (17) Ownership Request (18) Trade Bust Notification (19) Price Input (28) Liquidity Provider Command (32) Ask For Quote (33) Request For Execution (34) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) User Notification (39) MM Sign-In (47) MM Sign-In Ack (48) Security Definition Request (60) Security Definition Ack (61) MM Protection Request (62) MM Protection Ack (63) New Wholesale Order (64) Wholesale Order Ack (65) Request For Implied Execution (66) Cross Order (67) Wave For Liquidity (73) Wave For Liquidity Notification (74) Declaration Entry (40) Declaration Entry Ack (41) Declaration Notice (42) Declaration Cancel and Refusal (43) Fund Price Input (44) Fund Price Input Ack (45) Declaration Entry Reject (46)
Used For	Cash and Derivatives

Firm ID Publication

FIELD NAME	FIRM ID PUBLICATION
Description	[N/A] Indicates whether the client accept or not to provide its Firm ID to the RFQ recipients. (0:No ; 1:Yes) In case of "Yes", the Firm ID will be provided to Liquidity Providers through the field Counterpart Firm ID in the RFQ Notification (35) message.
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	0 = False

FIELD NAME	FIRM ID PUBLICATION
	1 = True
Used In	Quote Request (10)
Used For	Cash

Free Text

FIELD NAME	FREE TEXT
Description	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.
Format	Text (character)
Length	18
Possible Values	(Free Text)
Used In	New Order (01) Cancel Replace (06) Quotes (08) MM Sign-In (47) MM Sign-In Ack (48) New Wholesale Order (64) Cross Order (67) Declaration Entry (40) Declaration Notice (42) Quote Request (10)
Used For	Cash and Derivatives

Free Text Cross

FIELD NAME	FREE TEXT CROSS
Description	Free Text Cross is manually entered by the trader issuing the order in case of a cross order and concerns the sell side. This field is part of the clearing aggregate.
Format	Text (character)
Length	18
Possible Values	(Free Text)
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

G

Gross Trade Amount

FIELD NAME	GROSS TRADE AMOUNT
Description	Total amount of a Declaration. Indicates the global amount of a declaration when it is expressed as an amount.
Format	Amount
Length	8
Possible Values	From -2^63+1 to 2^63-1
Conditions	For inbound Declaration Entry (40) message (TCS), it is applicable only when Operation Type = ‘6’ for a trade/declaration on Funds if expressed as an amount. If expressed as a quantity, this field should not be provided.

FIELD NAME	GROSS TRADE AMOUNT
	In outbound Declaration Notice (42) messages (from TCS) field Gross Trade Amount is provided only for message with the Operation Type = '6' AND Declaration Status set to 7 = Filled, 13 = Pre-Matched OR 5 = Cancelled.
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Guarantee Flag

FIELD NAME	GUARANTEE FLAG
Description	Indicates if the trade is guaranteed or not (for clearing purposes).
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Cleared but not Guaranteed 2 = Cleared and Guaranteed
Conditions	In outbound Declaration Notice (42) messages (from TCS) field Guarantee flag is provided if the field Settlement Flag is set to 1 = True.
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

I

Input Price Type

FIELD NAME	INPUT PRICE TYPE
Description	Type of input price.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Valuation Price 2 = Alternative Indicative Price (AIP)
Used In	Price Input (28)
Used For	Cash

Instrument Group Code

FIELD NAME	INSTRUMENT GROUP CODE
Description	Instrument Group / Class Identifier.
Format	Alphanumerical ID (character)
Length	2
Used In	Mass Cancel (13) Mass Cancel Ack (14)
Used For	Cash

InvestmentDecisionWFirmShortCode

FIELD NAME	INVESTMENTDECISIONWFIRMSHORTCODE
Description	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision. ESMA description of the field: Code used to identify the person or the algorithm within the member or participant of the trading venue who is responsible for the investment decision. Where a natural person(s) within the member or participant of the trading venue is responsible for the investment decision the person who is responsible or has primary responsibility for the investment decision shall be identified with the {NATIONAL_ID} Where an algorithm is responsible for the investment decision the field shall be populated in accordance with Article 8 of [RTS 22 on transaction reporting under Article 26 of Regulation (EU) No 600/2014.]
Format	Numerical ID (signed integer 32)
Length	4
Possible Values	-2^31+1..2^31-1
Conditions	This field is mandatory when Account Type = Liquidity Provider, Related Party, House or Structured Product Market Maker; and only when DEA Indicator = 0. Also mandatory in in case in the field MIFID Indicators position 1 (InvestmentAlgoIndicator) is set to “1: Algorithm involved”. Guideline for algorithm associated values: When an order message is flagged with the associated InvestmentAlgoIndicator (position 1) in the MiFID Indicators field set to value “0: No algorithm” involved then all positive values (from 0 to 2^63-1) would represent a human trader. If the indicator is set to “1: Algorithm involved” clients are requested to populate this field with the ranges of values identified below. No technical checks would be performed to validate correctness of the ranges used. - In –house algorithms with positive range of values between 0 to 2^31-1 - ISV algorithms : negative range of values between -2^31+1 to -1
Used In	New Order (01) New Wholesale Order (64) Wholesale Order Ack (65) Cross Order (67) Declaration Entry (40) Quote Request (10)
Used For	Cash and Derivatives

Investor ID

FIELD NAME	INVESTOR ID
Description	Field used to identify the investo
Format	Alphanumerical ID (character)
Length	16
Used In	New Order (01) Cancel Request (12) Cancel Replace (06) Mass Cancel (13) Declaration Entry (40) Declaration Notice (42)
Used For	Cash and Derivatives

Investor ID Cross

FIELD NAME	INVESTOR ID CROSS
Description	Field used to identify the investor on the sell side of a dual sided declaration.
Format	Alphanumerical ID (character)
Length	16
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	Cash and Derivatives

IOI ID

FIELD NAME	IOI ID
Description	Unique identifier of Wave For Liquidity message.
Format	Numerical ID (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In the New Order (01), when populated with a value different than SBE Null Value, must be set to the value of the Exchange IOI ID provided by the Exchange in the Wave For Liquidity Notification (74) sent to acknowledge the Wave For Liquditiy (73).
Used In	New Order (01) Wave For Liquidity (73) Wave For Liquidity Notification (74)
Used For	Cash

IOI Quality Indication

FIELD NAME	IOI QUALITY INDICATION
Description	Relative Quality of the indication of interest.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = High 2 = Low 3 = Medium
Used In	Wave For Liquidity (73) Wave For Liquidity Notification (74)
Used For	Cash

IOI Quantity

FIELD NAME	IOI QUANTITY
Description	Indicates the size of the indication of interest.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Small 2 = Medium 3 = Large 4 = Undisclosed Qty
Used In	Wave For Liquidity (73) Wave For Liquidity Notification (74)

FIELD NAME	IOI QUANTITY
Used For	Cash

IOI Side

FIELD NAME	IOI SIDE
Description	Indicates the side of the indication of interest.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Buy 2 = Sell 4 = Undisclosed
Used In	Wave For Liquidity (73) Wave For Liquidity Notification (74)
Used For	Cash

IOI Transaction Type

FIELD NAME	IOI TRANSACTION TYPE
Description	Identifies the reason why the Wave For Liquidity message is being sent towards the Exchange.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = New 2 = Cancel 3 = Replace
Used In	Wave For Liquidity (73)
Used For	Cash

IOI Type

FIELD NAME	IOI TYPE
Description	Identifies the reason why the Wave For Liquidity Notification (74) message is being sent by the Exchange.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Ack 2 = Reject 3 = New IOI Notification 4 = IOI Reply Notification 5 = IOI Cancellation Notification 6 = IOI Replacement Notification
Used In	Wave For Liquidity Notification (74)
Used For	Cash

K

Kill Reason

FIELD NAME	KILL REASON
Description	Order Kill Reason
Format	Enumerated (unsigned integer 16)
Length	2
Possible Values	1 = Order Cancelled by Client 2 = Order Expired 3 = Order Cancelled by Market Operations 4 = Order Eliminated due to Corporate Event 5 = Done for day 6 = Cancelled MTL in an empty Order Book 7 = Cancelled by STP 8 = Remaining quantity killed (IOC) 9 = Beginning of PAKO Period 11 = Order Cancelled due to Cancel On Disconnect Mechanism 12 = RFQ expired 13 = RFQ partially or fully matched with other counterparts 14 = RFQ cancelled by the issuer 15 = RFQ Not matched due to issuer order's features 16 = Quote cancelled due to Knock-Out 17 = Order cancelled due to a Kill command 18 = Order cancelled due to Static Collars 19 = LP Order cancelled due to RFQ expiration 20 = LP Order cancelled due to RFQ cancellation 21 = RFQ Remaining quantity killed 22 = LP Order cancelled due to RFQ confirmation 23 = Order cancelled due to Market Maker Protection 24 = Order cancelled by clearing risk manager 25 = Order cancelled by member risk manager 26 = Order cancelled due to Trade Price Validation 30 = Conditional Order cancelled due to Potential Matching 36 = Order Cancelled due to a potential trade outside FSP limits 37 = Remaining RFC Quantity Cancelled 38 = Order Cancelled due to an incorrect Reactor response 41 = Order Cancelled due to Order Price Control Collar breach 42 = Order Cancelled due to Execution Prevention Across All Firms 43 = Cancelled due to Breach of MEP set by a clearing risk manager 44 = Cancelled due to Breach of MEP set by a member risk manager 45 = Auto RFQ fully matched with other counterparts 46 = Order Cancelled due to incompatibility with Uncrossing Price 47 = Order Cancelled due to Remaining Non Allocated Quantity 48 = Order Cancelled by Market Operations due to CSD Unavailability
Conditions	Value 12 is used when an order is cancelled due to RFQ expiration. It happens when the RFQ issuer does not validate the RFQ after a predefine period of time.
Used In	Kill (05)
Used For	Cash and Derivatives

L

Last Book IN Time

FIELD NAME	LAST BOOK IN TIME
Description	Last Matching Engine IN time (in ns) processed on the associated Resynchronization ID.
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Synchronization Time (51)
Used For	Cash and Derivatives

Last Client Message Sequence Number

FIELD NAME	LAST CLIENT MESSAGE SEQUENCE NUMBER
Description	Indicates the sequence number of the last message received by the Exchange from the Client on the OE Session.
Format	Sequence (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Used In	Logon Ack (101) Logon Reject (102)
Used For	Cash and Derivatives

Last Message Sequence Number

FIELD NAME	LAST MESSAGE SEQUENCE NUMBER
Description	Indicates the sequence number of the last message received by the Client from the Exchange on the OE Session.
Format	Sequence (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Used In	Logon (100) Logon Reject (102)
Used For	Cash and Derivatives

Last Traded Price

FIELD NAME	LAST TRADED PRICE
Description	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with the Price/Index Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In the Trade Bust Notification (19) message the Last Traded Price refers to Price of the cancelled trade.
Used In	Fill (04) Trade Bust Notification (19)

FIELD NAME	LAST TRADED PRICE
Used For	Cash and Derivatives

Last Traded Quantity

FIELD NAME	LAST TRADED QUANTITY
Description	The Last Traded Quantity indicates the quantity of last fill on an instrument (to be calculated with the Quantity Decimals).
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	In the Trade Bust Notification (19) message the Last Traded Quantity refers to Quantity of the cancelled trade.
Used In	Fill (04) Trade Bust Notification (19)
Used For	Cash and Derivatives

Leaves Quantity

FIELD NAME	LEAVES QUANTITY
Description	Indicates the remaining quantity of an order, i.e. the quantity open for further execution.
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Fill (04)
Used For	Cash and Derivatives

Leg Error Code

FIELD NAME	LEG ERROR CODE
Description	Error code in case of rejection for the Leg. Provides the return error code when a request is rejected for a functional or a technical reason.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-2
Used In	Wholesale Order Ack (65)
Used For	Derivatives

Leg Instrument ID

FIELD NAME	LEG INSTRUMENT ID
Description	Numerical leg instrument identifier (SymbolIndex) valid for the life of the instrument.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Used In	Fill (04) Cross Order (67)
Used For	Derivatives

Leg Last Traded Price

FIELD NAME	LEG LAST TRADED PRICE
Description	Leg Last Traded Price
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Used In	Fill (04) Cross Order (67)
Used For	Derivatives

Leg Last Traded Quantity

FIELD NAME	LEG LAST TRADED QUANTITY
Description	Leg Last Traded Quantity
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Fill (04) Cross Order (67)
Used For	Derivatives

Leg Last Trading Date

FIELD NAME	LEG MATURITY DATE
Description	Last Trading Date of the leg of the strategy (text formatted as YYYYMMDD).
Format	Numerical ID (unsigned integer 64)
Length	8
Possible Values	YYYYMMDD
Conditions	In Security Definition Request (60) and New Wholesale Order (64) messages this field should be populated when required to identify a Derivative outright as a leg of the strategy.
Used In	Security Definition Request (60) New Wholesale Order (64)
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)
Length	8
Possible Values	-2^63+1..2^63-1
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	Security Definition Request (60) New Wholesale Order (64)
Used For	Derivatives

Leg Put Or Call

FIELD NAME	LEG PUT OR CALL
Description	Type of the option as leg.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Call 0 = Put
Conditions	Only for Derivative Markets and Mandatory in message Security Definition Request (60) and New Wholesale Order (64) only populated for strategies when leg is an Option
Used In	Security Definition Request (60) New Wholesale Order (64)
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)
Length	4
Possible Values	0..99999
Conditions	For New Wholesale Order (64) only populated for strategies
Used In	Security Definition Request (60) New Wholesale Order (64)
Used For	Derivatives

Leg Security Type

FIELD NAME	LEG SECURITY TYPE
Description	Defines the type of instrument of the Leg
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = Future 1 = Option 2 = Cash
Used In	Security Definition Request (60) New Wholesale Order (64)
Used For	Derivatives

Leg Side

FIELD NAME	LEG SIDE
Description	Indicates the side of the trade leg.

FIELD NAME	LEG SIDE
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Buy 2 = Sell
Conditions	For New Wholesale Order (64) only populated for strategies
Used In	Fill (04) Security Definition Request (60) New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Derivatives

Leg Strike Price

FIELD NAME	LEG 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.
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In Security Definition Request (60) message this field should be populated with the Null value
Used In	Security Definition Request (60) New Wholesale Order (64)
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)
Length	4
Possible Values	0..2^32-2
Used In	Security Definition Request (60) New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Derivatives

Limit Matching Price

FIELD NAME	LIMIT MATCHING PRICE
Description	Defines the price from which the RFQ can be executed, as the RFQ must only be executed if the best price available among the LP answers and COB orders is better than or equal to the RFQ's limit matching price. The Limit Matching Price is provided by the RFQ Issuer.
Format	Price (signed integer 64)
Length	8

FIELD NAME	LIMIT MATCHING PRICE
Possible Values	-2^63+1..2^63-1
Conditions	For Quote Request (10) message, it is mandatory when RFQ Type = '2' (Auto RFQ)
Used In	Quote Request (10)
Used For	Cash

LIS Transaction ID

FIELD NAME	LIS TRANSACTION ID
Description	ID that can be used to associate Executions belonging to the same Wholesale Transaction. Applicable for LIS, EFS and Against Actuals.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Used In	Fill (04) Trade Bust Notification (19) New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Derivatives

Log Out Reason Code

FIELD NAME	LOG OUT REASON CODE
Description	Log Out Reason Code. Value 0 is provided by the client, all other possible values are provided by the Exchange.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = Regular Logout By Client 1 = End Of Day 2 = Too many unknown messages 3 = Excessive Number of Messages 4 = Excessive Amount of Data in Bytes 5 = Excessive Number of Messages and Amount of Data in Bytes 6 = Logout By Market Operations
Used In	Logout (103)
Used For	Cash and Derivatives

Logical Access ID

FIELD NAME	LOGICAL ACCESS ID
Description	Identifier of the Logical Access.
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Conditions	It is required in both Logon (100) and Logout (103) messages. It is required in the OwnershipRequest (18) message when the Order ID is not provided. In the Mass Cancel (13) message it can be used as filter to cancel orders belonging to this Logical Access. In User Notification (39), for Derivatives and concerning Risk Guard functionality, if populated with a value different from SBE Null value identifies the scope of the value provided in the User Status – linked with Suspension/Unsuspension or Block/Unblock contols.

FIELD NAME	LOGICAL ACCESS ID
Used In	Logon (100) Mass Cancel (13) Mass Cancel Ack (14) Ownership Request Ack (17) Ownership Request (18) MM Sign-In (47) MM Sign-In Ack (48) User Notification (39)
Used For	Cash and Derivatives

Logon Reject Code

FIELD NAME	LOGON REJECT CODE
Description	Provides the logon rejection reason.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Unknown Connection Identifier 2 = System unavailable 3 = Invalid sequence number 4 = Client session already logged on 5 = Client session disabled 6 = Invalid Queueing Indicator 7 = Invalid Logon format
Used In	Logon Reject (102)
Used For	Cash and Derivatives

Long Client ID

FIELD NAME	CLIENT ID
Description	Field used to identify the Client (investor), or trader's reference / posting order number for a pre-posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives. For Cash Markets this field is ignored except for IPO where this field is used to provide the information of the tax code.
Format	Alphanumerical ID (character)
Length	16
Used In	New Order (01) Cancel Replace (06) MM Sign In (47) MM Sign In Ack (48) New Wholesale Order (64) Cross Order (67)
Conditions	For Cash Markets this field is ignored except for IPO where this field is used to provide the information of the tax code.
Used For	Derivatives

LP Action Code

FIELD NAME	LP ACTION CODE
Description	Action the LP wants to apply on the specified instrument of warrant type.

