

**Document title****EURONEXT MARKETS - OPTIQ® OEG CLIENT SPECIFICATIONS – FIX 5.0 INTERFACE****Document type or subject****Optiq OEG Client Specifications – FIX 5.0 Interface****Version number****4.10.0****Date****6 Oct 2021****Number of pages****297****Related SBE version****310**

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## PREFACE

### About This Document

This document sets out the client messages specifications for Optiq OEG using the FIX 5.0 format. More specifically, it describes the contents of administrative and application messages and provides detailed field descriptions.

### Document Audience

This document must be read by Euronext's clients developing Front End Trading Access.

### Scope

The single set of messages used for Optiq in FIX protocol is provided in the document.

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

| Optiq Segment  | Segment Value | In/Out of Scope |
|--|---------------|-----------------|
| Euronext Cash Market                                     |               |                 |
| Equities <span>EQ</span>                                 | 1             | ✓               |
| Funds <span>FND</span>                                   | 2             | ✓               |
| Fixed Income <span>FXI</span>                            | 3             | ✓               |
| Structured Products <span>SP</span>                      | 4             | ✓               |
| Block <span>BLK</span>                                   | 14            | ✓               |
| Irish Bonds and Funds <span>IBF</span>                   | 16            | ✗               |
| Forex <span>FOREX</span>                                 | 15            | ✗               |
| Euronext Derivatives Market                              |               |                 |
| Commodity Derivatives <span>CMO</span>                   | 8             | ✓               |
| Index Derivatives <span>IDD</span>                       | 11            | ✓               |
| Equity Derivatives <span>EQD</span>                      | 12            | ✓               |
| Euronext Indices   |               |                 |
| Indices <span>Indices</span>                             | 9             | ✗               |
| Euronext Approved Publication Arrangement (APA) Facility |               |                 |
| Trade Reporting and Publication <span>TRP</span>         | 10            | ✗               |
| Other Markets  |               |                 |
| Luxembourg Stock Exchange <span>BDL</span>               | 5             | ✓               |

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## Associated Document

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

- Euronext Markets – Optiq OEG Client Specifications – SBE Interface
- Euronext Cash Markets – Optiq Kinematics Specifications
- Euronext Derivatives Markets – Optiq Kinematics Specifications
- Euronext Markets – Optiq & TCS Error List file (.csv)
- Euronext Markets – Optiq MDG Client Specifications
- Euronext Markets – Optiq File Specification
- Euronext Markets – Optiq OEG Connectivity Specifications

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](#).

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## What's New?

The following lists only all recent modifications made to this version.

For the Document History table see the [Document History in Appendix](#).

| Version | Change Description   |
|---------|--|
| 4.10.0  | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ Add clarification on tag 41 OrigClOrdID field conditions:<br/>If both OrigClOrdID and ClOrdID are provided in a modification or cancellation request, the OrigClOrdID is totally ignored and the request is performed on OrderID only, and then only OrderID is present in ExecutionReport(8).</li> <li>■ Add clarification on tag530 MassCancelRequestType possible values:<br/>'1' = Cancel orders for a security (cash and derivatives) or a contract (derivatives only)</li> <li>■ Update in <a href="#">OrderMassCancelRequest (q)</a> Message Description:<br/>The MassCancelRequestType (530) field defines the scope of the mass cancellation request:<br/>Derivatives only: To cancel orders assigned to instruments of a derivative contract, MassCancelRequestType (530) must be set to '1' and the SecurityID (48) field must be populated with the symbol index of the contract concerned.</li> <li>■ Improved description of 2.4 Order ID section</li> <li>■ Update in <a href="#">CrossOrder (U67)</a> :<br/>The field OrderActorType (21109) is mandatory</li> <li>■ Add clarification on tag 21801 FRMARAMPLP description:<br/>French Market Abuse Regulation Accepted Market Practice Liquidity provision is related to the AMAFI (Association française des marchés financiers) market abuse prevention.</li> </ul> |

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## 1. SOLUTION OVERVIEW

### 1.1 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.

The scope of this version of the document is for Cash and Derivatives markets. With migration of Derivatives markets to Optiq harmonization between Cash and Derivatives messages is completed. The single set of messages used for Optiq in FIX protocol are provided in the document.

### 1.2 MIFID II RELATED FIELDS & 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.

#### 1.2.1 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 additional fields introduced in the Optiq messages, e.g. **NewOrderSingle (D)** message. The sub-set of fields added to 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 (FIX)   | Used In   |
|----------------------------|--|---|
| Client identification code | Populated via combination of components in the <i>Parties</i> , or <i>NestedParties</i> or <i>OrderAttributeGrp</i> or | <a href="#">NewOrderSingle (D)</a><br><a href="#">ExecutionReport (8)</a> |



| Field in the Act                | Optiq fields (FIX)  | Used In   |
|---------------------------------|---|---|
|                                 | <i>NestedOrderAttributeGrp</i> group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: ClientIdentificationShortCode  | <a href="#">MassQuote (i)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">UserNotification (CB)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a>  |
| Investment decision within firm | Populated via combination of components in the <i>NestedParties</i> group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: InvestmentDecisionWFirmShortCode  | <a href="#">NewOrderSingle (D)</a><br><a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">CrossOrder (U67)</a>  |
| Execution within firm           | Populated via combination of components in the <i>Parties</i> group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: ExecutionWithinFirmShortCode            | <a href="#">NewOrderSingle (D)</a><br><a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">UserNotification (CB)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a> |
| Non-executing broker            | Populated via combination of components in the <i>NestedParties</i> group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: NonExecutingBrokerShortCode       | <a href="#">NewOrderSingle (D)</a><br><a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">CrossOrder (U67)</a>  |
| Commodity derivatives indicator | Populated via combination of components in the <i>OrderAttributeGrp</i> group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: CommodityDerivativesIndicator | <a href="#">NewOrderSingle (D)</a><br><a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a>  |
| Investment algo indicator       | Populated via combination of components in the <i>NestedParties</i> group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: InvestmentAlgoIndicator           | <a href="#">NewOrderSingle (D)</a><br><a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewWholesaleOrder (U64)</a>   |

| Field in the Act         | Optiq fields (FIX)   | Used In  |
|--------------------------|--|--|
|                          |  | <a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a>  |
| Execution algo indicator | Populated via combination of components in the <i>Parties</i> group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: ExecutionAlgoIndicator | <a href="#">NewOrderSingle (D)</a><br><a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a> |

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 are able to assign a short code to it in the Customer Web Portal. This short code may be used in the **NewOrderSingle (D)** message in the fields corresponding to the values explained in the messages description under *ClientIdentificationShortCode*.
- For clients using algorithms in their trading, guidelines for the way they should generate and populate the short codes associated to the executing (combination of values referred to in message descriptions as case *ExecutionWithinFirmShortCode*) and investment decision making (combination of values referred to in message descriptions as case *InvestmentDecisionWFirmShortCode*) should be set based on the setting of the Algo Indicator in the order messages:
  - When an order message is flagged to indicate that algorithm is not involved, then in the field *PartyID (448)* all positive values (from 0 to  $2^{31}-1$ ) would represent a human trader.
  - If an order is indicated as having involvement of an algorithm, clients are requested to populate *PartyID (448)* 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 populating of short codes in inbound messages:

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

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### 1.2.2 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.

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## 1.3 FUTURE USE

In preparation for various functionalities expected to be implemented in the future on Optiq a number of messages, fields and values were added and flagged 'For Future Use'

Details of functionalities flagged in the specifications as for 'Future Use' are provided for information purposes only, and may change significantly until such time as the finalised specifications for the relevant service are communicated to the clients.

The associated messages and effective use of fields & values 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'

If an inbound message contains a mandatory field having one of these flags, then the field must be sent with a default value.

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## 1.4 GLOSSARY

This section provides some high-level definitions of commonly used terms of 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 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.
- **Financial Information eXchange (FIX):** is an electronic communications and messaging protocol used as one of the solution for order entry messaging in Optiq. The FIX messaging standard is owned, maintained and developed through the collaborative efforts of FIX Trading Community™ member firms.
- **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. SymbolIndex 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 instruction 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.
- **Declaration:** A declaration is one side of a potential trade (in other words, an order) that is entered by the declaring member in TCS. It awaits matching with the declaration of the counterparty on the opposite side, or, if it fails to match within the given period of time, it is eliminated from TCS.

## 1.5 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<br>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<br>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   |

**Important 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
- Information related to functionalities that are still work in progress, may be present in this document are subject to change when finalized version of the specifications for these initiatives are released

## 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.

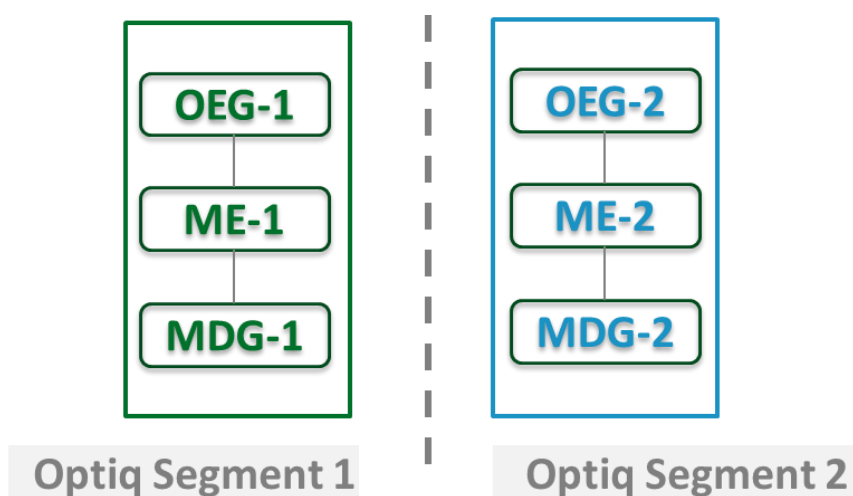
For the implementation of Optiq Segments the instrument universe is rationalized and reorganized to fit the new structure.

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.<sup>1</sup>

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:



<sup>1</sup> Standing data files and messages refer to the data provided for Cash and Derivatives, instruments, contracts, outrights and strategies

### 2.1.2 Partitions

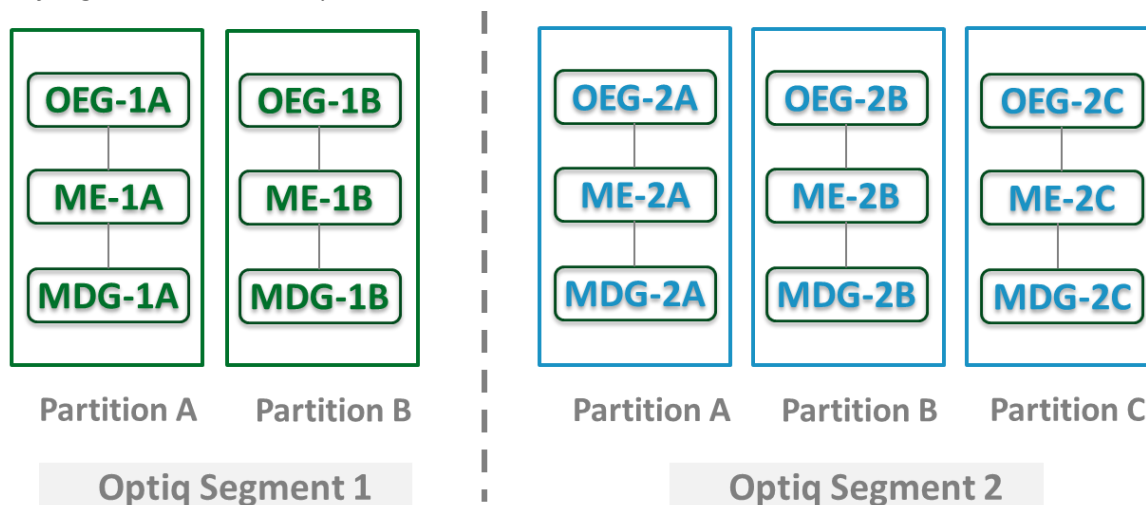
An Optiq Segment may be comprised of one or more physical partitions.

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;
- 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 *LogicalAccessID* and the *OEPartitionID*. 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

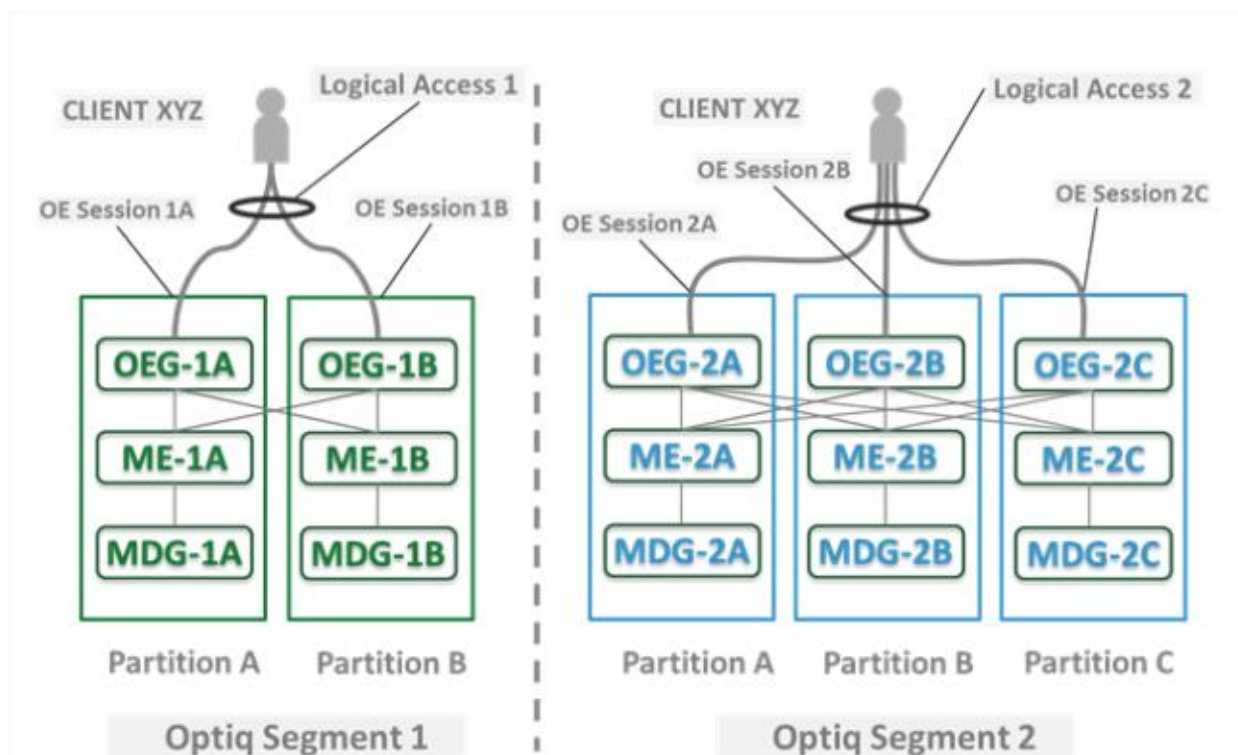
If a segment has multiple partitions, for the best possible response times, clients should initiate an OE session for each available partition and send messages through it only for the instruments hosted on this partition. However, a client may use a single OE Session to access all the instruments of 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 incurs additional response times (i.e. increased latency).