FIELD NAME	LP ACTION CODE
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Knock-In By Issuer (KIBI) 2 = Knock-Out By Issuer (KOBI) 3 = Payment After Knock-Out (PAKO) 4 = Bid Only 5 = Offer Only
Used In	Liquidity Provider Command (32)
Used For	Cash

LP ID

FIELD NAME	LP ID
Description	Indicates the Liquidity Provider ID under a given Firm ID for which dedicated Market Maker Roles and Obligations can be defined.
Format	Numerical ID (unsigned integer 32)
Length	10
Conditions	For Cash Markets, this field is ignored.
Used In	New Order (01)
Used For	Derivatives

LP Role

FIELD NAME	LP ROLE
Description	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider 12 = RFQ Liquidity Provider
Conditions	Liquidity Provider Role is mandatory when Account Type is equal to "Liquidity Provider". In CancelReplace (06) message, if provided the value is ignored. This field is not populated in message Security Definition Request (60) only for the leg that is an Option. For derivative markets, it should be set to the default value of '1' (Liquidity Provider).
Used In	New Order (01) Cancel Replace (06) Quotes (08) Quote Ack (09)
Used For	Cash and Derivatives

M

Margin Trading Flag

FIELD NAME	MARGIN TRADING FLAG
Description	Indicates if the order is a Margin Trade order or not. 0=False 1=True

FIELD NAME	MARGIN TRADING FLAG
Format	Boolean (unsigned integer 8)
Possible Values	0 = False 1 = True
Used In	New Order (01) Cancel Replace (06) Cancel Request (12) Mass Cancel (13)
Used For	Cash and Derivatives

Market Condition

FIELD NAME	MARKET CONDITION
Description	Field indicating the mode during which the Unpriced Orders Restriction must be applied. 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. - Call Mode: indicates whether the Unpriced Orders Restriction is applicable during Call Mode or not (0: No; 1: Yes). - Continuous Mode: indicates whether the Unpriced Orders Restriction is applicable during Continuous Mode or not (0: No; 1: Yes).
Format	Bitmap (unsigned integer 8)
Length	1
Possible Values	0= Call Mode 1= Continuous Mode
Used In	User Notification (39)
Used For	Cash

Market Phase Flag

FIELD NAME	MARKET PHASE FLAG
Description	Indicates the market phase to which the orders are eligible to.
Format	Enumerated (unsigned integer 8)
Possible Values	1 = Continuous trading only (default) 2 = Trading At Last (TAL) trading only 3 = Both
Used In	New Order (01) Cancel Replace (06) Cancel Request (12) Mass Cancel (13)
Used For	Cash and Derivatives

Market Place 2

FIELD NAME	MARKET PLACE 2
Description	It defines the Market place. Introduced with the new IA Messages implementation for Matrix/Satrun, this Alphanumerical field should be used in priority, instead of the old "MarketPlace" enumerated field.
Format	Alphanumerical ID (character)

FIELD NAME	MARKET PLACE 2
Length	3
Used In	User Notification (39)
Used For	Cash and Derivatives

Maturity

FIELD NAME	MATURITY
Description	[N/A] Scope of active orders to be cancelled according the selected maturity, expressed in YYYYMMDD format. For monthly DD must be set to 00. To identify weeklies and dailies DD must be set to the last trading day. (For Future Use)
Format	Alphanumerical ID (character)
Length	8
Used In	Mass Cancel (13) Mass Cancel Ack (14)
Used For	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)
Length	1
Possible Values	1 = Price 2 = Spread in basis points 3 = Spread
Conditions	Currently this functionality is used only for TRF and MOC products, and for TAS on Commodity Futures. Note that for the TRF products the value “Spread” means “Spread in index point”
Used In	Cross Order (67) New Wholesale Order (64) Fill (04)
User For	Derivatives

Message Sending Time

FIELD NAME	MESSAGE SENDING TIME
Description	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	New Order (01) Ack (03) Kill (05) Cancel Replace (06) Quote Ack (09) Quote Request (10) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request (18)

FIELD NAME	MESSAGE SENDING TIME
	Price Input (28) Liquidity Provider Command (32) MM Sign-In (47) MM Sign-In Ack (48) Security Definition Request (60) Security Definition Ack (61) MM Protection Request (62) MM Protection Ack (63) New Wholesale Order (64) Wholesale Order Ack (65) Request For Implied Execution (66) Cross Order (67) Wave For Liquidity (73) Wave For Liquidity Notification (74) Declaration Entry (40) Declaration Cancel and Refusal (43) Fund Price Input (44)
Used For	Cash and Derivatives

Message Sequence Number

FIELD NAME	MESSAGE SEQUENCE NUMBER
Description	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)
Format	Sequence (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Used In	Ack (03) Fill (04) Kill (05) Reject (07) Quote Ack (09) Mass Cancel Ack (14) Ownership Request Ack (17) Trade Bust Notification (19) Ask For Quote (33) Request For Execution (34) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) User Notification (39) MM Sign-In Ack (48) Instrument Synchronization List (50) Synchronization Time (51) Security Definition Ack (61) MM Protection Ack (63) Wholesale Order Ack (65) Wave For Liquidity Notification (74) Clear Book (75) Declaration Entry Ack (41) Declaration Notice (42)

FIELD NAME	MESSAGE SEQUENCE NUMBER
	Fund Price Input Ack (45) Declaration Entry Reject (46)
Used For	Cash and Derivatives

MIC of Secondary Listing

FIELD NAME	MIC OF SECONDARY LISTING
Description	Identifies the secondary listing place to which an instrument belongs by its MIC (Market Identification Code.), segment MIC according to ISO 10383.
Format	Alphanumerical ID (character)
Length	4
Conditions	In inbound DeclarationEntry (40) messages for declaration on the secondary listing place (Operation Type = '7'), the field Symbol Index and MIC of Secondary Listing must be provided. In associated outbound messages, provided only to acknowledge receipt of the original declaration.
Used In	Declaration Entry (40) Declaration Entry Ack (41) Declaration Notice (42) Declaration Entry Reject (46)
Used For	TCS (Cash and Derivatives)

MiFID Indicators

FIELD NAME	MIFID INDICATORS
Description	Field used as instruction for order handling. 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. - DEA Indicator: indicates whether the order was submitted via a Direct Electronic Access (DEA) connection or not. It must be set to 1 for DEA access. (0: No ; 1: Yes) If set to 1, then field ClientIdentificationShortCode must be populated. - InvestmentAlgoIndicator: indicates whether the investment decision was submitted by a trading algorithm or not. (0: No algorithm involved ; 1: Algorithm involved) This value must be set to 1 for cases where Algorithm has made the Investment decision. If set to 1, then field InvestmentDecisionWFirmShortCode must be filled. - ExecutionAlgoIndicator: indicates whether the order execution was submitted by a trading algorithm or not. (0: No algorithm involved ; 1: Algorithm involved) - CommodityDerivativeIndicator: indicates for a commodity derivative or a warrant with a commodity underlying, if the trade reduces the risk. (0: Order not associated with reduction of risk for Commodity Derivatives or Warrants with Commodity underlyings ; 1: Risk Reduction flag for orders associated with Commodity Derivatives or Warrants with Commodity underlyings) - Deferral Indicator: Indicates whether the order is candidate for a deferred publication of the resulting trade(s) or not. (0: Not Candidate ; 1: Candidate) - FR MAR AMP LP: Indicates whether the order is subject to French Market Abuse Regulation Accepted Market Practice Liquidity provision or not (0: Not subject to FR MAR AMP LP ; 1: Subject to FR MAR AMP LP). This is related to the AMAFI (Association française des marchés financiers) market abuse prevention. Example: If an order is subject to FR MAR AMP LP (French Market Abuse Regulation Accepted Market Practice Liquidity provision), the sixth position from the right to the left is set to '1': MiFID Indicators = '00100000'
Format	Bitmap (unsigned integer 8)
Length	1
Possible Values	0 = DEA Indicator 1 = InvestmentAlgoIndicator

FIELD NAME	MIFID INDICATORS
	2 = ExecutionAlgoIndicator 3 = CommodityDerivativeIndicator 4 = Deferral Indicator 5 = FR MAR AMP LP (AMAFI)
Conditions	Always provided in outbound messages Ack (03), Fill (04), Kill (05), MassCancelAck (14) and Reject (07) for the Derivatives segments. On the Derivatives segments, for the New Wholesale Order (64) inbound messages • positions 0, 3 and 4, may apply on the message level (not individual leg level) • positions 1, 2 and 5 do not apply, and should always be filled with zero (0)
Used In	New Order (01) Ack (03) Fill (04) Kill (05) Cancel Replace (06) Reject (07) Quotes (08) Mass Cancel Ack (14) New Wholesale Order (64) Wholesale Order Ack (65) Request For Implied Execution (66) Cross Order (67) Declaration Entry (40) Quote Request (10)
Used For	Cash and Derivatives

Minimum Order Quantity

FIELD NAME	MINIMUM ORDER QUANTITY
Description	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	New Order (01) Quote Request (10) RFQ Notification (35)
Conditions	Minimum Order Quantity must be provided when Dark Execution Instruction, bit in position 5 from the left (corresponding to Minimum Quantity Type) is equal to 1 (MES), else the order could never be executed during the RFQ matching mechanism
Used For	Cash and Derivatives

Minimum Number Of LPs

FIELD NAME	MINIMUM NUMBER OF LPS
Description	Defines the minimum number of distinct LPs (distinct Firm ID) that must submit an answer for the RFQ to be executed
Format	Numerical (unsigned integer 8)
Length	1
Possible Values	0..2^8-2

FIELD NAME	MINIMUM NUMBER OF LPS
Conditions	For Quote Request (10) message, it is mandatory when RFQ Type = '2' (Auto RFQ)
Used In	Quote Request (10)
Used For	Cash

Minimum Order Quantity

FIELD NAME	MINIMUM ORDER QUANTITY
Description	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals
Format	Quantity (unsigned integer 64)
Used In	Quote Request (10) New Order (01) RFQ Notification (35) RFQ Audit (72)
Used For	Cash and Derivatives

Miscellaneous Free Amount

FIELD NAME	MISCELLANEOUS FREE AMOUNT
Description	Miscellaneous Fee Value. Total order fees related to the funds share creation or redemption applied by the Asset Manager per order.
Format	Amount (signed integer 64)
Length	8
Possible Values	From -2^63+1 to 2^63-1
Used In	Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

MMP Execution Type

FIELD NAME	MMP EXECUTION TYPE
Description	Type of MM Protection Execution. - bit in position 0 - Notification (0: No ; 1: Yes) - bit in position 1 - Acknowledgment (0: No ; 1: Yes) - bit in position 2 - Pull (0: No ; 1: Yes)
Format	Bitmap (unsigned integer 8)
Length	1
Possible Values	0 = Notification 1 = Acknowledgement 2 = Pull
Used In	MM Protection Ack (63)
Used For	Derivatives

N

Non Executing Client ID

FIELD NAME	NON EXECUTING CLIENT ID
Description	This field will be used as unique client Key. Field indicating the client ID of the participant in a commercial package.

FIELD NAME	NON EXECUTING CLIENT ID
Format	Numerical ID (unsigned integer 64)
Length	2
Possible Values	0..2^16-1
Used In	New Order (01) New Wholesale Order (64) Wholesale Order Ack (65) Cross Order (67)
Used For	Derivatives

NonExecutingBrokerShortCode

FIELD NAME	NONEXECUTINGBROKERSHORTCODE
Description	MiFID II short code, Non-executing broker, identifier of the non-executing broker. ESMA description of the field: In accordance with Article 2(d). This field shall be left blank when not relevant.
Format	Numerical ID (signed integer 32)
Length	4
Possible Values	-2^31+1..2^31-1
Used In	New Order (01) New Wholesale Order (64) Wholesale Order Ack (65) Cross Order (67) Quote Request (10)
Used For	Cash and Derivatives

Number Of LPs

FIELD NAME	NUMBER OF LPS
Description	Indicates the number of LP answers to the RFQ (whether they can be executed or not)
Format	Numerical (unsigned integer 8)
Length	1
Possible Values	0..2^8-2
Used In	RFQ Matching Status (36)
Used For	Cash

O

OE Partition ID

FIELD NAME	OE PARTITION ID
Description	Identifies uniquely an OE Optiq partition by which the engine is reached.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-2
Conditions	In Logon (100) message it must be set according to the partition to which the messages are sent.

FIELD NAME	OE PARTITION ID
	In the Ownership Request (18) message it is optional, if populated it used to restrict the request of ownership to the orders belonging to the specified Logical Access ID and entered through this partition. In the Mass Cancel (13) message it is optional but cannot be populated if Logical Access ID is not populated ; if populated it used as filter to cancel orders entered through this partition (it can be combined with other criteria).
Used In	Logon (100) Mass Cancel (13) Mass Cancel Ack (14) Ownership Request Ack (17) Ownership Request (18) MM Sign-In (47) MM Sign-In Ack (48)
Used For	Cash and Derivatives

OEG IN From ME

FIELD NAME	OEG IN FROM ME
Description	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Ack (03) Fill (04) Kill (05) Reject (07) Quote Ack (09) Mass Cancel Ack (14) Trade Bust Notification (19) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) MM Sign-In Ack (48) Security Definition Ack (61) MM Protection Ack (63) Wholesale Order Ack (65) Wave For Liquidity Notification (74)
Used For	Cash and Derivatives

OEG IN From Member

FIELD NAME	OEG IN FROM MEMBER
Description	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Ack (03) Kill (05)

FIELD NAME	OEG IN FROM MEMBER
	Reject (07) Quote Ack (09) Mass Cancel Ack (14) MM Sign-In Ack (48) Security Definition Ack (61) MM Protection Ack (63) Wholesale Order Ack (65) Wave For Liquidity Notification (74)
Used For	Cash and Derivatives

OEG OUT To ME

FIELD NAME	OEG OUT TO ME
Description	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Ack (03) Kill (05) Reject (07) Quote Ack (09) Mass Cancel Ack (14) MM Sign-In Ack (48) Security Definition Ack (61) MM Protection Ack (63) Wholesale Order Ack (65) Wave For Liquidity Notification (74)
Used For	Cash and Derivatives

OEG OUT To Member

FIELD NAME	OEG OUT TO MEMBER
Description	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Ack (03) Fill (04) Kill (05) Reject (07) Quote Ack (09) Mass Cancel Ack (14) Trade Bust Notification (19) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) MM Sign-In Ack (48)

FIELD NAME	OEG OUT TO MEMBER
	Instrument Synchronization List (50) Synchronization Time (51) Security Definition Ack (61) MM Protection Ack (63) Wholesale Order Ack (65) Technical Reject (108) Wave For Liquidity Notification (74) Clear Book (75)
Used For	Cash and Derivatives

Offer Error Code

FIELD NAME	OFFER ERROR CODE
Description	Error code returned when a quote contains an invalid offer. See Error List for details of error codes.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-2
Used In	Quote Ack (09)
Used For	Cash and Derivatives

Offer Order ID

FIELD NAME	OFFER ORDER ID
Description	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.
Format	Numerical ID (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	The field Order ID in Fill (04) message sent in case of trade resulting from a matching against a (bulk) Quote is filled with value in Offer Order ID field corresponding to the Offer quote that participated in the trade.
Used In	Quote Ack (09) Wholesale Order Ack (65)
Used For	Cash and Derivatives

Offer Price

FIELD NAME	OFFER PRICE
Description	Quote offer price, (To be calculated with Price/Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In Quotes (08) either Bid Price or Offer Price, or both, must be populated
Used In	Quotes (08)
Used For	Cash and Derivatives

Offer Quantity

FIELD NAME	OFFER QUANTITY
Description	Quote offer quantity, (To be calculated with Quantity Decimals). Cancels a quote if set to zero "0".
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	In the New Wholesale Order (64) messages submitted by the Initiator the Offer Quantity must be the maximum volume to match in the transaction when the leading side is Sell.
Used In	Quotes (08) New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Cash and Derivatives

Open Close

FIELD NAME	OPEN CLOSE
Description	Open Close Indicator, Posting action. This field is part of the clearing aggregate. The first bit will be used to indicate whether this field is being actively used or not (1 = Actively Used ; 0 = Field Not Used). For each Leg 0 means Open and 1 means Close. Leg 2 to Leg 9 are applicable for Derivatives strategy instruments (not for cash instruments).
Format	Bitmap (unsigned integer 16)
Length	2
Possible Values	0 = Field Actively Used 1 = Leg 1 2 = Leg 2 3 = Leg 3 4 = Leg 4 5 = Leg 5 6 = Leg 6 7 = Leg 7 8 = Leg 8 9 = Leg 9
Used In	New Order (01) Cancel Replace (06) Quotes (08) New Wholesale Order (64) Cross Order (67) Quote Request (10)
Used For	Cash and Derivatives

Option Type

FIELD NAME	OPTION TYPE
Description	[N/A] Type of the option. (For Future Use)
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Call

FIELD NAME	OPTION TYPE
	2 = Put 3 = Other
Used In	Mass Cancel (13) Mass Cancel Ack (14)
Used For	Derivatives

Operation Type

FIELD NAME	OPERATION TYPE
Description	Type of Operation.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Declaration of a trade outside the book 4 = Fund order (quantity) 5 = Declaration of a VWAP transaction 6 = Fund order (cash amount) 7 = Declaration of a trade on a Secondary listing place
Used In	Declaration Entry (40) Declaration Entry Ack (41) Declaration Notice (42) Declaration Entry Reject (46)
User For	TCS

Order Actor Type

FIELD NAME	ORDER ACTOR TYPE
Description	Member role sending the Cross Order (67).
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Initiator 2 = Reactor
Used In	Cross Order (67)
User For	Derivatives

Order Amount Limit

FIELD NAME	ORDER AMOUNT LIMIT
Description	Indicates the Maximum Order Amount above which all orders will be rejected by Matching Engine. (To be calculated with Amount Decimals).
Format	Amount (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	User Notification (39)
Used For	Cash

Order Category

FIELD NAME	ORDER CATEGORY
Description	Field used as instruction for order handling. When not provided or provided at the Null Value, it is assumed to be set at value 1 “Lit Order”. - Lit Order: indicates whether the client requests to cancel a Lit order. - LIS Order: indicates whether the client requests to cancel a LIS order. - Quote Request: indicates whether the client requests to cancel a Quote Request. - RFQ LP Answer: indicates whether the client requests to cancel an LP Answer to a Quote Request.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer
Conditions	When not provided or provided at the Null Value, it is assumed to be set at value 1 “Lit Order”. On Block Segment, in CancelRequest (12) message, Order Category should be set at value 2 (LiS Order)
Used In	Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request Ack (17) Ownership Request (18)
Used For	Cash