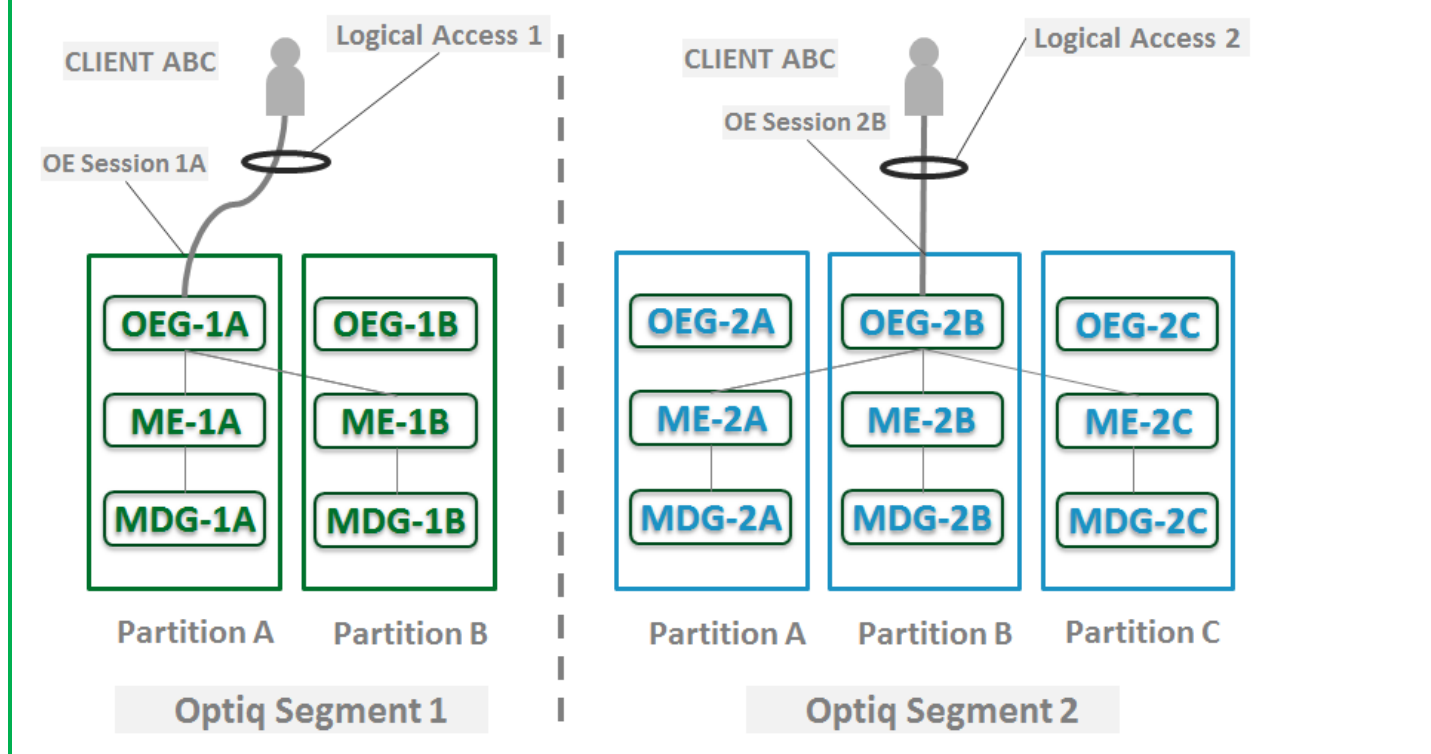
Quotes and other Market Making messages cannot be sent across partitions, and must be sent only to the partition where the Instrument or Contract is hosted.

By default, the responses to the private response messages sent through a different partition are returned 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 Standing Data market data messages, where details of the *Partition ID* assigned to each instrument are provided.<sup>2</sup>

**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 are assigned a subset of values identified within the specified ranges.

In addition the relevant details for OEG and MDG connectivity per instrument is 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 Markets – Optiq MDG Client Specifications* document.

<sup>2</sup> 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)

### 2.1.7 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 products belonging to an Optiq Segment may potentially be relocated across the partitions belonging to this Optiq Segment. Products are financial instruments on cash segments, contracts on derivative segments.

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

Every product can migrate overnight from one partition to another. It means that connectivity information associated to a product 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 products between Optiq Segments is not expected to be a regularly occurring event, it may arise, and will be done with prior notification to clients.

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#### 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 and until Clients are able to connect to the new partition they will still be able to use individual order messages to access all products (instruments for cash segments, contracts for derivative segments) 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.

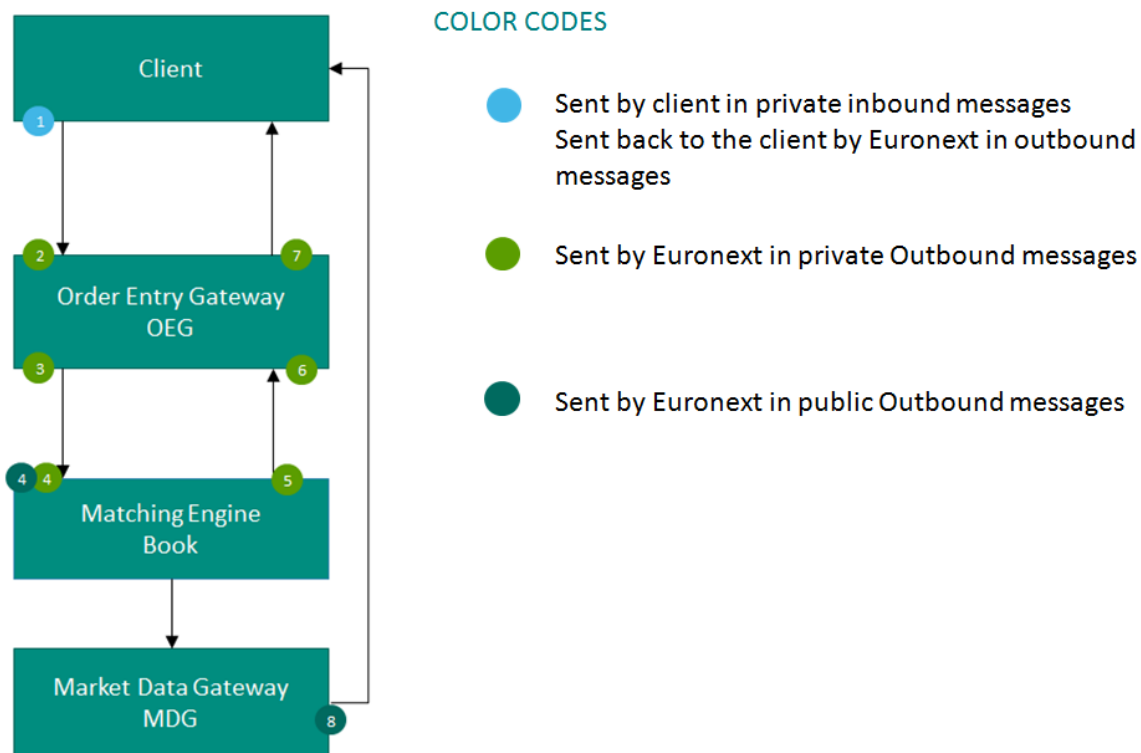
In all cases clients will always be provided prior notice - before such changes are performed.

## 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 | <i>TransactTime</i>    | is assigned by the Client in his inbound message.   |
| 2 | <i>OEGINFromMember</i> | is assigned by the OEG after decoding the inbound message.  |
| 3 | <i>OEGOUTToME</i>      | is assigned by the OEG when sending the inbound message to the matching engine.   |
| 4 | <i>BookINTime</i>      | is assigned by the ME when receiving the inbound message from the OEG.  |
| 5 | <i>BookOUTTime</i>     | is assigned by the ME when sending the outbound message to the OEG.   |
| 6 | <i>OEGINFromME</i>     | is assigned by the OEG when receiving the outbound message from the ME.   |
| 7 | <i>SendingTime</i>     | is assigned by the OEG when sending the outbound message to the client.<br>Corresponds to the OEG Out To Member timestamp in SBE. |
| 8 | <i>PacketTime</i>      | 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.

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## 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.

In FIX protocol the Client Order ID is provided in the field **ClOrdID (11)**. Clients may provide any value that respects the *ClOrdID* format and the ranges as defined below. The field format is a string of 20 characters accepting only numerical values ('0'...'9').

The Exchange recommends setting an unique ID per order, Firm (*SenderCompID (49)*) and Symbol Index (*SecurityID (48)*).

For order entry, the *ClOrdID* value is not checked by the Exchange<sup>3</sup>, 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 *OrigClOrdID* as unique identifier<sup>4</sup>, the value is checked by the Exchange for possible duplicates, i.e. different live orders originally submitted with the same *ClOrdID*. In case of duplicates, the inbound request is rejected with the associated error code. In outbound application messages the field *ClOrdID (11)* is not provided for unsolicited messages.

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### 2.3.2 Client Order ID for Order Management

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

This allows clients to use the *ClOrdID* as unique identifier to modify or cancel their orders per Symbol Index (*SecurityID*) and Firm (*SenderCompID*), in addition to the *OrderID*. It does not restrict clients to use the *OrderID* to manage their orders.

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

To properly perform the inbound request, the system checks that the value exists on the corresponding Symbol Index (*SecurityID*) among live orders belonging to the requesting Firm (*SenderCompID*). 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 *OrderID* to reach their orders.

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<sup>3</sup> With the exception of the Service Bureau accesses for which a check is always performed.

<sup>4</sup> If both *OrigClOrdID* and *ClOrdID* are provided in a modification or cancellation request, the *OrigClOrdID* is totally ignored and the request is performed on *OrderID* only.

As the uniqueness of the *ClOrdID* is not checked by the Exchange for order entry but only in case of modification and cancellation requests, clients who want to use the *OrigClOrdID* as unique identifier for these requests must ensure on their own the unicity of the *ClOrdID* per Symbol Index (*SecurityID*) and Firm (*SenderCompID*) 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 applied for “Cancellation of RFC submission” using the *ClOrdID*.

As requests using the *OrigClOrdID* 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 *OrderID* as the reference for their orders.

---

### 2.3.3 Client Order ID Ranges

Depending on the nature of the client access, the *ClOrdID* 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 *ClOrdID* uniqueness across all the firm orders.

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#### 2.3.3.1 For Regular “In House” Accesses

For Regular In-House accesses (i.e. not via ISV nor using Service Bureau):

- clients must use the positive number range 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.

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#### 2.3.3.2 For Regular Accesses via ISV

For Regular access via ISV, without use of Service Bureau:

- clients must use the negative number range only;
- clients must 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 correct use of the ISV ID and 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 ID or range in the inbound application message.

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#### 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 *OrderID* (37) 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 **OrderCancelReplaceRequest** (G) message.

FIX received encoded data, and to obtain the Order ID provided to the CCP it needs to be converted, using the steps identified below.

### 1- Step 1: conversion of the internal OrderID assigned by Optiq in hexadecimal:

The internal OrderID assigned by Optiq in internal format 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), the date is converted in hexadecimal.
- Then 1-byte includes the EMM, this EMM is converted in hexadecimal.
- Then the remaining most-significant 5-bytes contain the Order Number which is a sequence number restarted at 1 at each start of day, this order number is converted in hexa.

The result of this first step is the representation of the internal OrderID in hexadecimal.

### 2- Step 2: the conversion of the internal OrderID from Hexadecimal (resulting from Step 1) to Decimal value gives the OrderID provided in FIX Tag 37.

#### Example:

- Let's take an order submitted on 10/03/17 on EMM = 1 having a sequence number = 1234
- The corresponding OrderID assigned by Optiq in internal format is calculated as follows:
  - The relative number of days of 10/03/20 since EPOCH is 17235 ==> 43 53 in hexa
  - The EMM = 1 ==> 01 in hexa
  - Sequence number 1234 ==> 04 D2 in hexa
- The internal representation of the OrderID in hexadecimal is then: 00 00 00 04 D2 01 43 53
- The conversion in decimal of the OrderID is: 20703167315
- The OrderID (37) FIX tag will then contains a 11-characters string equal to "20703167315"

In case a FIX message is rejected for Technical reasons, it is not processed by the matching engine. In this case Order ID is neither allocated by the matching engine, nor provided in the rejection message.

Technical rejection cases can be identified by the type of the Error code, as provided in the field "Technical / Functional" within the Error codes file (.csv).

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## 3. ORDER ENTRY GATEWAY SPECIFICS

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### 3.1 SESSION MANAGEMENT

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#### 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** (A) message. Session Logon is always initiated by the client. The **Logon** (A) 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.

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#### 3.1.2 Heartbeats and TestRequests

The OEG uses the **Heartbeat** (0) and **TestRequest** (1) 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** (0) message after the given delay of inactivity on its side, i.e. the OEG sends a **Heartbeat** message after it has not sent out any messages within  $n$  second(s). In case no other messages, the clients will receive at least one **Heartbeat** (0) message every  $n$  second(s) when they are logged on. This ensures the client that OEG is up and functions properly.
- **TestRequest** (1) message after the given delay of inactivity on the client side, i.e. when the client has not sent any message within the last  $n$  second(s).
  - The client has another, equivalent time delay to answer the **TestRequest** (1) message by sending back to the OEG a **Heartbeat** (0) message.
  - Otherwise if the client does not issue the responding **Heartbeat** (0) message within the given delay, the OEG closes the connection. (Note that this disconnection triggers the Cancel on Disconnect mechanism if the latter is enabled).

The **TestRequest** (1) message can also be sent by the client to the OEG at any moment and the OEG will answer with a **Heartbeat** (0) message.

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

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#### 3.1.3 Logout

Normal termination of the message exchange session will be completed via the exchange of **Logout** (5) messages.



### 3.1.4 Message Sequence Usage

Optiq FIX messages are identified by a unique sequence number. Sequence numbers are initialized at the start of each FIX session starting at 1 (one) and increment throughout the session. Monitoring sequence numbers will enable parties to identify and react to missed messages and to gracefully synchronize applications when reconnecting during a FIX session.

Each session will establish an independent incoming and outgoing sequence series; participants will maintain a sequence series to assign to outgoing messages and a separate series to monitor for sequence gaps on incoming 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 **ExecutionReport** (8) 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 *CancelOnDisconnectionIndicator* (21018) field is set to 1 (one) which stands for "Order not in the scope of Cancel On Disconnect" 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 Disconnection" section of the *Euronext Markets – Optiq OEG Connectivity Specifications* document for further details.

## 4. FORMATTING

The general format of a OEG message is a standard header, followed by the message body fields and terminated with a standard trailer.

This section describes:

- The Conventions used for field format definition.
- The standard header and trailer of the private (or directed) messages used to communicate with the Order Entry Gateway (OEG) application, which provides access to members to Optiq.

### 4.1 FIELD FORMAT

A FIX message is composed of a collection of “<Field tag>=<Field value>” format. Every FIX field has an associated data type that limits the possible values for the characters used to fill this field.

According to FIX 5.0, all tags must have a value specified.