Order Expiration Date

FIELD NAME	ORDER EXPIRATION DATE
Description	Field used as date of order expiration for GTD orders. - Format : MMDD - Minimum Value : 0101 (Jan 1st) - Maximum Value : 1231 (Dec 31st) - If the day provided is greater or equal to the current trading date, the year to be applied will be the current year - If the day provided is lower than current trading date, the year to be applied will be the current year plus one
Format	Date (unsigned integer 16)
Length	2
Possible Values	0..2^16-2
Conditions	Order Expiration Date is mandatory for GTD orders.
Used In	New Order (01) Cancel Replace (06)
Used For	Cash and Derivatives

Order Expiration Time

FIELD NAME	ORDER EXPIRATION TIME
Description	*[N/A] Field used as time of order expiration for GTT orders.* *- Format : HHMMSS* *- Minimum Value : 0 (00:00:00)*

FIELD NAME	ORDER EXPIRATION TIME
	- Maximum Value : 235959 (23:59:59)
Format	*Numerical ID (unsigned integer 32)*
Length	*4*
Possible Values	*0..2^32-2*
Conditions	*Order Expiration Time is mandatory for GTT orders.*
Used In	New Order (01) Cancel Replace (06)
Used For	*Cash*

Order ID

FIELD NAME	ORDER ID
Description	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.
Format	Numerical ID (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	The field Order ID in Fill (04) message sent in case of trade resulting from a matching against a (bulk) Quote is filled with value of either Bid Order ID or Offer Order ID, corresponding to the side of the quote that participated in the trade. .
Used In	Ack (03) Fill (04) Kill (05) Cancel Replace (06) Reject (07) Cancel Request (12) Open Order Request (15) Ownership Request Ack (17) Ownership Request (18) Request For Implied Execution (66)
Used For	Cash and Derivatives

Order Price

FIELD NAME	ORDER PRICE
Description	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals). For the Market Data feed: -Set to Null Value for priceless orders. For the Order Entry -It is mandatory for priced orders (Limit, Stop-limit, Average Price) and must be set to Null Value where the price is irrelevant (Market, Stop-market, Peg, MTL).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	Mandatory in NewOrder (01) for RFQ Confirmation.
Used In	New Order (01) Ack (03) Cancel Replace (06)

FIELD NAME	ORDER PRICE
	Cross Order (67)
Used For	Cash and Derivatives

Order Priority

FIELD NAME	ORDER PRIORITY
Description	Rank giving the priority of the order. The order with the lowest value of Order Priority has the highest priority. Order Priority is unique per Symbol Index and EMM, therefore, it is also used as the unique order identifier in the market data feed. Order Priority should then allow clients to reconcile their orders between private order entry and market data feed. Used in conjunction with Previous Priority, for market data only.
Format	Numerical ID (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	Ack (03)
Used For	Cash and Derivatives

Order Quantity

FIELD NAME	ORDER QUANTITY
Description	Total order quantity, per quantity unit. (To be calculated with Quantity Decimals).
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	In Wave For Liquidity (73) message: - required to be provided with a value different than Null Value only when IOI Quantity is different than “Undisclosed Qty” – ignored in all other cases;
Used In	New Order (01) Ack (03) Cancel Replace (06) Quote Request (10) RFQ Notification (35) Cross Order (67) Wave For Liquidity (73) Wave For Liquidity Notification (74)
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)
Length	1
Possible Values	1 = Buy 2 = Sell

FIELD NAME	ORDER SIDE
	3 = Cross [i]
Conditions	[i]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. For Quote Request (10) message, it is mandatory when RFQ Type = '2' (Auto RFQ).
Used In	New Order (01) Ack (03) Fill (04) Cancel Replace (06) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Quote Request (10) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) Cross Order (67) Quote Request (10)
Used For	Cash and Derivatives

Order Size Limit

FIELD NAME	ORDER SIZE LIMIT
Description	Indicates the Maximum Order Size above which all orders will be rejected by Matching Engine. (To be calculated with Quantity Decimals).
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	User Notification (39)
Used For	Derivatives

Order Type

FIELD NAME	ORDER TYPE
Description	Type of Order. Please note that the values Stop-market/Stop-market-on-Quote, Stop limit/Stop-limit-on-quote, Average Price, Iceberg and Mid-Point Peg are used only for the Order Entry, they will never be populated in the Market Data feed.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Market 2 = Limit 3 = Stop-market or Stop-market-on-quote 4 = Stop-limit or Stop-limit-on-quote 5 = Primary Peg 6 = Market to limit 7 = Market Peg 8 = Mid-Point Peg

FIELD NAME	ORDER TYPE
	9 = Average Price 10 = Iceberg 14 = Auction Volume Discovery
Conditions	The only possible value in case of Cross Order (67) is value '2'. For Cancel Replace (06) and Cancel Request (10) messages if the Order Type different than the Order Type of the targeted order, the request will be rejected with the reason "Unknown Order".
Used In	New Order (01) Cancel Replace (06) Cancel Request (12) Cross Order (67)
Used For	Cash and Derivatives

Original Client Order ID

FIELD NAME	ORIGINAL CLIENT ORDER ID
Description	Client order ID of the original order.
Format	Numerical ID (signed integer 64)
Length	8
Possible Values	-2^63..2^63-1
Conditions	Original Client Order ID is provided in outbound messages only as response of a modification or cancellation, which is done with the Original Client Order ID specified by the client as the criteria for the modification or cancellation.
Used In	Ack (03) Kill (05) Cancel Replace (06) Cancel Request (12) Open Order Request (15) Ownership Request (18)
Used For	Cash and Derivatives

Original IOI ID

FIELD NAME	ORIGINAL IOI ID
Description	Reference identifier used with CANCEL and REPLACE transaction types.
Format	Numerical ID (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In Wave For Liquidity (73) required to be populated with a value different than SBE Null Value when: - attempting to cancel or modify a previously submitted indication of interest; In Wave For Liquidity Notification (74) provided with a value different than SBE Null Value when: - the message is being sent to acknowledge the cancellation or modification of a previously submitted indication of interest;
Used In	Wave For Liquidity (73) Wave For Liquidity Notification (74)
Used For	Cash

Order Origin

FIELD NAME	ORDER ORIGIN
Description	Indicates the origin of the order
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 =COB 2 =LP Answer
Used In	RFQ Audit (72)
Used For	Cash

Order Tolerable Price

FIELD NAME	ORDER TOLERABLE PRICE
Description	Allows the RFC Initiator to provide an improving tolerable price on the non-client side of the cross. This tolerable price is intended to anticipate possible price improvements, generated by RFC Reactors. In case RFC Initiator does not want to match RFC Reactors improved prices, this field must be provided with the Null value. (to be calculated with Price/Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In Ack (03) message for the Derivative markets, only sent with a value different than SBE Null value when the Ack Type is set 22 (Cross Order Ack), for the House leg of the RFC and only when clients have provided it in the inbound message.
Used In	Cross Order (67) Ack (03)
Used For	Derivatives

P

Package ID

FIELD NAME	PACKAGE ID
Description	[N/A] Deprecated field
Format	Alphanumerical ID (character)
Length	12
Possible Values	(See field description)
Used In	Fill (04)
Used For	Derivatives

Parent Execution ID

FIELD NAME	PARENT EXECUTION ID
Description	Unique identifier of a parent trade executed on the strategy
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2

FIELD NAME	PARENT EXECUTION ID
Conditions	For the Derivatives markets Trade Bust Notification (19) messages for a strategy are sent on the individual leg level. When provided the field Parent Execution ID identified the Execution ID provided in the Block of the Fill (04) messages and allows to map all legs to the Fill (04) message done for the strategy.
Used In	Trade Bust Notification (19)
Used For	Derivatives

Parent Symbol Index

FIELD NAME	PARENT SYMBOL INDEX
Description	Exchange identification code used to point to the strategy in the leg specific messages
Format	Numerical ID (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Conditions	For the Derivatives markets Trade Bust Notification (19) messages for a strategy are sent on the individual leg level. When provided the field Parent Symbol Index, together with field Parent Execution ID identify the original trade communicated via Fill (04) message.
Used In	Trade Bust Notification (19)
Used For	Derivatives

Parent Trade Unique Identifier

FIELD NAME	PARENT TRADE UNIQUE IDENTIFIER
Description	The Parent Trade Unique Identifier is the Trade Unique Identifier of the strategy trade.
Format	Alphanumerical ID (character)
Length	16
Conditions	Filled in case of a leg trade cancelled, this field refers to the Trade Unique Identifier of the strategy.
Used In	Trade Bust Notification (19)
Used For	Derivatives

Peg Offset

FIELD NAME	PEG OFFSET
Description	Tick offset for a pegged order. Used to indicate the signed tick added to the peg reference for a pegged order.
Format	Numerical ID (signed integer 8)
Length	1
Possible Values	-128..127
Used In	New Order (01) Cancel Replace (06)
Used For	Cash

Potential Matching Price

FIELD NAME	POTENTIAL MATCHING PRICE
Description	The Potential Matching Price indicates to the RFQ issuer the matching price for the "Potential Matching Quantity". The Potential Matching Price is recalculated and resend to the RFQ issuer through the RFQ Matching Status (36) message each time the order book is updated.

FIELD NAME	POTENTIAL MATCHING PRICE
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63..2^63-1
Conditions	Can be a negative when the price is expressed in bps. Available only for EMM = 8 (ETF MTF - NAV)
Used In	RFQ Matching Status (36)
Used For	Cash

Potential Matching Quantity

FIELD NAME	POTENTIAL MATCHING QUANTITY
Description	The potential matching quantity indicates the maximum volume that would be matched in case of an RFQ validation. When this message is sent to the RFQ issuer, it indicates the maximum volume that would be matched in case of an RFQ validation sent with an average limit price equal to the Potential Matching Price. When this message is sent to a Liquidity Provider, it indicates the total order quantity that would be matched in case of a validation sent by the RFQ Issuer.
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Used In	RFQ Matching Status (36) RFQ LP Matching Status (37)
Used For	Cash

Pre Matching Type

FIELD NAME	PRE MATCHING TYPE
Description	Pre-matching delay indicator for a TCS Declaration.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Not pre-matched 2 = Pre-matched for the next fixing 3 = Pre-matched for the second next fixing 4 = Pre-matched for the third next fixing 5 = Pre-matched for the fourth next fixing 6 = Pre-matched for the fifth next fixing
Conditions	In inbound Declaration Entry (40) message (TCS), it is applicable only when Operation Type is '4' or ‘6’. In outbound Declaration Notice (42) messages (TCS) provided only for message with the Operation Type '4' or ‘6’.
Used In	Declaration Entry Ack (41) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Previous Day Indicator

FIELD NAME	PREVIOUS DAY INDICATOR
Description	Flag indicator whether declaration matched at D or D-1. (0: [indicated as False] means "matched at D" ; 1: [indicated as True] means "matched at D-1").
Format	Boolean

FIELD NAME	PREVIOUS DAY INDICATOR
Length	1
Possible Values	0 = False 1 = True
Used In	Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Price

FIELD NAME	PRICE
Description	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Conditions	In New Wholesale Order (64) message for the Derivative markets, when price is not applicable, the field Price should be populated with value of zero (0). For DeclarationEntry (40), it must always be provided when Operation Type = '1', '5' or '7'. For DeclarationNotice (42), it is provided when Operation Type = '1', '5' or '7'. For a trade/declaration on Funds if expressed as an amount (Operation Type = '6'), this field should not be provided.
Used In	Price Input (28) New Wholesale Order (64) Wholesale Order Ack (65) Declaration Entry (40) Declaration Notice (42) Fund Price Input (44) Fund Price Input Ack (45)
Used For	Cash and Derivatives

Principal Code

FIELD NAME	PRINCIPAL CODE
Description	Identifies the beneficiary of the transaction when trading on behalf of another establishment. Clients may provide a TCS Member ID or an Euronext Member ID.
Format	Alphanumerical ID (character 8)
Length	8
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Principal Code Cross

FIELD NAME	PRINCIPAL CODE CROSS
Description	Identifies the beneficiary of the transaction when trading on behalf of another establishment, for the sell side of a cross order. Clients may provide a TCS Member ID or an Euronext Member ID.
Format	Alphanumerical ID (character 8)
Length	8
Used In	Declaration Entry (40) Declaration Notice (42)

FIELD NAME	PRINCIPAL CODE CROSS
Used For	TCS (Cash and Derivatives)

Protection Threshold

FIELD NAME	PROTECTION THRESHOLD
Description	Limit of the MM protection.
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	In message MM Protection Request (62) must be populated if Request Type is Set or Adjust
Used In	MM Protection Request (62) MM Protection Ack (63)
Used For	Derivatives

Protection Type

FIELD NAME	PROTECTION TYPE
Description	Type of Market Maker protection.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Delta 2 = Volume
Used In	MM Protection Request (62) MM Protection Ack (63)
Used For	Derivatives

Q

Quantity

FIELD NAME	QUANTITY
Description	Number of traded or ordered units (to be calculated with Quantity Decimals).
Format	Quantity (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	For Declaration Entry (40) message, it must always be provided when Operation Type = '1', ‘4’, ‘5’ or '7'. For a trade/declaration on Funds if expressed as an amount (Operation Type = ‘6’), this field should not be provided.
Used In	New Wholesale Order (64) Wholesale Order Ack (65) Declaration Entry (40) Declaration Notice (42)
Used For	Cash and Derivatives

Queueing Indicator

FIELD NAME	QUEUEING INDICATOR
Description	Indicates whether the client requests its orders to be queued or rejected in case of throttling. (0: False - Reject ; 1: True - Queue).
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	0 = False 1 = True
Used In	Logon (100)
Used For	Cash and Derivatives

QuoteReqID

FIELD NAME	QUOTEREQID
Description	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.
Format	Numerical ID (unsigned integer 64)
Length	8
Possible Values	0..2^64-2
Conditions	Mandatory if 'RFQ Answer' or 'RFQ Confirmation' (field Execution Instruction) = Yes
Used In	New Order (01) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37)
Used For	Cash

R

Recipient Type

FIELD NAME	RECIPIENT TYPE
Description	[N/A] Indicates whether the message is sent to the RFQ issuer or the Liquidity Provider.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = RFQ Issuer 2 = RFQ recipient (LP)
Used In	RFQ Matching Status (36)
Used For	Cash

Rejected Client Message Sequence Number

FIELD NAME	REJECTED CLIENT MESSAGE SEQUENCE NUMBER
Description	Indicates the Client Message Sequence Number of the rejected message.
Format	Sequence (unsigned integer 32)
Length	4
Possible Values	0..2^32-2
Used In	Technical Reject (108)
Used For	Cash and Derivatives

Rejected Message

FIELD NAME	REJECTED MESSAGE
Description	***[N/A]*** *Deprecated field*
Format	Numerical ID (unsigned integer 8)
Length	1
Possible Values	0..2^8-2
Used In	Reject (07) Technical Reject (108)
Used For	Cash and Derivatives

Rejected Message ID

FIELD NAME	REJECTED MESSAGE ID
Description	Provides the ID (Template ID) of the rejected message. E.g. 01 for NewOrder, 06 for CancelReplace...
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-2
Used In	Reject (07) Technical Reject (108) Declaration Entry Reject (46)
Used For	Cash and Derivatives

Request Type

FIELD NAME	REQUEST TYPE
Description	This field gives the type of request made by the Market Maker for the Market Maker Protection. At the time of activation, the Market Maker (MM) is able to Set (1) Protection Limits and Limit Breach actions for each protection type activated on a contract. MM can also Get (2) the current reached value of the limits, and breach actions can be updated by submitting an Adjust (3) at any time while the facility is active.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Set 2 = Get 3 = Adjust
Used In	MM Protection Request (62)
Used For	Derivatives

Response Type

FIELD NAME	RESPONSE TYPE
Description	Indicates if incoming message is accepted or rejected.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = Accept 1 = Reject
Used In	Wholesale Order Ack (65)

FIELD NAME	RESPONSE TYPE
Used For	Derivatives

Resynchronization ID

FIELD NAME	RESYNCHRONIZATION ID
Description	Each instrument is assigned to a Resynchronization ID, that is use in case of failover.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-2
Used In	Instrument Synchronization List (50) Synchronization Time (51)
Used For	Cash and Derivatives

RFE Answer

FIELD NAME	RFE ANSWER
Description	Indicate whether the Quotes message is an answer to a RequestForExecution (34) message or not. (0: No [False] ; 1: Yes [True])
Format	Boolean (unsigned integer 8)
Length	1
Possible Values	0 = False 1 = True
Conditions	For the Derivatives segments this field is ignored by Optiq.
Used In	Quotes (08)
Used For	Cash and Derivatives

RFQ Type

FIELD NAME	RFQ TYPE
Description	Indicates the choice of the RFQ Issuer on the type of RFQ confirmation.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Manual RFQ 2 = Auto RFQ
Used In	Quote Request (10)
Used For	Cash

RFQ Update Type

FIELD NAME	RFQ UPDATE TYPE
Description	[N/A] Indicates the current status of the RFQ.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = New 2 = Cancelled by the RFQ issuer 3 = Expired 4 = Partially or Fully Matched

FIELD NAME	RFQ UPDATE TYPE
Conditions	Value 1 is used to notify to LPs a new RFQ is available. Value 2 is used to notify to LPs the concerned RFQ (identified through the field QuoteReqID) is no more available as it has been cancelled by the RFQ Issuer. Value 3 is used to notify to LPs the concerned RFQ (identified through the field QuoteReqID) has expired after the predefine period of time without any confirmation order from the RFQ issuer. Value 4 is used to notify to LPs the concerned RFQ (identified through the field QuoteReqID) is no more available as it has been matched.
Used In	RFQ Notification (35)
Used For	Cash