Table below provides the mapping for the types specified in the “Type” column of message tables and the FIX types described in the official FIX 5.0 specifications document.

| Format            | Length | FIX 5.0 Type                                      |
|-------------------|--------|---|
| Char              | 1      | Char  |
| String            | N > 1  | String  |
| Currency          | 3      | Currency  |
| Boolean           | 1      | Boolean   |
| Int               | N      | Int   |
| Price             | N      | Price   |
| Qty               | N      | Qty   |
| Amt               | N      | Amt   |
| Percentage        | N      | Percentage  |
| Length            | N      | Length  |
| Float             | N      | Float   |
| LocalMktDate      | 8      | LocalMktDate                                      |
| SeqNum            | N      | SeqNum  |
| MultipleCharValue | N      | MultipleCharValue                                 |
| NumInGroup        | N      | NumInGroup  |
| MonthYear         | N      | MonthYear   |
| UTCTimestamp      | 27     | UTCTimestamp (Format: YYYYMMDD-HH:MM:SS.ssssssss) |

**Alphanumeric fields:** authorized characters are the following ones:

'0'..'9' 'a'..'z' 'A'..'Z' ' ' '#' '\$' '%' '(' ')' '+' '-' '.' ':' ';' '<' '=' '>' '@' '\*' '+' '^' '\_' '~' ',' '/'

**Numerical fields:** although binary data exist in FIX protocol (notion of raw data used by fields with FIX type “data”), such data are not used in the FIX messages for OEG. Numerical fields are expressed in ASCII characters '0'..'9' and decimal separator '.'.

**String fields:** authorized formats are alphanumeric free format strings, which can include any character or punctuation, except the delimiter. All String fields are case sensitive (e.g. Euronext ≠ euronext).

- Note: certain fields are provided in string format (FIX 5.0 compliance) but the authorized characters are restricted to numerical values ('0'..'9') (e.g., fields using **FIRM ID**)

**Length:** the value provided in the “Len” column of the table above indicates the field length:

- When a value is provided (e.g. '1' for Char type, or '27' for UTCTimestamp type), it indicates that the field value must have the exact length indicated.
- When *N* is used (e.g. String or Price types), it indicates that the related FIX type has no defined length according to FIX specifications. However, a value is usually provided in the message structures, indicating the maximum length of the field value according to OEG (the value may actually be shorter).

Please refer to the official FIX 5.0 specifications document (chapter “FIX PROTOCOL SYNTAX”, section “Data Types”) for further details.

- In all the message structures provided of this document (the tables representing the messages only):
  - Where a list of specific allowed values is provided, if the client provides data that is outside of the specified range, the message will be rejected
  - In the fields description the following pictograms represent:
    - ◆ [C] - the value is for Cash only;
    - ◆ [D] - the value is for Derivatives only;
    - ◆ [i] - special conditions apply to the displayed value. These conditions are detailed in the description of the corresponding field in the “Conditions” row.

**Price:** float field representing a price without decimal places. The real Price value must be calculated as described in the section [Price, Quantity, Ratio and Amounts Formats](#)

**Qty:** float field representing a quantity without decimal places. The real quantity value must be calculated as described in the section [Price, Quantity, Ratio and Amounts Formats](#)

**Amt:** float field representing an amount (typically Price times Qty) without decimal places. The real amount value must be calculated as described in the section [Price, Quantity, Ratio and Amounts Formats](#)

**Float:** float field representing a number (i.e. Ratio) without decimal places. Field description provides details on how to calculate the actual value used in such fields.

**MultipleCharValue:** string field allowing sending multiple values at the same time. This field contains one or more space delimited single character values (e.g. |18=0 1 0|) with each possibly indicating different values and/or flags. Each filled in value is normally set to zero (0) or one (1) and should be used as indication of whether the position in the field should be processed or not. Each value provided should be read based the meaning provided for possible values in the description of each field.

*For example*, the field *TradeQualifier (21080)* of type MultipleCharValue has 8 possible values which can be simultaneously sent on a 13 characters length string, as follows:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| 0 |   | 1 |   | 0 |   | 1 |   | 0 |    | 0  |    | 0  |    | 0  |

In this example, the values filled correspond to the positions in the field, and indicate possible values that should be interpreted as follows:

| Value position | Position represents                       | Value Meaning in Example                                |
|----------------|---|---|
| 1              | 0 = Uncrossing Trade                      | 0 (No) - the trade didn't occur during Uncrossing Phase |
| 3              | 1 = First Trade Price                     | 1 (Yes) – Opening trade                                 |
| 5              | 2 = Passive Order                         | 0 (No) – Not a passive order                            |
| 7              | 3 = Aggressive Order                      | 1 (Yes) – An Aggressive order                           |
| 9              | 4 = Trade Creation by Market Operations   | 0 (No) – Trade NOT created by Market operations         |
| 11             | 5 = NAV Trade expressed in bps            | 0 (No) – Not a NAV trade expressed in basis points      |
| 13             | 6 = NAV Trade expressed in price currency | 0 (No) – Not a NAV trade expressed in currency          |
| 15             | 7 = Deferred Publication                  | 0 - Immediate Publication                               |

## 4.2 STRUCTURE REPRESENTATION

Some messages may contain a subset of consecutive fields (a repeating group) that can be repeated a variable number of times.

Generally the number of times a repeating group is repeated is specified by the numerical field (the counter) preceding that group.

In this document, repeating groups (including their counter) are highlighted with heavy, dark green edges and light green background, like in the example below:

|     |         |  |  |                         |  |  |  |
|-----|---------|--|--|-------------------------|--|--|--|
|     |         |  |  |                         |  |  |  |
|     |         |  |  |                         |  |  |  |
| ... |         |  |  |                         |  |  |  |
|     |         |  |  |                         |  |  |  |
|     | Counter |  |  | Repeating Group Counter |  |  |  |
|     |         |  |  | Repeating Group         | Min and max values affect the minimum and maximum message length |  |  |
|     |         |  |  |                         |  |  |  |

### Nested repeating components

In some cases it is necessary to have components (groups of fields) repeated within another repeating group, within a single FIX message. Such “sub”-groups are called nested repeating components. Nested repeating components are especially important in representation of the Parties component, identifying the multiple different cases of the entities participating in the order (e.g. various MIFID II related fields).

In this document, to easily differentiate from the repeating group within which they are used, nested repeating components are designated within the message definition via:

- Highlighting of the fields within the components with light green background, and
- Wider green outline – the lines is wider depending on the number of nested repeating components inside a give component

If a nested repeating component is used, they are always specified inside another repeating group (identifiable with a green outline and light grey background), and the outer repeating group is always specified.

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

...

|  |                |  |  |                                |  |  |  |
|--|----------------|--|--|--------------------------------|--|--|--|
|  |                |  |  |                                |  |  |  |
|  | Counter        |  |  | Repeating Group Counter        |  |  |  |
|  |                |  |  | Repeating Group                | Min and max values affect the minimum and maximum message length |  |  |
|  |                |  |  |                                |  |  |  |
|  | Nested Counter |  |  | Nested Repeating Group Counter |  |  |  |
|  |                |  |  | Nested Repeating Group         | Min and max values affect the minimum and maximum message length |  |  |
|  |                |  |  |                                |  |  |  |
|  | Nested Counter |  |  | Nested Repeating Group Counter |  |  |  |
|  |                |  |  | Nested Repeating Group         | Min and max values affect the minimum and maximum message length |  |  |

### 4.3 FIX OPTIONAL FIELDS

Optional and conditional fields can be set to null value as defined by the FIX standard. Optional and conditional fields are handled as defined by the FIX standard.

If a field is identified to be set to "null value" (e.g. in the associated messages for SBE Interface) - the field is not provided in FIX.

For more details please refer to section "Conditional Values in Outbound Messages" within this document.

## 4.4 DATE AND TIME CONVENTIONS

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

### For Cash and Derivatives Markets:

- Date and Timestamps 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 using a string of 27 characters, as follows:

YYYYMMDD-HH:MM:SS.ssssssss

where:

- “YYYY” is the year.
- “MM” is the month.
- “DD” is the day.
- “HH” are the hour.
- “MM” is the minute.
- “SS” is the second.
- “ssssssss” is the fraction of a second (nanoseconds).

*Note:* Expiry Date and Time provided for Good Till Time (GTT)<sup>5</sup> and Good Till Date (GTD) orders follow their own rules, please refer to the field description for further details.

### For TCS Reporting:

- Timestamps 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.
- 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.dddZ.

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.dddZ”.
- “hh” is the hour.
- “mm” is the minute.
- “ss.dddZ” is the second and its fraction of a second.
- “Z” is a constant letter used for UTC time.

<sup>5</sup> For Future use

## 4.5 PRICE, QUANTITY, RATIO AND AMOUNT FORMATS

If a price is needed in the messages, it is expressed in currency, basis points 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:

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

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 IDENTIFICATION AND EMM

### 4.6.1 Symbol Index

An instrument is identified by its Symbol Index. In FIX protocol this value is provided in field **SecurityID** (48). Note that, on the Derivative segments, contracts are also identified by a 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: **Standing Data** (1007), **Outright Standing Data** (1014), **Strategy Standing Data** (1012), **Contract Standing Data** (1013) messages and in the Standing Data files available on the Web and SFTI HTTPS server. As such, the client applications must link the Symbol Index (*SecurityID* (48)) which is used in all messages, with other instrument characteristics present in the Standing Data messages or files.

The Symbol Index (*SecurityID* (48)) is assigned by Euronext and will not change for 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 Markets – Optiq MDG Client Specifications* document.

### 4.6.2 Order Priority

The *OrderPriority* (21004) is provided in private **ExecutionReport** (8) messages for every individual order.

Value in the field *OrderPriority* (21004) 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 **MassQuote** (i) 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 *OrderPriority* (21004) may be used to allow clients to reconcile with the Market Data feed as the *OrderPriority* is also provided in the **Order Update** (1002) message.

For further details please refer to the description of the **ExecutionReport** (8) message and to the Cash Markets Kinematics document in Section 1.2.5.1 *Private and Public feed reconciliation*.

For Stop orders *OrderPriority* (21004) will be provided in the private **ExecutionReport** (8) acknowledgement 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 **ExecutionReport** (8) acknowledgement message is issued, with the field *OrdStatus* (39) set to “S = Stop Triggered Ack”, they will be assigned a new order priority that indicates their priority vs. the rest of the 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 [provided in *SecurityID* (48)] is specified as it is used to route the order to the right platform. In FIX protocol this value is provided in the custom field *EMM* (20020).

## 4.7 MESSAGE HEADER & TRAILER

### 4.7.1 Message Header

Client ◀▶ OEG

#### Message Usage:

The header identifies the type, length, destination, sequence number, time and point of origin of each OEG FIX 5.0 message.

Origin and destination information of each message is held by the fields [SenderCompID](#) (49) and [TargetCompID](#) (56).

In case a firm's Logical access is configured with Additional allowed member code(s) [ACL] on top of the mandatory Member Code [Owner] that owns / requests the connection:

In case a firm's Logical access is configured with Additional allowed member code(s) [ACL] (a.k.a. Executing Firm), on top of the mandatory Member Code [Owner] (a.k.a. Executing Firm) that owns / requests that connection AND if these member codes (between Owner and ACL) are not the same:



- the field [OnBehalfOfCompID \(115\)](#) is mandatory in Inbound messages, otherwise the field is not required
- if value is provided in field [OnBehalfOfCompID \(115\)](#) of the inbound message, the field [DeliverToCompID \(128\)](#) is sent back with the same value, in the following Outbound application messages: **ExecutionReport** (8), **OrderCancelReject** (9), **MassQuoteAck** (b), **QuoteRequestReject** (AG), **OrderMassCancelReport** (r), **RequestAckMessage** (Uy), **OwnershipRequestAck** (U29). In all other cases the field is not provided in Outbound.

There are two fields that help with the resending of messages:

- [PossDupFlag \(43\)](#) - is set to Y when a message is being resent because it was prompted by the system or as result of a ResendRequest.
- [PossResend \(97\)](#) - is set to Y when a message, already sent, is being reissued with a new sequence number (e.g. resending an order).

The receiving application should process these messages as follows:

- [PossDupFlag \(43\)](#) - If a message with this sequence number has been previously received, ignore message, if not, process normally.
- [PossResend \(97\)](#) - Forward the message to the application and determine if was previously received (i.e. verify order ID and parameters).

Note: This field can only be set by the OEG (if set by the client application, a **Reject** (3) message is sent back by the Optiq ME).

| Tag | Field                            | Short Description  | Format | Len | Values  | Presence    |
|-----|----------------------------------|--|--------|-----|---|-------------|
| 8   | <a href="#">BeginString</a>      | Beginning of message identifier.<br>Identifies the beginning of message and the protocol version. Must be the first field in message.<br>Always unencrypted.       | String | 9   | FIXT.1.1 (Always unencrypted, must be first field in message) | Mandatory   |
| 9   | <a href="#">BodyLength</a>       | Message length including header, body and trailer.<br>Message length, in bytes, forward to checksum field.<br>Must be second field in message. Always unencrypted. | Length | 6   | Integer   | Mandatory   |
| 35  | <a href="#">MsgType</a>          | Specifies the Message type.  | String | 3   | (See field description)                                       | Mandatory   |
| 34  | <a href="#">MsgSeqNum</a>        | The MsgSeqNum (34) is mandatory for all inbound messages and identifies the sequence number of the inbound or outbound message.                                    | SeqNum | 10  | From 1 to 2 <sup>32</sup> -2                                  | Mandatory   |
| 49  | <a href="#">SenderCompID</a>     | Identifier of the member firm that sends the message.  | String | 8   | Inbound: Firm ID /<br>Outbound: Exchange ID                   | Mandatory   |
| 56  | <a href="#">TargetCompID</a>     | Message receptor ID.   | String | 8   | Inbound: Exchange ID /<br>Outbound: Firm ID                   | Mandatory   |
| 115 | <a href="#">OnBehalfOfCompID</a> | ID of the issuing firm when the message is sent through a third party.   | String | 8   | Inbound: Firm ID /<br>Outbound: Not used                      | Conditional |

values in tags

| Tag | Field                                  | Short Description  | Format       | Len | Values   | Presence    |
|-----|--|--|--------------|-----|--|-------------|
| 128 | <a href="#">DeliverToCompID</a>        | ID of the receiving firm when the message is sent through a third party.<br><br>This field holds the same information as the one held by OnBehalfOfCompID in inbound messages. | String       | 8   | Inbound: Not used /<br>Outbound: Firm ID   | Conditional |
| 43  | <a href="#">PossDupFlag</a>            | Identifies if a message is being retransmitted or not.   | Boolean      | 1   | (See field description)  | Optional    |
| 97  | <a href="#">PossResend</a>             | Indicates if the message contains information that was already sent under a different sequence number.   | Boolean      | 1   | (See field description)  | Optional    |
| 52  | <a href="#">SendingTime</a>            | Time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).   | UTCTimestamp | 27  | YYYY = 0000-9999,<br>MM = 01-12, DD = 01-31, HH = 00-23,<br>MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 122 | <a href="#">OrigSendingTime</a>        | Time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).   | UTCTimestamp | 27  | YYYY = 0000-9999,<br>MM = 01-12, DD = 01-31, HH = 00-23,<br>MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 369 | <a href="#">LastMsgSeqNumProcessed</a> | Indicates to the Client which was the Message Sequence Number of the last message processed by the Exchange.   | SeqNum       | 10  | From 1 to 2 <sup>32</sup> -2   | Conditional |