S

Schema ID

FIELD NAME	SCHEMA ID
Description	Identifier of the message schema that contains the template. Used to differentiate Exchange Specifications
Format	Numerical ID (unsigned integer 16)
Used In	SBE Header
Used For	Cash and Derivatives

Schema Version

FIELD NAME	SCHEMA VERSION
Description	Version of the message schema in which the message is defined. Used to add messages and/or modify some others
Format	Numerical ID (unsigned integer 16)
Used In	SBE Header
Used For	Cash and Derivatives

Security Request ID

FIELD NAME	SECURITY REQUEST ID
Description	ID of a strategy security definition request. Clients must provide a Security Request ID in every Security Definition Request (60) message, otherwise the message will be immediately rejected by the OEG. Clients should provide any numerical value. The Exchange recommends setting an unique ID per request and Firm. The Security Request ID value is not checked by the Exchange (besides the format), it is simply returned in the corresponding Security Definition Ack (61) message to allow clients reconciling the response message with their original security definition request.
Format	Numerical ID (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Used In	Security Definition Request (60) Security Definition Ack (61)
Used For	Derivatives

Sell Revision Indicator

FIELD NAME	SELL REVISION INDICATOR
Description	Indicates whether the offer quote is a new quote, a replacement of a previous quote or a cancellation.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = New 1 = Replacement 2 = Cancellation
Used In	Quote Ack (09)
Used For	Cash and Derivatives

Sender Location ID

FIELD NAME	SENDER LOCATION ID
Description	Field used to identify the specific message originator.
Format	Alphanumerical ID (character)
Length	11
Used In	New Order (01) Cancel Replace (06) Cancel Request (12) Mass Cancel (13)
Used For	Cash and Derivatives

Settlement Flag

FIELD NAME	SETTLEMENT FLAG
Description	Indicates whether the declaration must be settled or not. (0: [indicated as False] means "Not Settled" ; 1: [indicated as True] means "Settled").
Format	Boolean
Length	1
Possible Values	0 = False 1 = True
Conditions	In outbound Declaration Notice (42) messages (from TCS) field Settlement Flag is always provided.
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Settlement Period

FIELD NAME	SETTLEMENT PERIOD
Description	[N/A] Indicates the settlement delay in trading days, from 0 to 30 days. (TCS is using the Settlement Period defined in the referential at instrument)
Format	Numerical
Length	1
Possible Values	From 0 to 30
Conditions	In outbound Declaration Notice (42) messages (from TCS) field Settlement Period is provided if the field Settlement Flag is set to 1 = True but is ignored by TCS.
Used In	Declaration Entry (40)

FIELD NAME	SETTLEMENT PERIOD
	Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Side

FIELD NAME	SIDE
Description	Indicates the Executing Side
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Buy 2 = Sell
Used In	New Wholesale Order (64) Declaration Entry (40)
Used For	Cash and Derivatives

Software Provider

FIELD NAME	SOFTWARE PROVIDER
Description	Free text field entered by the client in the Logon (100) message, identifying the provider of the software used for exchange of messages for trading purposes.
Format	Text (character)
Length	8
Possible Values	(Free Text)
Used In	Logon (100)
Used For	Cash and Derivatives

Start Time Vwap

FIELD NAME	START TIME VWAP
Description	Start time for the Volume Weight Average price computation period (Number of seconds since the beginning of the day – UTC Time).
Format	Intraday Time in Seconds
Length	4
Possible Values	From 0 to 2^32-2
Conditions	For Declaration Entry (40) message, it is used for declarations when Operation Type = '5' ; and if not provided it is assumed that the VWAP calculation period lasts until the end of the trading session.
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash)

Stop Trigger Price

FIELD NAME	STOP TRIGGER PRICE
Description	Stop Trigger Price is mandatory for stop orders.
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1

FIELD NAME	STOP TRIGGER PRICE
Used In	New Order (01) Cancel Replace (06)
Used For	Cash

STP ID

FIELD NAME	STP ID
Description	Identifier of a group of Users or Traders sharing the same business activity at the same Firm.
Format	Numerical ID (unsigned integer 16)
Length	2
Possible Values	0..2^16-1
Used In	New Order (01) Cancel Replace (06) Quotes (08)
Used For	Cash and Derivatives

Strategy Code

FIELD NAME	STRATEGY CODE
Description	Exchange-recognized strategy code
Format	Alphanumerical ID (character)
Length	1
Possible Values	A = Jelly Roll B = Butterfly *C = Call or Put Cabinet - Deprecated* 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 T = ICS one sided combination same expiry U = ICS two sided combination same expiry V = Volatility Trade W = Condor X = Box Y = Bundle *Z = Reduced Tick Spread - Deprecated* a = Ladder versus Underlying

FIELD NAME	STRATEGY CODE
	b = Butterfly versus Underlying c = Call Spread versus Put versus Underlying d = Call or Put Spread versus Underlying e = Call or Put Calendar Spread versus Underlying f = Call/Put Diagonal Calendar Spread versus Underlying g = Guts versus Underlying h = Two by One Call or Put Ratio Spread versus Underlying i = Iron Butterfly versus Underlying j = Combo versus Underlying k = Strangle versus Underlying l = Ratio Inter Contract Spread 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 - Deprecated* 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 1 = Call Spread versus Put Or Put Spread versus Call 2 = Ratio Spread Option
Used In	Security Definition Request (60) New Wholesale Order (64) Wholesale Order Ack (65)
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)
Length	4
Possible Values	0..2^32-1
Conditions	For inbound messages, the Symbol Index must be specified. For second listing place trade, the Symbol Index and the MIC of secondary listing must be specified. If provided in the User Notification (39) message, it specifies the scope of the action specified in User Status. For Derivatives and for Risk Guard functionality it's filled each time the User status is linked with Block / Unblock or Order Size Limit and identifies the contract upon which the specified action was applied. 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.

FIELD NAME	SYMBOL INDEX
	For all messages, with exception of MM Sign-in and MM Protection Request, this field represent the Symbol Index of the Instrument. For the MM Sign-in and MM Protection Request this field represents the Symbol Index of the Contract. For New Wholesale Order this represents numerical leg instrument identifier (Security ID).
Used In	New Order (01) Ack (03) Fill (04) Kill (05) Cancel Replace (06) Reject (07) Quotes (08) Quote Ack (09) Quote Request (10) Cancel Request (12) Mass Cancel (13) Mass Cancel Ack (14) Open Order Request (15) Ownership Request Ack (17) Ownership Request (18) Trade Bust Notification (19) Price Input (28) Liquidity Provider Command (32) Ask For Quote (33) Request For Execution (34) RFQ Notification (35) RFQ Matching Status (36) RFQ LP Matching Status (37) User Notification (39) MM Sign-In (47) MM Sign-In Ack (48) Instrument Synchronization List (50) Security Definition Ack (61) MM Protection Request (62) MM Protection Ack (63) New Wholesale Order (64) Wholesale Order Ack (65) Request For Implied Execution (66) Cross Order (67) Wave For Liquidity (73) Wave For Liquidity Notification (74) Clear Book (75) Declaration Entry (40) Declaration Entry Ack (41) Declaration Notice (42) Declaration Cancel and Refusal (43) Fund Price Input (44) Fund Price Input Ack (45) Declaration Entry Reject (46)
Used For	Cash and Derivatives

T

Target Counterparties

FIELD NAME	TARGET COUNTERPARTIES
Description	Allows members to specify the targeted counterparties of the submitted indication of interest. Values specified, in the list of possible values, indicate the bit positions that should be used to set as zero (0) or one (1). A single field contains multiple values provided in different positions. - Euronext data Driven: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Euronext Data Driven group or not. (0: No ; 1: Yes) - Interest Lists: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Interest Lists group or not. (0: No ; 1: Yes) - Holdings: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Holdings group or not. (0: No ; 1: Yes) - Buy Side: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Buy Side group or not. (0: No ; 1: Yes) - Sell Side: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Sell Side group or not. (0: No ; 1: Yes) - Quality of Sell Side: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Quality Sell Side group or not. (0: No ; 1: Yes) - Local Community of Specialists AMS: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Local Comminity of Specialists of Amsterdam market or not. (0: No ; 1: Yes) - Local Community of Specialists PAR: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Local Comminity of Specialists of Paris market or not. (0: No ; 1: Yes) - Local Community of Specialists BRU: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Local Comminity of Specialists of Brussels market or not. (0: No ; 1: Yes) - Local Community of Specialists LIS: indicates whether the submitter of the indication of interest aims to notify the counterparties which belong to the Local Comminity of Specialists of Lisbon market or not. (0: No ; 1: Yes)
Format	Bitmap (unsigned integer 16)
Length	1
Possible Values	0 = Euronext Data Driven 1 = Interest Lists 2 = Holdings 3 = Buy Side 4 = Sell Side 5 = Quality of Sell Side Counterparty 6 = Local Community of Specialist AMS 7 = Local Community of Specialist PAR 8 = Local Community of Specialist BRU 9 = Local Community of Specialist LIS
Used In	Wave For Liquidity (73)
Used For	Cash

TargetExecutionWithinFirmShortCode

FIELD NAME	TARGETEXECUTIONWITHINFIRMSHORTCODE
Description	Value of the target Execution Within Firm Short Code used as a filter to reduce scope of the Mass Cancel request
Format	Numerical ID (signed integer 32)

FIELD NAME	TARGETEXECUTIONWITHINFIRMSHORTCODE
Length	4
Possible Values	-2^31+1..2^31-1
Conditions	If provided in the MassCancel (13) message, the field acts as a filter to reduce the scope of the orders and quotes submitted by the Firm and specified Short code. Value provided in this field may differ from the value specified in the field ExecutionWithinFirmShortCode within the MassCancel (13) message.
Used In	Mass Cancel (13) Mass Cancel Ack (14)
Used For	Cash and Derivatives

Technical Origin

FIELD NAME	TECHNICAL ORIGIN
Description	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining
Used In	New Order (01) Cancel Replace (06) Quotes (08) New Wholesale Order (64) Cross Order (67) Quote Request (10)
Used For	Cash and Derivatives

Template ID

FIELD NAME	TEMPLATE ID
Description	Identifier of the message template. This is the message type of the Market Data messages..
Format	Numerical ID (unsigned integer 16)
Length	1
Used In	SBE Header
Used For	Cash and Derivatives

Time In Force

FIELD NAME	TIME IN FORCE
Description	Specifies the maximum validity of an order. For Stop orders it provides the maximum validity when not triggered.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = Day 1 = Good Till Cancel 2 = Valid for Uncrossing 3 = Immediate or Cancel

FIELD NAME	TIME IN FORCE
	4 = Fill or Kill *5 = Good till Time (not available, reserved for future use)* 6 = Good till Date 7 = Valid for Closing Uncrossing *8 = Valid for Session (not available, reserved for future use)*
Conditions	Modifying order from or to one validity type to any other, will result in loss of priority.
Used In	New Order (01) Cancel Replace (06)
Used For	Cash and Derivatives

Total Affected Orders

FIELD NAME	TOTAL AFFECTED ORDERS
Description	Number of orders affected following a global request. It is set to -1 to indicate that the request is processed.
Format	Numerical ID (signed integer 32)
Length	4
Possible Values	-2^31+1..2^31-1
Used In	Mass Cancel Ack (14) Ownership Request Ack (17)
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) ETF Access is decommissioned ■ bit in position 6 - NAV Trade expressed in price currency: indicates whether the trade is a NAV trade expressed in price currency(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)
Length	1
Possible Values	0 = Uncrossing Trade

FIELD NAME	TRADE QUALIFIER
	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	
Used In	Fill (04)
Used For	Cash and Derivatives

Trade Time

FIELD NAME	TRADE TIME
Description	Time of the trade. Equals to the Matching Engine IN time (in ns), when the aggressor enters the matching engine.
Format	Epoch Time in Nanoseconds (unsigned integer 64)
Length	8
Possible Values	0..2^64-1
Used In	Fill (04) Declaration Notice (42)
Used For	Cash and Derivatives

Trade Type

FIELD NAME	TRADE TYPE
Description	Type of trade.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Conventional Trade (Cash and Derivatives) 2 = Large in Scale (LiS) Trade (Derivatives Only) *3 = Basis Trade (Derivatives Only) - Deprecated* 4 = Large in Scale (LiS) Package Trade (Derivatives Only) 5 = Guaranteed Cross Trade (Cash and Derivatives) 6 = Against Actual Trade (Derivatives Only) *7 = Asset Allocation Trade (Derivatives Only) - Deprecated* 9 = Exchange for Swap Trade (Derivatives Only) *10 = Exchange for Physical Trade - Cash Leg (Cash Only) - Deprecated* 11 = Strategy Leg Conventional Trade (Derivatives Only) *12 = Strategy Leg Large in Scale (LiS) Trade (Derivatives Only) - Deprecated* *13 = Strategy Leg Basis Trade (Derivatives Only) - Deprecated* *14 = Strategy Leg Guaranteed Cross Trade (Derivatives Only) - Deprecated* *15 = Strategy Leg Against Actual Trade (Derivatives Only) - Deprecated* *16 = Strategy Leg Asset Allocation Trade (Derivatives Only) - Deprecated* *18 = Strategy Leg Exchange For Swap Trade (Derivatives Only) - Deprecated* *19 = Strategy Leg Exchange For Physical Trade (Derivatives Only) - Deprecated* 20 = BoB Trade (Cash Only) *22 = AtomX Trade (Derivatives Only) - Deprecated* 24 = Trade Cancellation (Cash and Derivatives)

FIELD NAME	TRADE TYPE
	25 = Out of Market Trade (Cash Only) 26 = Delta Neutral Trade - Underlying Cash Leg (Cash Only) 27 = Market VWAP Operation Trade (Cash Only) 28 = Euronext Fund Service Trade (Cash Only) 29 = Secondary Listing Trade (Cash Only) 30 = Request for Cross Trade (Derivatives Only) 31 = Request for cross strategy Leg Trade (Derivatives Only) 32 = Trade Publication (Cash and Derivatives) 33 = Dark Trade (Cash Only) 34 = Delta Neutral Trade - Underlying Future Leg (Derivatives Only) 36 = Total Trade Volume *37 = ETF-MTF NAV Trade (price in basis points) (Cash Only) - Deprecated* *38 = ETF-MTF NAV Dark Trade (price in basis points) (Cash Only) - Deprecated* 39 = Guaranteed Cross – Negotiated deal NLIQ (Liquid) 40 = Guaranteed Cross – Negotiated deal OILQ (illiquid) 41 = Large in Scale (LIS) Trade (Cash) 42 = Large in Scale (LiS) Trade in basis points (Derivatives Only) 43 = Large in Scale (LiS) Package Trade in basis points (Derivatives Only) *44 = Strategy Leg Large in Scale (LiS) Trade in basis points (Derivatives Only) – Deprecated* 46 = Non-Standard Settlement 47 = Repurchase Agreement – Repo (OBOE only) 48 = Exchange Granted Trade (OBOE only) 49 = Other (OBOE only) 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 (Cash Only) 104 = RFQ Trade (Cash Only) 105 = AVD Trade 106 = Strategy Leg Conventional Trade – Provisional Price (Derivatives Only) 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', and '38'; for consistency purposes other values are also listed here, however they are deprecated, or are only used in other messages and market data
Used In	Fill (04)
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

FIELD NAME	TRADE UNIQUE IDENTIFIER
Conditions	Filled when message is related to New Trade or Cancel Trade. In StrategyFields of **Fill** (07) message, *Trade Unique Identifier* is filled with the trade unique identifier of the corresponding leg. In **Declaration Notice** (42): Provided when notifying of Trade Creation or a Trade Cancellation.
Used In	Declaration Cancel and Refusal (43) Declaration Notice (42) Fill (04) Trade Bust Notification (19)
Used For	Cash and Derivatives TCS (Cash and Derivatives)

Trader ID

FIELD NAME	TRADER ID
Description	Field used to identify the trader entering the orde
Format	Alphanumerical ID (character)
Length	16
Used In	New Order (01) Cancel Replace (06) Cancel Request (12) Mass Cancel (13) User Notification (39) Declaration Entry (40) Declaration Notice (42)
Used For	Cash and Derivatives

Trading Capacity

FIELD NAME	TRADING CAPACITY
Description	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)
Conditions	In case the Membership Authorizations Control is activated, the trading capacity is mandatory in the New Wholesale Order and the Cross Order messages. If not populated, the order is rejected.
Used In	New Order (01) Quotes (08) New Wholesale Order (64) Cross Order (67) Declaration Entry (40) Declaration Notice (42) Quote Request (10)
Used For	Cash and Derivatives

Trading Capacity Cross

FIELD NAME	TRADING CAPACITY CROSS
Description	Indicates for the sell side of a cross order whether the order submission results from trading as matched principal, on own account or as any other capacity.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)
Conditions	For DeclarationEntry (40) message, it is mandatory for Cross order and indicates the trading capacity of the sell side.
Used In	New Order (01) Declaration Entry (40) Declaration Notice (42)
Used For	Cash and Derivatives TCS (Cash and Derivatives)

Trading Session Validity

FIELD NAME	TRADING SESSION VALIDITY
Description	Trading Session Validity. Sessions represent the following: - Session 1 – Normal Trading Hours (Cash) - Session 2 – Normal Trading Hours (Derivatives for future use) - Session 3 – Extended Trading Hours (for Index Derivatives segment, correspond to the extension 17.30 CET - 22.00 CET for future use – for XMLI Structured Products, corresponds to the first extension 18.30 CET - 20.00 CET – for SEDX Italiana Structured Products, corresponds to the extension 17.30 CET – 20.30 CET) - Session 4 – Second Extended Trading Hours (for legacy Structured Products, corresponds to the second extension 20.00 CET - 22.00 CET – for Borsa Italiana Structured Products, corresponds to the extension 20.30 CET – 22.00 CET)
Format	Bitmap (unsigned integer 8)
Length	1
Possible Values	Bit 1 = Session 1 Bit 2 = Session 2 Bit 3 = Session 3 Bit 4 = Session 4
Conditions	For the Derivatives markets we accept all bits deactivated (0) only. For Cash Markets: Scenario 1: to send an order valid only during the **Normal Trading Hours (no ETH)**: Trading Session Validity populated with **Session 1 OR 0 (all bits deactivated) OR 255 (Null value)**. Scenario 2: to send an order valid until the **first extension**, for eligible instruments (for SEDX Structured Products, corresponds to the extension 17.30 CET – 20.30 CET – for XMLI Structured Products, corresponds to the extension 18.30 CET - 20.00 CET): Trading Session Validity populated with **Session 1 + Session 3** Scenario 3: to send an order valid until the **second extension**, for eligible instruments (for SEDX Structured Products, corresponds to the extension 20.30 CET – 22.00 CET - for XMLI Structured Products, corresponds to the extension 20.00 CET - 22.00 CET): Trading Session Validity populated with **Session 1 + Session 3 + Session 4**. The same is valid to send an order valid until the closing time of the instrument, regardless it is normal or extended trading hours.