#### 4.7.2 [Message Trailer](#)

Client ◀▶ OEG

##### Message Usage:

The trailer is used to segregate messages and contains the three digit character representation of the checksum value.

| Tag | Field                    | Short Description   | Format | Len | Values    | Presence  |
|-----|--------------------------|---|--------|-----|-----------|-----------|
| 10  | <a href="#">Checksum</a> | Simple checksum.<br>Always 3 bytes, always unencrypted, always last field in message. | String | 3   | Numerical | Mandatory |

#### 4.8 REJECTION AND DISCONNECTION WHEN HANDLING MISSING MANDATORY TAGS OR INCORRECT VALUES IN TAGS

Upon the reception of an inbound message, the Exchange (through OEG) rejects the message if it is poorly formatted, e.g. missing a mandatory field, if the provided fields data is outside of the range of the possible values. In addition to this general rule the table below identifies specific cases when fields or values provided result in either rejection of connection, or disconnection of the client from the OEG. The various cases are grouped by the field / tag.

values in tags

| Field (tag)       | Value           | Behaviour   |
|-------------------|-----------------|---|
| MsgType (35)      | Missing         | If this field is missing in the first message following the physical connection of the client, no matter the type of message sent, OEG closes the connection.   |
| BeginString (8)   | Missing         | If the inbound message is missing the field <i>BeginString</i> (8) or if this field has an unauthorized value, then the OEG will close the connection and will not issue any message back to the client   |
|                   | Incorrect Value |   |
| BodyLength (9)    | Missing         | If this field is missing in the first message following the physical connection of the client, no matter the type of message sent, OEG closes the connection.   |
|                   | Incorrect Value | If the inbound message has a wrong <i>BodyLength</i> (9) the message will be ignored by the OEG   |
| Checksum (10)     |                 | If the inbound message has a wrong <i>Checksum</i> (10) the message will be ignored by the OEG  |
| MsgSeqNum (34)    | Missing         | If this field is missing in the first <b>Logon</b> (A) message, OEG sends back a Logout (5) with <i>SessionStatus</i> (1409) = <b>104</b> (Invalid logon Value)   |
|                   |                 | If the message is <u>not</u> a Logon (A) and this field is missing, OEG closes the connection   |
| SenderCompID (49) | Missing         | If the field is missing in any message, OEG closes the connection and if relevant disconnects the client  |
|                   | Incorrect Value | If the first message is a Logon (A), OEG sends back a <b>Reject</b> (3) with fields set as <i>TargetCompID</i> (56) = <b>INCORRECT VALUE</b> and <i>SessionRejectReason</i> (373) = <b>9</b> (CompID problem), and the connection is not established.   |
|                   |                 | If the first message is <u>not</u> a Logon (A), OEG disconnects the client  |
| TargetCompID (56) | Missing         | If the field is missing in any message, OEG disconnects the client  |
|                   | Incorrect Value | If the <b>Logon</b> (A) message sent by the client has the <i>TargetCompID</i> (56) that exceeds the length of the field, OEG disconnects the client  |
|                   |                 | If the <b>Logon</b> (A) message has a value in <i>TargetCompID</i> (56) that does not correspond to the one set for the Logical Access, OEG sends back a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>9</b> (CompID problem)  |
| PossResend (97)   | =Y              | If there is no session established and client send a message to the Exchange with <i>PossResend</i> (97)=Y, the tag is ignored and the message is processed   |
|                   |                 | If the connection is already established and a messages is sent with <i>PossResend</i> (97)=Y or if the <i>PossResend</i> (97)=Y is set in the <b>Logon</b> (A) message OEG sends a <b>Reject</b> (3) message with <i>SessionRejectReason</i> (373) = <b>5</b> (Value is incorrect (out of range) for this tag) |
| SendingTime (52)  | Missing         | If the field is missing in the first message that is a <b>Logon</b> (A), OEG sends back a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>1</b> (Required Tag Missing)   |
|                   |                 | If the field is missing in the first message that is <u>not</u> a Logon (A), OEG closes the connection  |
|                   | Out of Range    | If the field is provided with a value that is out of range in the first message that is a <b>Logon</b> (A), OEG sends back a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>5</b> (Value is incorrect (out of range) for this tag)  |
|                   |                 | If the field is provided with a value that is out of range in the first message is <u>not</u> a Logon (A), OEG closes the connection  |
|                   | Incorrect Value | If the field is provided with an incorrect value in the first message that is a <b>Logon</b> (A), OEG sends back a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>6</b> (Incorrect data format for value)   |

| Field (tag)                                    | Value               | Behaviour  |
|--|---------------------|--|
|  |                     | If the field is provided with an incorrect value in the first message that is <u>not</u> a Logon (A), OEG closes the connection  |
| HeartBtInt (108)                               | Incorrect Value     | If the client sends a <b>Logon</b> (A) message with <i>HeartBtInt</i> (108) having an incorrect value, OEG sends back a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>5</b> (Value is Incorrect (out of range) for this tag)  |
| EncryptMethod (98)                             | ≠ 0                 | If the client sends a <b>Logon</b> (A) message with <i>EncryptMethod</i> (98) with a value different from <b>0</b> (zero), OEG sends back: <ul style="list-style-type: none"> <li>a <b>Reject</b> (3) message with <i>SessionRejectReason</i> (373) = <b>7</b> (Decryption problem), followed by</li> <li>a <b>Logout</b> (5) message with <i>SessionStatus</i> (1409) = <b>104</b> (Invalid logon Value)</li> </ul> |
| OEPartitionID (21019)<br>LogicalAccess (21021) | Unknown combination | If the client sends a <b>Logon</b> (A) message with an unknown combination of values in fields <i>OEPartitionID</i> (21019) and <i>LogicalAccess</i> (21021), OEG sends back a <b>Logout</b> (5) message with <i>SessionStatus</i> (1409) = <b>5</b> (Invalid Username or Password)  |
| NextExpectedMsgSeqNum (789)                    | > 1                 | If the client sends the first <b>Logon</b> (A) message of the day with <i>NextExpectedMsgSeqNum</i> (789) higher than 1, OEG sends back a <b>Logout</b> (5) message with <i>SessionStatus</i> (1409) = <b>10</b> (Received NextExpectedMsgSeqNum(789) is too high)   |
|  | < 1                 | If the client sends the first <b>Logon</b> (A) message of the day with <i>NextExpectedMsgSeqNum</i> (789) equal to <b>0</b> (zero), OEG sends back a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>5</b> (Value is incorrect (out of range) for this tag)   |
| DefaultAppVerID (1137)                         | ≠ 9                 | If the client sends a <b>Logon</b> (A) message with <i>DefaultAppVerID</i> (1137) with a value different than <b>9</b> (nine), OEG sends back a <b>Reject</b> (3) message with <i>SessionRejectReason</i> (373) = <b>18</b> (Invalid/Unsupported Application Version)  |

**Note :**

In case messages contain unknown tags if all mandatory and needed tags identified for the message are present, the additional unknown tags will be handled as follows:

- Before a successful Logon:
  - Messages other than Logon (A) will be ignored
  - Logon message will be reviewed for known tags only. Unknown tags will be ignored
- After a successful Logon:
  - The expected message will be handled with just the known tags processed as usual, (i.e. checked for correctness of values, presence of mandatory, and otherwise needed tags) and unknown tags will be ignored.

## 4.9 SEQUENCE NUMBER GAP MANAGEMENT & REJECTION

Among other methods, OEG uses sequence numbers of messages to keep track of orderly exchange of messages between the Exchange and the client.

A gap between the message numbers may indicate the possibility of missed messages and usually implies the need for re-synchronization of messages or message sequence numbers between the Exchange and the client. As such occurrence of gaps must be detected and managed by use of Gap fill. The gap detection can be performed either by the Exchange, through OEG, or by the client.