FIELD NAME	TRADING SESSION VALIDITY
	The scenarios 2 and 3 are applicable for SEDX Structured Products without condition, but for XMLI Structured Products are applicable only for members eligible to **Bilateral Settlement** (only members doing bilateral settlement can trade after 18:30).
Used In	New Order (01) Cancel Replace (06)
Used For	Cash and Derivatives

Transaction Price Type

FIELD NAME	TRANSACTION PRICE TYPE
Description	Contribution to price formation or the price discovery process.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Plain Vanilla Trade 2 = Non Price Forming Trade (NPFT) *3 = Trade Not Contributing to Price Discovery Process* 4 = Dark Trade (For Future Use)
Conditions	For Declaration Entry (42) message, it is provided only if previously set in the corresponding inbound Declaration Entry (40).
Used In	Declaration Entry (40) Declaration Notice (42)
Used For	TCS (Cash)

Triggered Stop Time In Force

FIELD NAME	TRIGGERED STOP TIME IN FORCE
Description	Specifies the maximum validity of an triggered stop order. If both Time In Force and Triggered Stop Time In Force are Good till Date they will both refer to the same Order Expiration Date (or Order Expiration Time) provided in the order. If Order Expiration Date is modified it will be for both untriggered stop and triggered stop, or only for the triggered stop if the order was previously triggered.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = Day 1 = Good Till Cancel 3 = Immediate or Cancel 6 = Good till Date
Conditions	It is mandatory for stop orders.
Used In	New Order (01) Cancel Replace (06)
Used For	Cash and Derivatives

U

Underlying Instrument ID

FIELD NAME	UNDERLYING INSTRUMENT ID
Description	*[N/A] Deprecated*

FIELD NAME	UNDERLYING INSTRUMENT ID
Format	*Numerical ID (unsigned integer 32)*
Length	*4*
Possible Values	*Deprecated*
Used In	Fill (04)
Used For	*Derivatives*

Underlying Last Traded Price

FIELD NAME	UNDISCLOSED ICEBERG TYPE
Description	*[N/A] Deprecated*
Format	*Price (signed integer 64)*
Length	*8*
Possible Values	*Deprecated*
Used In	Fill (04)
Used For	*Derivatives*

Undisclosed Iceberg Type

FIELD NAME	UNDISCLOSED ICEBERG TYPE
Description	[N/A] Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity. (For Future Use, Pending Regulatory Approval)
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market
Used In	New Order (01) Cancel Replace (06)
Used For	Cash

Undisclosed Price

FIELD NAME	UNDISCLOSED PRICE
Description	[N/A] Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)
Format	Price (signed integer 64)
Length	8
Possible Values	-2^63+1..2^63-1
Used In	New Order (01) Cancel Replace (06)
Used For	Cash

User Status

FIELD NAME	USER STATUS
Description	Status of the user.
Format	Enumerated (unsigned integer 8)

FIELD NAME	USER STATUS
Length	1
Possible Values	1 = Trader-Algo Suspended 2 = Trader-Algo Suspension Cleared 3 = Trader-Algo Killed 4 = Trader-Algo Kill Cleared 5 = Firm Suspended 6 = Firm Suspension Cleared 7 = Firm Killed 8 = Firm Kill Cleared 9 = DEA Suspended 10 = DEA Suspension Cleared 11 = DEA Killed 12 = DEA Kill Cleared 13 = Trader-Algo Suspended by Risk Manager 14 = Trader-Algo Unsuspended by Risk Manager 15 = Firm Suspended by Risk Manager 16 = Firm Unsuspended by Risk Manager 17 = DEA Suspended by Risk Manager 18 = DEA Unsuspended by Risk Manager 19 = Logical Access Suspended by Risk Manager 20 = Logical Access Unsuspended by Risk Manager 21 = Trader-Algo Blocked by Risk Manager 22 = Trader-Algo Unblocked by Risk Manager 23 = Firm Blocked by Risk Manager 24 = Firm Unblocked by Risk Manager 25 = DEA Blocked by Risk Manager 26 = DEA Unblocked by Risk Manager 27 = Logical Access Blocked by Risk Manager 28 = Logical Access Unblocked by Risk Manager *29 = Order Size Limit Activated by Risk Manager - **Deprecated*** *30 = Order Size Limit Deactivated by Risk Manager - **Deprecated*** 31 = OAL Activated for a Firm by Risk Manager 32 = OAL Deactivated for a Firm by Risk Manager 33 = OAL Activated for a Firm on a Logical Access by Risk Manager 34 = OAL Deactivated for a Firm on a Logical Access by Risk Manager 35 = MEP Activated by Risk Manager 36 = MEP Deactivated by Risk Manager 37 = MEP Action Activated: Accept only actions that decrease the position 38 = MEP Action Activated: Incoming requests are blocked 39 = MEP Action Activated: Book was purged and incoming requests are blocked 40 = MEP Action Activated: No Action, Alert Only 41 = No Action in place 42 = UOR Activated for a Firm by Risk Manager 43 = UOR Deactivated for a Firm by Risk Manager 44 = UOR Activated for a Logical Access by Risk Manager 45 = UOR Deactivated for a Logical Access by Risk Manager 46 = OSL Activated for a Firm by Risk Manager 47 = OSL Deactivated for a Firm by Risk Manager 48 = OSL Activated for a Logical Access by Risk Manager 49 = OSL Deactivated for a Logical Access by Risk Manager

FIELD NAME	USER STATUS
Conditions	Value "32 = OAL Deactivated for a Firm by Risk Manager" and "34 = OAL Deactivated for a Firm on a Logical Access by Risk Manager", "47 = OSL Deactivated for a Firm by Risk Manager", "49 = OSL Deactivated for a Logical Access by Risk Manager" are used to indicate that Order Amount Limit/Order Size Limit have been deactivated and, in this case, field Order Amount Limit/ Order Size Limit are populated with SBE Null value.
Used In	User Notification (39)
Used For	Cash and Derivatives

W

Waiver Indicator

FIELD NAME	WAIVER INDICATOR
Description	Waiver Indicator. Values indicated (in 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. ESMA description of the field: Indication as to whether the transaction was executed under a pre-trade waiver in accordance with Articles 4 and 9 of Regulation (EU) 600/2014. For all instruments: 'LRGS' = Large in scale For equity instruments: 'RFPT' = Reference price transaction 'NLIQ' = Negotiated transactions in liquid financial instruments 'OILQ' = Negotiated transactions in illiquid financial instruments 'PRIC' = Negotiated transactions subject to conditions other than the current market price of that equity financial instrument. For non-equity instruments: 'SIZE' = Above specific size transaction 'ILQD' = Illiquid instrument transaction This field shall only be populated for the market side of a transaction executed under a waiver on a trading venue.
Format	Bitmap
Length	1
Possible Values	0 = LRGS (for future use) 1 = RFPT 2 = NLIQ 3 = OILQ 4 = PRIC 5 = SIZE 6 = ILQD 7 = OMF (for future use)
Conditions	In outbound Declaration Notice (42) messages (from TCS) field Waiver Indicator is filled with one of the possible values if Declaration Status is set to 7 = Filled AND the transaction meets the conditions required for a waiver.
Used In	Declaration Entry Ack (41) Declaration Notice (42)
Used For	TCS (Cash and Derivatives)

Wholesale Side

FIELD NAME	WHOLESALE SIDE
Description	Indicates the side of the Wholesale order.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	1 = Buy 2 = Sell 3 = Cross

FIELD NAME	WHOLESALE SIDE
Used In	New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Derivatives

Wholesale Trade Type

FIELD NAME	WHOLESALE TRADE TYPE
Description	Type of the Wholesale trade being submitted.
Format	Enumerated (unsigned integer 8)
Length	1
Possible Values	0 = Large in Scale Trade 1 = Against Actual 2 = Exchange For Swaps 3 = Block Standard 4 = Block NFC Auction 5 = Block Historical
Used In	New Wholesale Order (64) Wholesale Order Ack (65)
Used For	Derivatives

APPENDIX A: REVISION HISTORY

VERSION NO	DATE	AUTHOR	CHANGE DESCRIPTION
1.0.0	31 Oct 2016	IT Solutions - LPI	First Version
1.1.0	16 Mar 2017	IT Solutions - LPI	The following section has been removed: - 1.2 Work In Progress Sections | New Order MiFID Extension (02) The following sections have been added: - 1.2.3 Short Codes management before January 2018 | 2.3 Client Order ID Management | 2.3.1 Client Order ID Overview | 2.3.2 Client Order ID usages for Order Management | 2.3.3 Client Order ID Ranges | 2.3.3.1 For Regular "In House" Accesses | 2.3.3.2 For Regular Accesses via ISV | 2.3.3.3 For Service Bureau Accesses | 2.4 Throttling Mechanism | 2.4.1 General Overview | 2.4.2 Throttling Scope | 2.5 Throttling Methods | 2.5.1 Throttling Methods | 2.5.1.1 Global Throughput | 2.5.1.2 Unacknowledged Threshold | 2.5.2 Counting Window | 2.5.3 Unacknowledged Requests | 2.5.4 Queuing or Rejection | 2.6 Order ID The following sections have been updated: - 1.2 MiFID Related Changes | 1.2.1 Maintenance of Relevant Data relating to Orders in Financial Instruments | 2.1.3 Logical Access and OE Sessions | 2.2.2 Drop Copy | 3.1.1 Logon Overview | 3.1.2 Heartbeats and Test Requests | 4.6.1 Symbol Index | 4.6.2 Order Priority (previously named Order Reference Number) | 5.2.2 Example: NewOrder (01) message The following messages have been updated: - **Logon:** Updated description, Removed *OE Session ID,* Added *Logical Access ID,* Added *OE Partition ID,* Added *Software Provider,* Updated *Last Message Sequence Number* presence from Mandatory to Conditional | **Logout:** Description Updated, Removed *OE Session ID* , Updated values for *Log Out Reason Code* | **NewOrder:** Removed *DEAIndicator,* Added *MiFID Indicators,* Added *QuoteReqID,* Added *Triggered Stop Time In Force,* Added *Trading Capacity* | **Ack:** Updated Description, Removed *Order Reference Number,* Added *Order Priority* | **Fill:** Added *Trade Type,* Moved *Leg Side* to the second repeating section, Added *Execution Phase* | **Kill:** Updated description | **Cancel Replace:** Updated description, Moved *ExecutionWithinFirmShortCode* from repeating section to the block , Moved *ClientIdentificationShortCode* from repeating section to the block, Added *Order Side,* Removed *DEAIndicator,* Removed *NonExecutingBrokerShortCode,* Added *Triggered Stop Time In Force,* Removed *Account Type Cross* | **Quotes:** Updated description, Added *ExecutionWithinFirmShortCode,* Added *MiFID Indicators,* Added *InvestmentDecisionWFirmShortCode,* Added *NonExecutingBrokerShortCode,* Added *ClientIdentificationShortCode,* Removed *RFE*

			Indicator, Added *RFE Answer,* Added *Trading Capacity* | **Quote Request:** New Message | **Cancel Request:** Added *ExecutionWithinFirmShortCode,* Added *ClientIdentificationShortCode,* Added *Order Side,* Added *Order Type* | **Ownership Request Ack:** New Message | **Ownership Request:** New Message | **Mass Cancel:** Updated description, Added *ExecutionWithinFirmShortCode,* Added *ClientIdentificationShortCode* ,Removed *OE Session ID* ,Added *OE Partition ID,* Added *Logical Access ID* | **Mass Cancel Ack:** Removed *OE Session ID,* Added *OE Partition ID,* Added L*ogical Access ID,* Added *Option Type* | **Open Order Request:** Added *EMM,* Added *ExecutionWithinFirmShortCode,* Added *ClientIdentificationShortCode* | **Extended Response:** Removed *Order Reference Number,* Added *Order Priority,* Added *MiFID Indicators,* Removed *OE Session ID,* Added *OE Partition ID,* Added *Logical Access ID,* Removed *DEAIndicator,* Added *QuoteReqID,* Added *Triggered Stop Time In Force,* Added *Trading Capacity,* | **Collar Breach Confirmation:** Added *ExecutionWithinFirmShortCode,* Added *ClientIdentificationShortCode* | **Price Input:** Added *ExecutionWithinFirmShortCode,* Added *ClientIdentificationShortCode* | **Extended Fill:** Added *MiFID Indicators,* Added *Execution Phase,* Added *QuoteReqID,* Added *Triggered Stop Time In Force,* Moved *Leg Side* to the last repeating section, Added *Trading Capacity* | **LP Command:** Added *ExecutionWithinFirmShortCode,* Added *ClientIdentificationShortCode* | **RFQ Notification:** New Message | **RFQ Matching Status:** New Message | **User Notification:** New Message The following fields have been updated: - Updated *Exchange ID* from 1 byte Integer to 8 characters string; Added Conditions to *Account Number;* Added Conditions to *Account Type;* Removed value '9' from *Account Type;* Added Conditions to *Ack Type;* Added values '14' and '15' to *Ack Type;* Added Conditions to *Clearing Firm ID;* Updated length of *Clearing Instruction* from 4 to 2 bytes; Updated *Client Order ID* definition; Updated *ClientIdentificationChortCode* definition; Added Conditions to *Complex Trade Component ID;* Revamped values for *Concerned Field;* Added Conditions to *Counterpart Firm ID;* Added Conditions to *Country of Executor;* Added Conditions to *Country Investor;* Added Conditions to *Dark Execution Instruction;* Removed value '3' from *EMM;* Added value '8' to *EMM;* Updated description and condition of *ExecutionWithinFirmShortCode;* Added values '4' and '5' to *Execution Instruction;* Updated *Firm ID* technical type from unsigned integer to string; Added Conditions to *InvestmentDecisionWFirmShortCode;* Added values from '12' to '17' to *Kill Reason;* Removed value '10' from *Kill Reason;* Added Conditions to *Kill Reason;* Added Conditions to *Last Traded Price;* Added value '1' to *Log Out Reason Code;* Added Conditions to *LP Role;* Added value '12' to *LP Role;* Updated *Market Of Reference MIC* length from 8 to 4 bytes; Added Conditions to

			Order ID; Added Conditions to *Order Price;* Added Conditions to *Order Side;* Added Conditions to *Order Type;* Added value '9' to *Order Type;* Revamped *Peg Offset;* Added Conditions to *Price;* Added Conditions to *Quantity;* Added Conditions to *Securities Transaction Indicator;* Updated *Sell Revision Indicator* values ; Updated *Buy Revision Indicator* values ; Added Conditions to *Symbol Index;* Removed value '9' from *Time In Force;* Added values '5' and '6' to *Trade Qualifier;* Added Conditions to *Waiver Indicator* The following fields have been added: - Account Number Counterpart, Account Type Cross Buy, Account Type Cross Sell, Action Type, ARM APA Indicator, Bypass Indicator, Centralisation Date, Client Country Branch, Client Cross Birth Date, Client Cross Country Branch, Client Cross First Name, Client Cross Identification Code, Client Cross National ID, Client Cross Passport ID, Client Cross Surname, Client Decision Maker Birth, Client Decision Maker Code, Client Decision Maker First Name, Client Decision Maker NID, Client Decision Maker Passport ID, Client Decision Maker Surname, Client First Name, Client ID, Client ID MiFID, Client ID MiFID Cross, Client Identification Code, Client OrderNational ID, Client Passport ID, Client Surname, Counterparty Entity ID, Counterparty Firm Directive Indicator, Country Branch Membership, Currency, Declaration ID, Declaration Status, Deferral Indicator, Duplicative Trade Report Indicator, End Client, End Time Vwap, Entering Counterpart, Executing Broker, Executing Counterpart, Executing Entity ID, Execution Phase, ExecutionWithinFirm, ExecutionWithinFirmIDType, Family ID, FieldConcernedTradeEntry, Firm ID Publication, Free Text 1, Free Text 2, Free Text 3, Free Text 4, Free Text 5, Gross Trade Amount, Gross Trade Amount Scale, Guarantee Flag, Investment Decision Within Firm, Investment Firm Directive Indicator, ISIN Code, Logical Access ID, Market Of Reference MIC, MIC, MiFID Emission Allowance Type, MiFID Indicators, MiFID Notional Amount, MiFID Price Notation, MiFID Qty in Measurement Unit Notation, MiFID Quantity Measurement Unit, Net AmountNotional Currency, Notional Increase Decrease, Number Of LPs, OE Partition ID, Operation Type, OTC Post Trade Indicator, Other Factors Indicator, Potential Matching Price, Potential Matching Quantity, Price Multiplier, Price Multiplier Decimals, Price Scale, Quantity Notation, Quantity Scale, QuoteReqID, Recipient Type, Rejection ID, Return Type, RFE Answer, RFQ Update Type, Settlement Flag, Settlement Period, Side, Software Provider, Start Time Vwap, Trading Capacity, Trading Date Time, Trading Venue, Transaction ID, Transaction Price Type, Transaction Time, Transmission of Order Indicator, Transmitting Firm ID Buyer, Transmitting Firm ID Seller, Triggered Stop Time In Force, Upfront Payment, Upfront Payment Currency, User Status The following fields have been removed:

			- BorS Decision Maker Birth, BorS Decision Maker Country, BorS Decision Maker First Name, BorS Decision Maker NID, BorS Decision Maker NPassport, BorS Decision Maker Surname, Buy or Sell Decision Maker CodeRevision Indicator, Buy or Sell Identification Code, Buy Revision Indicator, Buyer or Seller date of birth, Buyer or Seller first name, Buyer or Seller National Id, Buyer or Seller NPassport, Buyer or Seller surname, Client IDBirth Date, Country Branch Buyer or Seller, Country of Executor, OE Session ID, RFE Indicator, Transmission of Order Indicator
1.1.1	6 Sep 2017	IT Solutions - LPI	The following field has been updated: - *Account Number*: Updated length from 14 to 12 bytes The following messages have been updated: - **NewOrder (01):** Updated *Account Number* length | **CancelReplace (06):** Updated *Account Number* length | **Quotes (08):** Updated *Account Number* length | **ExtendedResponse (16):** Updated *Account Number* length | **ExtendedFill (29):** Updated *Account Number* length The following section has been updated: - 5.2.2 Example: NewOrder (01) message: Updated *Account Number* length and overall message length
1.2.0	20 Oct 2017	IT Solutions - LPI	The following messages have been updated: - **Ack (03):** Updated description for VFU/VFC Ack; Updated *Client Order ID* presence from Mandatory to Conditional | **Fill (04)**: Updated description for MiFID Transaction Identification Code | **CancelReplace (06):** Updated *Account Type* and *LP Role* presences from Conditional to Optional | **Reject (07)**: Updated description for rejection in case of invalid values | **Quotes (08)**: Updated description for Clearing Data and Short Codes management; Added *Free Text* field in the clearing data repeating section | **QuoteAck (09):** Updated *Buy Revision Indicator* and *Sell Revision Indicator* presences from Mandatory to Conditional**;** Updated description for duplicates management | **MassCancelAck (14):** Updated presences of the following fields from Mandatory to Conditional: *Message Sending Time*, *OEG IN From Member*, *OEG OUT To ME* | **OpenOrderRequest (15):** Updated description following ExtendedResponse message decommissioning | **OwnershipRequestAck (17):** Updated description following ExtendedResponse message decommissioning | **OwnershipRequest (18):** Updated description following ExtendedResponse message decommissioning; Added *Original Client Order ID* and *EMM* fields | **PriceInput (28):** Removed value '3' Reference Price from the field *Input Price Type;* updated description following the removal of this value The following messages have been removed: - ExtendedResponse (16) - ExtendedFill (29) The following fields have been updated: - Multiple integer fields updated to align possible values with their presence in messages

			structures: the mandatory fields have one less authorized value (Null Value is not accepted) - Multiple bitmap fields updated to remove "Future Use" values previously set on unused bits - Updated descriptions for fields: Account Number; Client Order ID; Trade Qualifier; Ack Qualifiers; Order Priority; Order Type; Software Provider - Updated or Added conditions for fields: Account Type; Ack Type; Client Order ID; Firm ID; InvestmentDecisionWFirmShortCode - Modified Values as follows: *Account Type*: value '8' changed from Riskless Principal to Structured Product Market Maker; *Account Type Cross*: value '8' changed from Riskless Principal to Structured Product Market Maker; *Ack Type*: added values '16' VFU/VFC Triggered Ack, '17' Open Order Request Ack; *EMM*: value Not Applicable changed from '254' to '99'; *Input Price Type*: removed value '3'; *Logon Reject Code*: renamed values '6' and '7'; *MiFID Indicators*: updated values '4' and '5'; *Open Close*: values 2 to 9 set for Derivatives only; *Trade Qualifier*: renamed value Opening Trade to First Trade; *Trade Type*: removed value '35', added values '37' and '38'; *Triggered Stop Time In Force*: removed values '2', '3', '4', '5', '7' and '8' The following sections have been added: - 1.3 FUTURE USE The following sections have been updated: - 1.2.1 Maintenance of Relevant Data relating to Orders in Financial Instruments: Added paragraph on short code general presence rules | 2.2.2 Drop Copy: Removed details of SBE Drop Copy as it will be provided in FIX only | 4.1.4 SBE Optional Fields and Null Value: Added note on Bitmap | 4.3 DATE AND TIME CONVENTIONS: Removed unused time format in 27-bytes | 4.6.1 Symbol Index: Removed tab depicting Symbol Index ranges The following sections have been removed: - 2.4 THROTTLING MECHANISM: will be described in a dedicated document - 2.5 THROTTLING PARAMETERS: will be described in a dedicated document Formatting changes: - Added notes in messages for repeating section usage and number of occurrence | Renamed section 1.2.2 from *Transaction Reporting to Competent Authorities* to *Reporting to Competent Authorities* | Renamed Timestamps fields to Epoch Time in Nanoseconds | Adjusted visual representation of any "future use" fields, with addition of [N/A] "flag" in the descriptions, and different colour of the fields
1.3.0	29 Jan 2018	IT Solutions - LPI	The following messages have been added: - Technical Reject (108) - Instrument Synchronization List (50) - Synchronization Time (51) The following messages have been updated: - **Ack (03):** updated description for Order Priority details - **Reject (07):** updated description; *Firm ID* presence changed from Mandatory to Conditional

			- **MassCancelAck (14):** updated description for the sending of unitary Kill (05) messages - **UserNotificaiton (39):** updated description for DEA description The following fields have been updated: - *Exchange ID:* format changed from Numerical to Text - InvestmentDecisionWFirmShortCode: updated conditions - Log Out Reason Code: added new values - *Order Priority*: updated description for stop orders - *Trade Type:* added new values (39, 40, 41) The following sections have been updated: - 4.5 PRICE, QUANTITY, RATIO AND AMOUNT FORMATS: removed references to MiFID fields - 4.6.2 Order Priority The following sections have been removed: - Short Codes Management before January 2018
1.3.1	16 Mar 2018	IT Solutions - LPI	The following messages have been updated: - **Reject (07):** field *Rejected Message* has been deprecated and field *Rejected Message ID* has been added - **Technical Reject (108)**: field *Rejected Message* has been deprecated and field *Rejected Message ID* has been added The following fields have been updated: - *Rejected Message:* it has been deprecated and replaced by the field *Rejected Message ID* - *Rejected Message ID*: it has been introduced to replace field *Rejected Message*; this change has been made to align the length of this field with the length of the field *Template ID* - *Disclosed Quantity*: updated conditions, updated minimum value from 0 to 1 - *EMM*: updated conditions for presence in Reject (07) message - *Symbol Index*: updated conditions for presence in Reject (07) message - *Order ID, Bid Order ID* and *Offer Order ID*: updated conditions for the Fill (04) message - *Maturity*: updated format from Date to Alphanumerical ID – This fields is used for Derivatives only (For Future Use) - *Order Expiration Date:* updated format from Date to Numerical ID - *Time In Force: value Good Till Time* set For Future Use - Order Expiration Time: set For Future Use
1.4.0	16 Mar 2018	IT Solutions	The following field description has been updated: - Counterpart Firm ID
1.5.0	25 Oct 2018	IT Solutions - LPI	The following messages have been created: - RFQ LP Matching Status (37) The following messages have been updated: - **New Order (01):** Removed future use grey layout from the following fields: *Dark Execution Instruction*, *QuoteReqId*, *Peg Offs*et; Added two empty repeating sections at the end of the message - **Cancel Replace (06):** Removed future use grey layout from the following fields: *Dark*

			Execution Instruction, *QuoteReqId*, *Peg Offset*; Added two empty repeating sections at the end of the message - **Quote Request (10):** Removed 'For Future Use' from message description; added *Dark Execution Instruction* and *Minimum Order Quantity* fields - **Cancel Request (12):** Added *Order Category* field - **Mass Cancel (13):** Added *Order Category* field; Added two empty repeating sections at the end of the message - **Mass Cancel Ack (14):** Added *Order Category* field - **Open Order Request (15):** Added *Order Category* field - **Ownership Request Ack (17):** Added *Order Category* field - **Ownership Request (18):** Added *Order Category* field - **RFQ Notification (35):** Removed 'For Future Use' from message description; added *Dark Execution Instruction*, *Minimum Order Quantity* fields; Deprecated *RFQ Update Type* field - **RFQ Matching Status (36):** Deprecated *Recipient Type* field; updated Message Usage; removed 'For Future Use' from message description - **User Notification (39):** Added one empty repeating section at the end of the message The following fields have been created: - Order Category The following fields have been updated: - Modified Values as follows: *LP Role*: added value '12' RFQ Liquidity Provider; *Dark Execution Instruction*: value '1' Deferred Trade Indicator set as deprecated, value '2' Displayed Order Interaction set as deprecated; *Kill Reason*: added values from '19' to '22', values '13' and '15' previously "For Future Use" set to "Deprecated"; *Trade Qualifier*: added value '7' Deferred Publication; *Trade Type*: removed 'For Future use' label from value '38', added values '42' '43' and '44' (Derivatives only); *Ack Qualifiers*: removed 'For Future Use' label from value '0'; *EMM*: added value '9' The following fields have been deprecated: - Recipient Type; RFQ Update Type Formatting changes: - Added repeating section headers in message structures The following sections have been updated: - 4.1.2 SBE Repeating Section Header: added description for empty repeating sections
1.6.0	12 Nov 2018	IT Solutions - LPI	Please note that all the changes introduced with this release and listed below are applicable and used for Euronext Block only The following messages have been updated: - **New Order (01):** Added new value "Conditional Order" in field *Execution Instruction* - **Cancel Replace (06):** Added new value "Conditional Order" in field *Execution Instruction* - **Kill (05):** Added new value "Order cancelled due to potential matching" in field *Kill Reason* and

			message description has been updated accordingly - **Ack (03):** Added new value "Random Uncrossing Phase" in field *Ack Phase* The following fields have been updated: - Modified Values as follows: *Execution Instruction*: added value '6' Conditional Order; *Kill Reason*: added value '18' Order Cancelled due to potential matching; *Ack Phase*: added value '8' Random Uncrossing Phase; The following sections have been updated: - 5.1.1 Scope of Messages and Functionalities: added new Optiq Segment: Block - Added Block Optiq Segment in "Available For" for the following messages: all admin messages, NewOrder (01), Ack (03), Fill (04), Kill (05), CancelReplace (06), Reject (07), CancenRequest (12), MassCancel (13), MassCancelAck (14), OpenOrderRequest (15), OwnershipRequestAck (17), OwnershipRequest (18), UserNotification (39), InstrumentSynchronizationList (50), SynchronizationTime (51).
1.6.1	20 Nov 2018	IT Solutions - LPI	The following field has been updated: *Kill Reason*: updated value 'Order Cancelled due to potential matching' from '18' to '30'
2.0.0	21 May 2019	IT Solutions - WMA	Major update for the migration of the Derivatives Markets to Optiq. The following changes have been made: ■ For support of the Derivative segments, the following New messages have been added: ■ MM Sign-In (47) and MM Sign-In Ack (48) ■ Security Definition Request (60) and Security Definition Ack (61) ■ MM Protection Request (62) and MM Protection Ack (63) ■ New Wholesale Order (64) and Wholesale Order Ack (65) ■ In section 5.3 "Administration Messages" – added support for the Derivatives segments ■ For support of the Derivative segments, the following changes have been updated in the existing messages: ■ **New Order** (01): In the block added a field *Non Executing Client ID*; Added support for the Derivatives segments; modified references to the repeating groups to show the names provided in the SBE template ■ **Ack** (03): Added a repeating group for the short codes, including: *ExecutionWithinFirmShortCode*, *ClientIdentificationShortCode*, *MiFID Indicators*; Added support for the Derivatives segments; updated description of Ack responses that are specific to the Cash markets only, or are for future use, and added clarification for reconciliation of private and public messages for the Cash markets only, and use of Order Priority for the Derivatives markets ■ **Fill** (04): Deprecated fields in the OptionalFieldsFill repeating group: *Underlying Last Traded Price*, *Package ID*, *Underlying Instrument ID*; Added a repeating group for the short codes, including: *ExecutionWithinFirmShortCode*, *ClientIdentificationShortCode*, *MiFID*

			Indicators; Added support for the Derivatives segments ■ **Kill** (05): In the block added a field *Ack Qualifiers*; Added a repeating group for the short codes, including: *ExecutionWithinFirmShortCode*, *ClientIdentificationShortCode*, *MiFID Indicators*; Added support for the Derivatives segments; updated description for the specific use of fields for Cash and Derivatives markets ■ **Cancel Replace** (06): Added support for the Derivatives segments without changes in the structure and updated description for the specific use of fields for Cash and Derivatives markets ■ **Reject** (07): Added support for the Derivatives segments; Added a repeating group for the short codes, including: *ExecutionWithinFirmShortCode*, *ClientIdentificationShortCode*, *MiFID Indicators* ■ **Quotes** (08): In the block added a field *Execution Instruction* & deprecated field *RFE Answer;* Added field *RFE Answer* in the QuoteRep repeating group to make the RFE responses possible on the individual double-sided quote; Added support for the Derivatives segments; updated description for different behavior and support for the Warrants & Certificates and the Derivatives segments ■ **Quote Ack** (09): In the block added fields *ExecutionWithinFirmShortCode* and *Ack Qualifiers*; Added support for the Derivatives segments; updated description for different behavior and support for the Warrants & Certificates and the Derivatives segments ■ **Quote Request** (10): Added support for the Derivatives segments without changes in the structure and updated description and updated description to indicate the specific use and conditions for the Derivatives segments ■ **Mass Cancel** (13): In the block added a field *TargetExecutionWithinFirmShortCode*; Added support for the Derivatives segments; updated description for different behaviour on the Cash and Derivatives markets ■ **Mass Cancel Ack** (14): In the block added fields *Ack Qualifiers* and *TargetExecutionWithinFirmShortCode*; Added a repeating group for the short codes, including: *ExecutionWithinFirmShortCode*, *ClientIdentificationShortCode*, *MiFID Indicators*; Added message support for the Derivatives segments ■ **Trade Bust Notification** (19): In the block added fields *LIS Transaction ID, Parent Execution ID* and *Parent Symbol Index*; Added support for the Derivatives segments; updated description for specifics of the Derivatives segments ■ Added support for the Derivatives segments for the existing messages that do not change in structure: **Cancel Request** (12), **Open Order Request** (15), **Ownership Request**

			(18), **Ownership Request Ack** (17), **User Notification** (39), **Instrument Synchronization List** (50), **Synchronization Time** (51) ■ Field Descriptions: ■ Add new fields: Breach Action, Breach Status, Contract Symbol Index, Current MMP Position, ESCBMembership, Leg Error Code, Leg Last Trading Date, Leg Price, Leg Put Or Call, Leg Ratio, Leg Security Type, Leg Strike Price, Leg Symbol Index, LIS Transaction ID, MMP Execution Type, Non Executing Client ID, Parent Execution ID, Parent Symbol Index, Protection Threshold, Protection Type, Quantity, Request Type, Response Type, Security Request ID, Side, Strategy Code, TargetExecutionWithinFirmShortCode, Wholesale Side, Wholesale Trade Type ■ Enriched values for fields as follows: *Ack Qualifiers* – added values 2 = Request with Client Order Id, 3 = Use of Cross Partition, 4 = Internal1, 5 = Internal2, 6 = Execution Upon Entry flag Enabled, and 7 = Execution Upon Entry flag; *Account Type* and *Account Type Cross* - added values 14 = Omega Client and 15 = Ceres Client; *MIFID Indicators* – added value 5 = FR MAR AMP LP (for Future use on the Cash markets) ■ Deprecated values for fields as follows: *Clearing Instruction* – deprecated values 4008, 4009, 4010; *Dark Execution Instruction* – deprecated values 1 = Deferred Trade Indicator and 2 = Displayed Order Interaction; *Trade Type* – deprecated values 7 = Asset Allocation Trade (Derivatives Only), 10 = Exchange for Physical Trade - Cash Leg (Cash Only), 14 = Strategy Leg Guaranteed Cross Trade (Derivatives Only), 16 = Strategy Leg Asset Allocation Trade (Derivatives Only), 19 = Strategy Leg Exchange For Physical Trade (Derivatives Only), 22 = AtomX Trade (Derivatives Only) ■ Deprecated fields or those set to future use: Contract ID, Package ID, Underlying Instrument ID, Underlying Last Traded Price ■ Enriched conditions and descriptions of fields Account Type Cross, Ack Qualifiers, AFQ Reason, Bid Error Code, Bid Order ID, Bid Price, Bid Quantity, Breached Collar Price, Clearing Instruction, Collar Rejection Type, Contract ID, Contract Symbol Index, EMM, Exchange ID, Execution Instruction, Execution ID, Leg Option Type, Leg Price, Leg Strike Price, Leg Ratio, LP Role, MIFID Indicators, Log Out Reason Code, Maturity, MMP Execution Type, Non Executing Client ID, Offer Error Code, Offer Order ID, Offer Quantity, Offer Price, Order ID, Order Category, Order Side, Original Client Order ID, Parent Execution ID, Peg Offset, Price, Quantity, Rejected Message, Symbol Index, Trade Type, Trading Session Validity and Undisclosed Iceberg Type, Undisclosed Price ■ Use of the following fields extended to be for both Cash and Derivatives: Buy Revision

			Indicator, Order Priority, RFE Answer, Sell Revision Indicator, STP ID, Technical Origin ■ Throughout the document: ■ References to "Cash Markets" updated to "Cash and Derivatives Markets" where applicable, and added clarification for differences in messages, and specific uses and behaviour for the individual markets ■ Updated references to the documentation, that covers both Cash and Derivatives markets ■ Formatting updates and correction of phrasing, typos and cosmic changes ■ Replaced segment tags on individual messages with text based ones, for convenient searching ■ In MIFID II related fields and values updated list of messages that include short codes ■ Added section 1.5 "Error Codes" – where description from the dedicated document "Euronext Markets - Optiq & TCS Error List". Associated references to the document removed ■ Added a section "Work in Progress" ■ Added a table mapping of OEG SBE templates and specifications per segment, with latest and earliest supported versions ■ In "Determine the 'shorter path' added footnote on Cash and Derivatives standing data ■ Section 4.5 "Price, Quantity, Ratio and Amount Formats" added clarification for prices in basis points ■ Section 4.6.2 "Order Priority" added clarification for reconciliation use in Market data for Cash markets only ■ Section 5.1.1 "Scope of Messages and Functionalities" updated the list of Optiq Segments, to include Derivatives segments, and use text-based tags used for the segments ■ Section 5.2.2 "Example: NewOrder (01) message" updated example to be in line with new format
2.1.0	6 Sep 2019	IT Solutions - WMA	The following changes have been made to this version of the document, publish along with SBE template 204: ■ In section 5.4.2 "Ack (03)" updated description of Ack responses for Quote Request (10), Request For Implied Execution (66) and Cross Order (67) messages; ■ In section 5.4.4 "Kill (05)" added details for handling of order cancellation; ■ In section 5.4.9 "Quote Request (10)" updated description for different behavior and support for the Warrants & Certificates and the Derivatives segments; ■ In section 1.2 "MIFID II related Fields and Values" updated list of messages that include short codes ■ The following new messages were added as part of SBE 203: ■ **Request For Implied Execution** (66); ■ **Cross Order** (67); ■ The following changes were made in the existing messages: ■ As part of SBE 203: ■ **New Order** (01): Added a repeating group 'Additional Infos' including field *Long Client ID* ■ **Fill** (04): Added notes on processing of Fill messages sent for Strategy transactions

			submitted as Wholesales. Added a repeating group 'Optional Fields Derivatives' including fields *Evaluated Price, Message Price Notation* ▪ **Cancel Replace** (06): Added a repeating group 'Additional Infos' including field *Long Client ID* ▪ **User Notification** (39): Added *Logical Access ID* and *Order Size Limit* for Risk Guard Service; ▪ **MM Sign In** (47): Removed *Client ID*; Added *Long Client ID*; ▪ **MM Sign In Ack** (48): Removed *Client* ID; Added *Long Client ID*; ▪ **MM Protection Ack** (63): Updated format of *Current MMP Position* to support negative values; ▪ **New Wholesale Order** (64): Added notes on processing of Fill messages sent for Strategy transactions submitted as Wholesales. Changed presence of field *Leg Side* to conditional; Moved *Trading Capacity* to WholesaleClientRep; Replaced *Client ID* by *Long Client ID*; Added *Message Price Notation*; ▪ **Wholesale Order Ack** (65) Changed presence of field *Leg Side* to conditional; Removed *Trading Capacity* ▪ As part of SBE 204: ▪ **Fill** (04): Added fields *Final Symbol Index, Final Execution ID* in the repeating group 'Optional Fields Derivatives' ▪ Field Descriptions updated with SBE templates 201 through 204: ▪ Added new fields: ▪ As part of SBE 203: Message Price Notation, Evaluated Price, Order Actor Type, Long Client ID; ▪ As part of SBE 204: Final Execution ID, Final Symbol Index; ▪ Enriched values for fields as follows: ▪ As part of SBE 203: *Ack Type* – added value 21 = RFIE Ack; *EMM* – added value 15 = Delta Neutral Contingency leg; *Kill Reason* – added value 36 = Order Cancelled due to a potential trade outside FSP limits; *Trade Type* – added values 100 = Conventional Trade - Provisional price, 101 = Large in Scale (LiS) Trade - Provisional price, 102 = Large in Scale (LiS) Package Trade - Provisional price; *User Status* – added values 13 = Trader - Algo Suspended by Risk Manager, 14 = Trader - Algo Unsuspended by Risk Manager, 15 = Firm Suspended by Risk Manager, 16 = Firm Unsuspended by Risk Manager, 17 = DEA Suspended by Risk Manager, 18 = DEA Unsuspended by Risk Manager, 19 = Logical Access Suspended by Risk Manager, 20 = Logical Access Unsuspended by Risk Manager, 21 = Trader - Algo Blocked by Risk Manager, 22 = Trader - Algo Unblocked by Risk Manager, 23 = Firm Blocked by Risk Manager, 24 = Firm Unblocked by Risk Manager, 25 = DEA Blocked by Risk Manager, 26 = DEA Unblocked by Risk Manager, 27 = Logical Access Blocked by Risk Manager, 28 = Logical Access Unblocked by Risk Manager, 29 = Order Size Limit Activated by Risk Manager, 30 = Order Size Limit Deactivated by Risk Manager;

			▪ As part of SBE 204: *Ack Type* – added value 22 = Cross Order Ack; *Kill Reason* – added values 37 = Remaining RFC Quantity Cancelled, 38 = Order Cancelled due to an incorrect Reactor Response; ▪ Deprecated values or removed values as follows: ▪ As part of SBE 201: *Trade Type* – removed wrongly introduced in SBE 200 deprecated flag for value 5 = Guaranteed Cross Trade; ▪ As part of SBE 203: *Strategy Code* – deprecated values C = Call or Put Cabinet, Z = Reduced Tick Spread, u = Buy Write; Enriched conditions and description of fields Symbol Index, Firm ID, User Status, Order Size Limit, Leg Price, Current MMP Position, Leg Ratio.
4.0.0	27 Feb 2020	IT Solutions - IZE	The following changes have been made to this version of the document, publish along with SBE template 300: ▪ Add the Account Type field as optional for both messages; Quote Request (10) and RFQ Notification (35); ▪ Add new Counterpart Firm ID values: 3 = LCH Limited, 5 = SIX X Clear and 2 = Bilateral Settlement; ▪ In section 5.4.38 add new message RFQ Audit; ▪ New field "Order Origin" added in fiels description section. This field is used in message RFQ Audit; ▪ Add note about RFQ issuer new behaviour. A RFQ issuer is able to establish connection and submit RFQ request. So it is able to use following messages: (the note is added in 3 messages section's description) ▪ Quote Request (10) ▪ Cancel Request (12) ▪ Mass Cancel (13) ▪ Change "Strike Price Leg"to "Price Leg" in 3 sections for Delta-Neutral Strategy description; ▪ The field "Trading Capacity" is removed from the block of the New Wholesale Order (64) message and added in its repeating group; ▪ In New Order (01) message description section replace the number of repeating groups from six to seven and the description of "AdditionalInfos" repeating section added. ▪ The Condition of field "Order Type" is updated to reflect the case of Cross order where the only possible value is "Limit"; ▪ Update Cross Order typo mistake (it should be with space and not linked); ▪ Add following messages as link to in the ClientIdentification and add them also in section 1.1.1 short codes table: Ack (03), Fill (04), Kill (05), Reject (07) and Mass Cancel Ack (14); ▪ Remove from the description of field "Account Type Cross" the message "Cross Order" ▪ In New order (01) section 5.4.1 and in Quote (08) section 5.4.7 remove the paragraph describing the order that are not FOK or IOC are blocked; ▪ Correct Delta Neutral description text under" Section 5.4.30.1" - New Wholesale Order (64) - Message Description; ▪ Update the condition of fields "ExecutionWithinFirmShortCode" and "InvestmentDecisionWFirmShortCode" to reflect the correct fields length;

			▪ In the section 5.4.6 of Reject (07) message, a note added to mention that the ClientIdentificationShortCode field is not populated for Cross Orders;
4.0.1	12 Mar 2020	IT Solutions - IZE	The following changes have been made to this version of the document: **1. Document Improvements:** ▪ Update the Support contact information. ▪ Update the **Scope** section by adding Euronext's Trade Confirmation System (TCS). ▪ Update the SBE Templates and Specification versions per segment and add details about the Financial Derivatives segment. ▪ Add note about Financial Derivative segment which is out of scope in page 30 (Optiq segment table). ▪ More details about Client Order ID Usage for Order Management are added in section 2.3.2 . (New paragraph displayed before the last one on the section). 2. Merge of TCS OEG SBE : ▪ The section 4.3 "Date and Time Conventions" is updated to detail "Date format" definition in case of Cash and Derivatives Markets and in case of TCS reporting service. ▪ Add all TCS Application messages under 5.4 Application Messages section. (From section 5.4.39 to section 5.4.45) ▪ Add list of TCS fields that was not available in OEG document under section 6. Fields Description (Account Number Cross, Account Type Cross, Action Type, Bypass Indicator, CCP ID, Centralisation Data, ClientIdentificationShortCodeCross, Declaration ID, Declaration Status, End Time Vwap, Entering Counterparty, Free Text Cross, Gross Trade Amount, Guarantee Flag, MIC of Secondary Listing, Miscellaneous Free Amount, Operation Type, Pre Matching Type, Principal Code Cross, Previous Day Indicator, Settlement Flag, Settlement Period, Start Time Vwap, Transaction Price Type and Waiver Indicator).
4.0.2	30 Mar 2020	IT Solutions - IZE	The following changes have been made to this version of the document: **Document Improvements:** ▪ Remove Financial Derivatives Optiq Segment FID from the document. ▪ In section 5.4.37 Cross Order, under repeating section usage details about following fields; Leg Last Traded Price and Leg Last Traded Quantity is added. ▪ In section 5.4.37 under message description definition about the value of Symbol Index in case of Cross Order on strategies is added. ▪ Add Document Audience section. ▪ Update Scope section by adding new table. ▪ Removing Further Information section and the Old table of SBE templates per segment. ▪ Add clarification about the use of MiFIDFields occurrences in following messages description: Ack , Fill, Reject, Kill and Mass Cancel Ack.(The MiFIDFields repeating section should be used for Optiq Derivatives while it is not used for Optiq Cash.) ▪ Add clarification about the use of field ExecutionWithinFirmShortCode in QuoteAck message description (In the QuotesAck (09) message the field

			ExecutionWithinFirmShortCode should be used for Optiq Derivatives while it is not used for Optiq Cash).
4.1.0			■ The following changes have been made to this version of the document: ■ In Mass Cancel (13) added details for processing of mass cancellation. ■ In Application Messages: - **Quote Request (10):** *AccountType* changed from Optional to Conditional (Mandatory for ETF Access Platform). ■ In Field Description: - Enriched conditions and descriptions of fields: *Trading Session Validity*, *Account Type* and *Counterpart Firm ID;* ■ Enriched values for field as follows: *Trading Session Validity* with new value '4' (Session 4).
4.2.0	16 Jun 2020	IT Solutions – FBO	Integration of Oslo Fixed Incomes: ■ New values for Trade Type: ■ 46 = Non-Standard Settlement ■ 47 = Repurchase Agreement – Repo (OBOE only) ■ 48 = Exchange Granted Trade (OBOE only) ■ 49 = Other (OBOE only) ■ 50 = Odd Lot ■ Added note on TVTIC determination in section Fill (04) message description.
4.2.1	23 Jun 2020	IT Solutions – FBO	Rewrote description of Trading Session Validity field (actual possible values, bitmap format).
4.3.0	5 Aug 2020	IT Market Services – WMA	SBE 303 introduced – No impact on OEG
4.3.1	20 Sep 2020	IT Market Services – WMA	The following changes have been made to this version of the document: ■ In Error Codes, removal of the note indicating "Dark feature is for future use" ■ Correction of the definition of the Session 3 for the field Trading Session Validity
4.4.0	2 Nov 2020	IT Market Services – WMA	Introduction of SBE 304 – no impacts
4.5.0	4 Jan 2021	IT Market Services	The following messages were added – only available for Block Segment: ■ Wave For Liquidity (73) ■ Wave For Liquidity Notification (74); The following message structure was updated: ■ New Order (01): Added IOI ID; The following section was updated: ■ 5.4.1.1 Message Description; The following field got the conditions updated: ■ Order Quantity: adjusted to include "In Wave For Liquidity (73) message: required only when IOI Quantity is different than "Undisclosed Qty" – ignored in all other cases"; The following fields got the list of messages on which they are used updated to include Wave For Liqudiitiy (73) and Wave For Liquidity Notification (74): ■ Order Quantity; ■ EMM; ■ Symbol Index; ■ Message Sending Time;

			■ Book IN Time; ■ Book OUT Time; ■ OEG IN From ME; ■ OEG IN From Member; ■ OEG OUT To ME; ■ Error Code.
4.6.0	8 Feb 2021	IT Market Services – WMA	■ The following changes have been made to this version of the document: ■ In Field Description: - Updated description of fields: *Order Expiration Date* and *Counterpart Firm ID.*
4.6.1	5 Jul 2021	IT Market Services – WMA	■ The following changes have been made to this version of the document: ■ In Fill (04): - Updated description in Trading Venue Transaction Identification Code (TVTIC) ■ In Declaration Notice (42): - Add description of Trading Venue Transaction Identification Code (TVTIC)
4.7.0	9 July 2021	IT Market Services – SNM	■ The following changes have been made to this version of the document: In Kill (05): update the general message description to include the RFC orders
4.8.0	3 Aug 2021	IT Market Services – FLO	Introduction of SBE 308 – no impacts
4.10.0	6 Oct 2021	IT Market Services – FLO	■ Introduction of SBE 310. ■ The following change has been made to this version of the document: ■ Improved description in the section 2.4 Order ID ■ Improved description of the bit position FR MAR AMP LP in MiFID Indicators bitmap field: ■ FR MAR AMP LP is related to the AMAFI (Association française des marchés financiers) market abuse prevention. Plus, addition of an example.
4.11.0	24 Nov 2021	IT Market Services – WMA	Introduction of SBE 311 – no impacts
4.12.0	24 Dec 2021	IT Market Services – WMA	■ Introduction of SBE 312. ■ The following changes have been made to this version of the document: ■ In New Order (01): - Updated field *STP ID* which becomes enabled ■ In Cancel Replace (06): - Updated field *STP ID* which becomes enabled ■ In Quotes (08): - Added field *STP ID* in Quotes (08) message ■ In Field Description: ■ - Updated description of fields: *Execution Instruction* and *STP ID.* ■ - Added bit 7 (STP both orders) in *Execution Instruction.*
4.13.0	24 Jan 2022	IT Market Services – WMA	■ Introduction of SBE 313. ■ The following changes have been made to this version of the document: ■ References to Collar Breach Confirmation message and mechanism are removed from the document because the feature is not used anymore in Euronext Cash markets

			■ In Collar Breach Confirmation (20): - Message removed: this feature is not used anymore in Euronext. ■ In Reject (07): - Section Collars Fields is not used anymore for Cash ■ In Field Description: - Updated values for field *AckType*: 4 (Collar Confirmation Ack) is removed
5.16.0	1 Jun 2022		■ Introduction of SBE 315 – no impacts. ■ Introduction of SBE 316. ■ The following changes have been made to this version of the document: ■ In New Order (01): - Field added: Trading Capacity Cross ■ In Fill (04): - Description updated for section Trading Venue Transaction Identification Code (TVTIC) - Fields added: *Trade Unique Identifier* in the main section, *Trade Unique Identifier* in the Strategy Fields repeating section ■ In Trade Bust Notification (19): - Description updated - Fields added: Trade Unique Identifier and Parent Trade Unique Identifier ■ In Declaration Notice (42): - Description updated for section Trading Venue Transaction Identification Code (TVTIC) - Field added: Trade Unique Identifier ■ In Declaration Cancel and Refusal (43): - Field added: Trade Unique Identifier ■ In Field Description: - Fields added: *Trade Unique Identifier*, *Parent Trade Unique Identifier* - Value added: "41" (Order cancelled due to Order Price Control Collar breach) in field *Kill Reason* - Value added: "9" (Euronext Clearing) in field *CCP ID* - Value added: "9" (Euronext Clearing) in field *Counterpart Firm ID*
5.17.0	1 Aug 2022	IT Market Services – YOU – WMA	■ Introduction of SBE 317 ■ The following changes have been made to this version of the document: ■ In New Order (01): - Rejection rule added for Trading Capacity and Trading Capacity Cross fields ■ In Declaration Entry (40): - Explanation and Rejection rule added for Trading Capacity and Trading Capacity Cross fields ■ Details added for presence rule and condition for field Trade Unique Identifier.
5.18.0	15 Sep 2022	IT Market Services – SBE – MKO – WMA	■ Introduction of SBE 318. ■ The following changes have been made to this version of the document: ■ In User Notification (39): - Field added: *OrderAmountLimit* ■ In Field Description : - Description updated for field Trading Capacity Cross: Adding that, apart from TCS, the Trading

			Capacity Cross field is also used for the Central Order Book (Cash & Derivatives). - Values added for field *User Status*: "31", "32", "33" and "34" - Values deprecated in SBE 315 for field *Account Type* and *Account Type Cross*: "14" (Omega Client), "15" (Ceres Client). These values were never used.
5.19.0	24 Oct 2022	WMA	■ Introduction of SBE 319. ■ The following changes have been made to this version of the document: ■ In Field Description: - Value added for field *Account Type*: '5' (Assigned Broker) - Value added for field *Account Type Cross*: '5' (Assigned Broker) - Value added for field *Trade Type*: '103' (Issuing Or Tender Offer Trade)
5.20.0	14 Nov 2022	FBO – WMA	■ The following changes have been made to this version of the document: ■ In New Order (01): - repeating section header *ClearingFields* length value is corrected to 35 ■ In Field Description: - Value added for field CCP ID: '7' (Bilateral Settlement Italian Model) - Value renamed for field CCP ID: '2' (Bilateral Settlement) is now '2' (Bilateral Settlement Traditional Model) - Value added for field *Trade Type* : '104' (RFQ Trade) - Description updated for field Order Amount Limit: to be combined with Amount Decimals instead of Quantity Decimals - Clarification in the description of field *Number Of LPs*
5.21.0	16 Dec 2022	FNS – YOU – WMA	■ The following changes have been made to this version of the document: ■ Added ClearBook (75) message ■ Description of User Notification (39) adjusted to cover the new functionality related to Sponsored Connections ■ The field SettlementPeriod has been marked as [N/A] for Declaration Entry (40) and Declaration Notice (42): TCS will use the Settlement Period defined in the Referential at instrument level.
5.21.1	3 Feb 2023	FNS	■ The following changes have been made to this version of the document: ■ Description of UserNotification (CB) adjusted to cover the new functionality related to Sponsored Firms
5.23.0	7 Mar 2023	WMA	■ Introduction of SBE 323. ■ The following changes have been made to this version of the document: ■ In SBE Optional Fields and Null Value: section updated – Null value cannot be sent in a mandatory field (SBE Backward/Forward compatibility) ■ In For Regular Accesses via ISV: section updated – ISV ID is optional ■ In Field Description:

			- Field StartTimeVwap and EndTimeVwap: description updated – field expressed in UTC time - Field KillReason: value '42' (Order Cancelled due to Execution Prevention Across All Firms) is added - Field OptionType: value '3' (Other) is added - Field SettlementPeriod: removal of "not relevant anymore" to avoid confusion. Even if not used, a possible value (from 0 to 30) should be sent in the field set as mandatory in the SBE template (SBE rule to ensure backward/forward compatibility).
5.24.0	11 Apr 2023	WMA	■ Introduction of SBE 324 – No changes ■ The following changes have been made to this version of the document: ■ In New Order (01): when used as an RFQ Confirmation, the field *OrderPrice* is mandatory. ■ In Field Description ■ Field OrderPrice: description updated - Mandatory when referring to an RFQ Confirmation
5.25.0	15 May 2023	FNS - WMA	■ Introduction of SBE 325 – No technical changes ■ The following changes have been made to this version of the document: ■ In New Order (01) and Cancel Replace (06): message description adjusted to indicate the usage of Long Client ID between Cash and Derivatives ■ In Field Description: - Field LongClientID: adjusted to indicate its usage for cash markets and the respective conditions - Field TradingSessionValidity: description updated for Session 3 and Session used in Borsa Italiana Markets
5.28.0	31 Jul 2023	NCH – FLO – FNS- WMA	■ Introduction of SBE 328 ■ The following changes have been made to this version of the document: ■ In RFQ Notification (35), RFQ Matching Status (36), RFQ LP Matching Status (37) and RFQ Audit (72): - 'FXI' label is added as these messages are relevant for Fixed Income ■ In Declaration Entry Reject (46): - *Rejected Message ID* field is added and *Rejected Message* field is deprecated (correction to reflect current behavior – no changes) ■ In Kill (05): - Message description adjusted to indicate it's sent following a kill due to a risk guard command ■ In User Notification (39): - message description adjusted to indicate it's usage due to the new Risk Guard Maximum Exposure Position functionality; - message structure adjusted to include the new field needed to indicate the side of the exposure; ■ In Field Description: - Condition is added for field: *TradingCapacity*; - New values added to Kill Reason field; - New values added to User Status field; - New Exposure Side field added;
5.29.0	23 Oct 2023	WMA - FLO	■ Introduction of SBE 329. ■ The following changes have been made to this version of the document: ■ In New Order (01) and Quote Request (10) messages:

			• Minimum Order Quantity must be provided when Dark Execution Instruction - bit in position 5 from the left – (corresponding to Minimum Quantity Type) is equal to 1 (MES), else the order could never be executed during the RFQ matching mechanism ■ In TradingSessionValidity: clarification added on possible combinations ■ In KillReason: value "18" (Order Cancelled due to Static Collars) is added
5.30.0	13 Nov 2023	NTDP - WMA	The following changes have been made to this version of the document: ■ 4.6.2 Order Priority: - Added "For both Cash and Derivative Markets" note regarding the Order Priority of Stop Orders. Small typos (commas) corrected ■ In Field Description: - Triggered Stop Time In Force: value '3 – Immediate or Cancel' added to the list of possible values - ExecutionWithinFirmShortCode: Added explanation on how to populate the field for 'NORE'
5.31.0	1 Dec 2023	NTDP – WMA - FNS	The following changes have been made to this version of the document: ■ Section 4.6.2 Order Priority – updated to reflect the behaviour regarding Order Priority of Dark Sweep Orders once they move to the Central Order Book ■ Section 5.4.13 Open Order Request (15): - Added explanation on how to properly identify Dark (Sweep and not Sweep) Orders to be identified through the "OrderCategory" field ■ Section 5.4.14 Ownership Request (18): - Added explanation on how to properly identify Dark (Sweep and not Sweep) Orders to be identified through the "OrderCategory" field ■ Section 5.4.36 Cross Order (67): - Structure adjusted to include the new field needed for RFC Autojoin functionality ■ Section 5.4.2 Ack (03): - Structure adjusted to include the new field needed for RFC Autojoin functionality ■ Section Fund Price Input (44): - Removal of "Dutch" mention as trading in amount is authorized on both Dutch Fund and ATFund Markets ■ In 6. Field Description: - Field "Ack Type" - Added new possible values used for the acknowledgment of Dark Sweep Orders becoming Lit Orders - Field "Order Tolerable Price" - Added to support RFC Autojoin functionality
5.33.0	26 feb 2024	IT Market Services – WMA	The following changes have been made to this version of the document: ■ Removal of Optiq Segment 15 (Forex) which is not in used anymore ■ Section 5.4.7 Quotes (08) – Text adjusted about RFE Answer field which is always ignored on Derivatives segments ■ Section 5.4.10 Cancel Request (12) – updated to add note of expected behaviour of Order Category field to identify Dark Orders

			■ Section 5.4.13 Open Order Request (15) – corrected typo for expected Order Category behaviour for Dark Sweep Orders ■ Section 5.4.14 Ownership Request (18) – corrected typo for expected Order Category behaviour for Dark Sweep Orders
5.35.0	22 Apr 2024	IT Market Services – WMA – NPE – FBO	The following changes have been made to this version of the document: ■ Section 5.4.2 Ack (03) – Text adjusted to include the scenarios under which the message is sent for Dark related notifications ■ Section 5.4.41 Declaration Entry (40) – value '3' (Trade Not Contributing to Price Discovery Process) for Transaction Price Type field is removed. ■ Section 5.4.43 Declaration Notice (42) – value '3' (Trade Not Contributing to Price Discovery Process) for Transaction Price Type field is removed. ■ Field Description: ■ In Transaction Price Type: value '3' (Trade Not Contributing to Price Discovery Process) is removed. ■ Section 5.4.3 Fill (04), StrategyFields repeating section length is corrected from 25 to 41, and OptionalFieldDerivatives repeating section length is corrected from 9 to 17 ■ Section 5.4.27 Security Definition Request (60), StrategyLegs repeating section length is corrected from 22 to 35 ■ Section Wholesale Order (64), WholesaleLegRep repeating section length is corrected from 43 to 51 ■ Section Wholesale Order Ack (65), WholesaleClientRep repeating section length is corrected from 20 to 19 ■ Section Cross Order (67), ClearingFieldsX repeating section length is corrected from 34 to 43
5.38.0	19 Aug 2024	IT Market Services – WMA	The following changes have been made to this version of the document: ■ Section Field Description: - Field LogOut Reason Code: value 6 (Logout By Market Operations) is added
5.39.0	24 Oct 2024	IT Market Services – WMA	The following changes have been made to this version of the document: ■ In Section Clear Book (75): - Message is extended to all Optiq segments ■ Description is updated
5.351.0	28 Oct 2024	IT Market Services – WMA - AAM	The following changes have been made to this version of the document: ■ In Cancel Replace (06): Bitmap *DarkExecutionInstruction* is ignored by the system (thus the dark execution instruction of an existing order cannot be updated) ■ In Fill (04): fix typo for number of occurrences for OptionalFieldsDerivatives ■ In Field Description: - DarkExecutionInstruction Bitmap is updated with new bit "Dark STP Indicator"
5.352.0	13 Dec 2024	IT Market Services – NTDP	■ In Field Description: - StrategyCode field - two new possible values, T (ICS one sided combination same expiry) and U (ICS two sided combination same expiry), were added

5.353.0	15 Jan 2025	IT Market Services - MRO	The following changes have been made to this version of the document: ■ In Field Description: - MifidIndicators field, updated the Conditions for position 4 (Deferral Indicator) - Ack Type field updated with a new value used for internal notification when orders are parked. ■ In Application Messages: - Updated description of Cancel Replace (06) - Cancel Replace (06): Specify that the modification of Trading Session Validity is not allowed. Ack (03): Update with the internal notification for parked orders.
5.354.0		IT Market Services – NTDP - AAM	The following changes have been made to this version of the document: - Section 5.4.1.1 Message Description -> updated to reflect the existence of now eight repeating sections, the new one being "OptionalIDs", in the New Order (01) message - Section 5.4.1.2 Message Structure -> updated to reflect the presence of the "OptionalIDs" to the structure of the New Order (01) message - Section 5.4.24 User Notification (39): – Update 5.4.24.1 Message Description section with Unpriced Orders Restriction command description. – Update 5.4.24.2 Message Structure section with new field: Market Condition. - Section Field Description: ○ Field Strategy Code – added new value: 'I – Ratio Inter Contract Spread' ○ Field LP ID – field created. ○ Field Market Condition – field created. ○ Field User Status – added new values for Unpriced Order Restriction 42 = UOR Activated for a Firm by Risk Manager 43 = UOR Deactivated for a Firm by Risk Manager 44 = UOR Activated for a Logical Access by Risk Manager - 45 = UOR Deactivated for a Logical Access by Risk Manager
5.354.1	4 Apr 2025	IT Market Services – MRO	■ In Field Description: Updated Description and Conditions of Trading Session Validity
5.355.0	23 Apr 2025	IT Market Services – MPE – MRO	The following changes have been made to this version of the document: ■ Section 5.4.9 Quote Request (10): – Update 5.4.24.2 Message Structure section with new fields: ♦ Trading Capacity ♦ MifidIndicators ♦ InvestmentDecisionWFirmShortCode ♦ NonExecutingBrokerShortCode ♦ Clearing Firm ID ♦ Client ID ♦ Account Number

			♦ Technical Origin ♦ OpenClose ♦ Clearing Instruction ♦ RFQ Type ♦ Free Text Section ♦ Limit Matching Price ♦ Minimum Number of LPs ♦ Expiration Delay – Change of 'presence' of Order Side from 'optional' to 'conditional' – Included Optiq Segment: FXI ■ Section 5.4.3 Fill (04): – Change of 'presence' of Client Order ID from 'conditional' to 'optional' ■ Section Field Description: – Field RFQ Type – Field created. – Field Limit Matching Price – Field created. – Field Minimum Number of LPs – Field created. – Field Expiration Delay – Field created – Field AckType – added new value: '26 – Auto RFQ Confirmation Ack' – Field Account Type – aligned text in Description – Field User Status: ♦ Added new values for the fields related to the OSL granularity (Firm and Logical Access). ♦ Deprecated former values related to OSL (not taking into consideration Logical Access granularity). ♦ Updated the condition to take into consideration the new values related to OSL command. ♦ Corrected the values for UOR command – Field KillReason: value '45' (Auto RFQ fully matched with other counterparts) added.
5.356.0	28 May 2025	IT Market Services – MPE – MRO	The following changes have been made to this version of the document: ■ Introduction of SBE 357. ■ Section Field Description: – Field Strategy Code – added new values: '1 – Call Spread versus Put Or Put Spread versus Call ' and '2 - Ratio Spread Option' – Field LP ID – corrected the format (Numerical ID) and the length (10) ■ Section Application Messages: – In Cross Order (67): ♦ Change of presence rule from 'Conditional' to 'Optional' for 'Last Leg Traded Price' field – In Clear Book (75): ♦ Now also applicable for the FND, FXI and BDL Segments
5.356.1	18 Jun 2025	IT Market Services – MPE – MRO	■ Section User Notification (39): – Update the message structure with the addition of EMM field; ■ Section Quote Request (10): – Corrected the length of fields:

			InvestmentDecisionWFirmShortCode, NonExecutingBrokerShortCode, Expiration Delay, OpenClose, Minimum Number of LPs; ■ Section Field Description: – Field EMM: add User Notification (39) message to the list of messages .
5.357.0	20 Aug 2025	IT Market Services – MRO	The following changes have been made to this version of the document: ■ Introduction of SBE 357 ■ Section New Wholesale Order (64): Eliminate the restriction on sending wholesales of type 'Against Actuals' and 'Exchange for Swaps' with side that differs from Cross. ■ Section Quote Request (10): - Field Minimum Number Of LPs, corrected Length to '1' ▪ Section Clear Book (75): updated ist of supported segments; ■ Section Field Description: – Field LISTransactionID: Update the *LISTransactionID* Description as that can be used to associate Executions belonging to the same LIS, AA and EFS Transactions. – Field Minimum Number Of LPs, corrected Length to '1'.
5.358.0	Sept. 2025	IT Market Services – AAM - MPE	The following changes have been made to this version of the document: ■ Introduction of SBE 358; ■ Section Field Description: ○ Field Dark Execution Instruction: added bit 6 "Dark Passive Order Indicator" ○ Field Trade Type: added value '106 = Strategy Leg Conventional Trade - Provisional price' (Future Use) ○ Field Collar Rejection Type: added values '3 – LowStatic collar' and '4 – High Static collar' (Future Use) ○ Ack Phase: Add new value: 9 – Uncrossing Phase ○ Ack Type: Add new value: 27 – AVD Triggered Ack ○ Order Type: Add new value: 14 – Auction Volume Discovery ○ Trade Type: Add new value: 105 – AVD Trade ○ CCP ID and Counterpart Firm ID: EuroCCP rebranded as Cboe Clear Europe ■ Section Cancel Replace (06): expanded with the Error Code "Modification of DarkExecutionInstruction is not allowed"

			▪ Sections New Order (01), Cancel Replace (06), Quote Request (10), RFQ Audit (72), RFQ Notification (35) , updated values for field Dark Execution Instruction ▪ Section Ack (03): o New Ack Type for AVD Triggering ▪ Section Kill (05): o AVD Orders killing due to incompatibility with Uncrossing Price
6.361.0	29 Oct. 2025	IT Market Services - MPE	The following changes have been made to this version of the document: ▪ Section Field Description: o Field TradeType: added '107 - Block Standard Trade', '108 - Block NFC Auction Trade' and '109 - Block Historical Trade' o Field WholesaleTradeType: added '3 - Block Standard', '4 - Block NFC Auction' and '5 - Block Historical' ▪ Section Cancel Request (12): added link to section Kill (05) for the description of cross-Logical Access behavior ▪ Section Cancel Replace (6): added link to section Ack (03), updated for the description of cross-Logical Access behavior ▪ Section Quote Request (10): added details on field *RFQ Type,* expanded *FreeTex*t Section and *RFQOptionalFields* Section; ▪ Specified that Time in Force "Good Till Time" and field Order Expiration Time are not available, and reserved for future use ▪ Section RFQ Matching Status (36): added segment BLK.
6.362.0	17 Dec. 2025	IT Market Services - MRO	The following changes have been made to this version of the document: ▪ Section Logout (103), added note for non-processed messages.
6.363.0	21 Jan. 2026	IT Market Services - NTDP	The following changes have been made to this version of the document: ▪ Section Clear Book (75): added segment BDL; ▪ Sections New Order (01), Cancel Replace (06): corrected possible values for Trading Session Validity.
6.363.1	18 Feb 2026	IT Market Services - MRO	The following changes have been made to this version of the document: ▪ Section Declaration Entry Reject: adjusted graphics of the Message Structure table ▪ Section Field Description; Field KillReason: added '46 - Order Cancelled due to incompatibility with Uncrossing Price'.
6.364.0	27 Feb. 2026	IT Market Services - EJA	The following changes have been made to this version of the document: ▪ added Section 3.3 to provide more detailed explanation of Inflight Control Mechanism; ▪ Section 5.4.17 PriceInput (28) updated with precision that message is subject to Inflight Mechanism; ▪ Section 5.4.5 Cancel Replace (06) updated with precision that message is subject to Inflight Mechanism;

			■ Section 5.4.10 Cancel Request (12) updated with precision that message is subject to Inflight Mechanism; ■ Section 5.4.11 Mass Cancel (13) updated with precision that message is subject to Inflight Mechanism, updated description; ■ Section 5.4.13 Open Order Request (15) updated with precision that message is subject to Inflight Mechanism; ■ Section 5.4.14 Ownership Request (18) updated with precision that message is subject to Inflight Mechanism.
6.365.0	01 Apr. 2026	IT Market Services - NTDP	The following changes have been made to this version of the document: ■ Introduction of SBE 365; ■ Section 5.4.1 New Order (01) - added small note about LongClientID (for Cash markets, in case of IPO market model) expecting correctly formatted values and not being case sensitive; ■ Section Field Description; Field MessagePriceNotation – expanded Condition to include TAS on Commodity Futures.
6.365.1	21 Apr. 2026	IT Market Services - MRO	The following changes have been made to this version of the document: ■ updated Section 3.3.2 to provide more detailed explanation of Inflight Control Mechanism.
6.365.2	30 Apr. 2026	ITMS - MRO	The following changes have been made to this version of the document: ■ updated Section 5.2.24 User Notification (39) to include field Market Place (*Market Place 2)*; ■ section Field Description: added field Market Place 2. Across the document: removed references to 'ETF Access', decommissioned.
6.366.0	03 Jun. 2026	IT Market Services - MRO	The following changes have been made to this version of the document: ■ Introduction of SBE 366; ■ Introduction of SBE 367; ■ Section Field Description: - Field Time in Force – flagged value '8 = Valid for Session' as not available, reserved for future use - Field Kill Reason – new value '47 = Order Cancelled due to Remaining Non Allocated Quantity' added; - ■ Across the document: removed references to 'ETF Access', decommissioned.
6.367.0	22 Jun 2026	IT Market Services - MRO	Updated "Related SBE Version" to 267
6.369.0	19 Aug 2026	IT Market Services - MRO	The following changes have been made to this version of the document: ■ Updated SBE version to 369;

			■ Field description: CCP ID added value “4 - Euronext Clearing Athens”; CounterpartFirmID added value “4 - Euronext Clearing Athens”; Kill Reason – new value 48 = "Order Cancelled by Market Operations due to CSD Unavailability".