Re-synchronization is done to ensure orderly state of information in each party's systems and the same mechanisms are used by the Exchange in day-to-day run, as well as in cases of recovery after disruptive incidents.

In FIX protocol in cases where a gap is identified the re-synchronization of missed messages between the Exchange and the client may be managed by use of the **Logon** (A) and **ResendRequest** (2) and **SequenceReset** (4) messages.

This section describes various cases and associated behaviour when gap of sequence numbers is detected by the Exchange, as well as the cases when the messages and attempts at re-synchronization are rejected.

The Gap Fill behaviour is managed according to FIX Protocol and takes into account that a gap can be detected in the following cases:

- Upon a Logon Request
- During the trading session while the Client and the Exchange are sending and receiving messages from each other
- Upon a Logout Request

## 4.9.1 Gap Detection & Management

### 4.9.1.1 Upon a Logon Request

In order to establish a connection with the Exchange the client sends a **Logon** (A) message to the trading or drop copy gateway. The **Logon** (A) message has a field *NextExpectedMsgSeqNum* (789) that must be used to indicate to the Exchange the sequence number of the last message that was received by the client incremented by one (+1) when re-connecting during the session, and must be set to 1 in the first Logon of the Day. Additionally, as in all message, the **Logon** (A) message also contains the field *MsgSeqNum* (34) to indicate the message sequence number. In case a gap is detected through the values provided in the **Logon** (A) message, the gap is filled without sending of the **ResendRequest** (2) messages.

The table below presents the cases where a gap will be detected on Logon, without causing Exchange to ignore or reject the message, as well as the expected behaviour:

| MsgSeqNum (34)  | NextExpectedSeqNum (789)                             | Behaviour  |
|---|--|--|
| Value received is <b>higher</b> than the expected one | Value received is the <u>expected</u> one            | OEG will acknowledge the <b>Logon</b> (A) message and wait for the client to: <ul style="list-style-type: none"> <li>■ resend all the messages that are identified as missed by the gap <b>OR</b></li> <li>■ send a <i>SequenceReset</i> (4) message indicating the next correct sequence number to be processed by the Exchange</li> </ul>  |
| Value received is the <u>expected</u> one             | Value received is <b>lower</b> than the expected one | OEG will acknowledge the <b>Logon</b> (A) message and resend all the outbound messages that the client missed, which are assumed to be starting from the message with sequence number provided in the field <i>NextExpectedMsgSeqNum</i> (789) and up to the last known message  |
| Value received is <b>higher</b> than the expected one | Value received is <b>lower</b> than the expected one | In this case both the Exchange and client will detect a gap / missed messages. To manage the gap of both sides OEG will acknowledge the <b>Logon</b> (A) and: <ul style="list-style-type: none"> <li>■ expect that the client will resend the missing inbound messages, <u>while</u></li> <li>■ resending to the client the message that outbound messages identified as missed</li> </ul> |

#### 4.9.1.2 During the Trading Session

During a trading session, it is possible that either the client or the Exchange miss incoming and/or outgoing messages. In order to detect such missed messages, the field *MsgSeqNum* (34) must be checked and, if the value provided in this field is higher than the expected then a gap is detected.

The following subsections present how to fill a gap that is detected in the following particular cases:

- from an Administration message that is not a **Logon** (A), **Logout** (5), **ResendRequest** (2) or a **SequenceReset** (4)
- from an Application message

##### 4.9.1.2.1 Gap in Administration Messages

- In case where the gap is identified from an Administration message that is not a **Logon** (A), **Logout** (5), **ResendRequest** (2) or a **SequenceReset** (4) the message that resulted in occurrence of the gap is ignored by the Exchange. To manage the gap generated by this case client must take one of the following actions:
  - resend all the messages requested by the Exchange via the **ResendRequest** (2) message (replacing the **HeartBeat** (0) by a **SequenceReset** (4) with *GapFillFlag* (123) set to **Y**) and issue a new **HeartBeat** (0) once the gap is filled **OR**
  - send a new **SequenceReset** (4) message with *GapFillFlag* (123) set to **Y** and *NewSeqNo* (36) set to the sequence number of the next message that will be sent to the Exchange.

**Note:**

When the Gap is detected through a **Logon** (A) or a **Logout** (5) message, OEG will not ignore the message originating the gap. OEG will process the **Logon** (A) or the **Logout** (5) but will not increment its own “*NextExpectedSeqNum*”.

##### 4.9.1.2.2 Gap in Application Messages

- In case where the gap is identified from an Application message, the message that resulted in occurrence of the gap is ignored by the Exchange. To manage the gap generated by this case client must take one of the following actions:
  - resend all the messages requested by the Exchange via the **ResendRequest** (2) message **OR** send a **SequenceReset** (4) message with fields *GapFillFlag* (123) set to **Y** and *NewSeqNo* (36) set to the sequence number of the next message that will be sent to the Exchange.

#### 4.9.1.3 Upon a Logout Request

A **Logout** (5) message can be sent either by the Exchange or by the client. If the Exchange detects a gap in the **Logout** (5) message sent by the client, the message is processed as follows:

- OEG processes the **Logout** (5) message sent by the client
- OEG issues a **ResendRequest** (2) requesting the range of messages that were missed and then waits for them to be either
  - resent by the client, or
  - to be replaced by a **SequenceReset** (4) with *GapFillFlag* (123) set to **Y** and *NewSeqNo* (36) set to the sequence number of the next message that will be sent to the Exchange
- Client’s connection is not disconnected until either the gap in messages is addressed by the actions identified above, or the time of inactivity has passed and client has not responded to a **TestRequest** (1) message.

**Note :**

- When the Gap is detected through a **Logon** (A) or a **Logout** (5) message, OEG will not ignore the message originating the gap. OEG will process the **Logon** (A) or the **Logout** (5) but will not increment his own "NextExpectedSeqNum".

**4.9.1.4 Gap Fill Processing – Rejection Cases**

During the gap fill processing, all the functional and technical checks will be performed normally on all the messages in order to ensure their integrity. The table below identifies all the rejection cases linked to the processing of the gap fill:

| Description of Case Causing Rejection  | Associated OEG Behaviour  |
|--|---|
| <b>ResendRequest</b> (2) sent by the client has the <i>BeginSeqNo</i> (7) set to <b>zero '0'</b>   | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>5</b> (Value is incorrect (out of range) for this tag)  |
| <b>ResendRequest</b> (2) sent by the client has the <i>BeginSeqNo</i> (7) <b>higher</b> than the <i>MsgSeqNum</i> (34) of the last message sent by OEG   | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>20</b> (Requested MsgSeqNum is higher than last known MsgSeqNum)  |
| <b>ResendRequest</b> (2) sent by the client has the <i>EndSeqNo</i> (16) <b>lower</b> than the <i>BeginSeqNo</i> (7)   | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>21</b> (EndSeqNo is lower than BeginSeqNo)  |
| <b>ResendRequest</b> (2) sent by the client has the <i>EndSeqNo</i> (16) <b>higher</b> than the <i>MsgSeqNum</i> (34) of the last message sent by OEG  | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>20</b> (Requested MsgSeqNum is higher than last known MsgSeqNum)  |
| The message resent by the client does not have the <i>PossDupFlag</i> (43)   | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>1</b> (Required tag Missing)  |
| The message resent by the client does not have the <i>OrigSendingTime</i> (122)<br>Required for applicative messages resent as a result of a ResendRequest or automatic resynchronization at Logon. Field is not populated in outbound SequenceReset-GapFill message and is not expected in inbound SequenceReset-GapFill message. | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>1</b> (Required tag Missing).<br>For more details please review carefully sections in this document on "Gap Sequence Number Gap Management & Rejection" |
| The message resent by the client has the <i>OrigSendingTime</i> (122) <b>higher</b> than the <i>SendingTime</i> (52)   | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>5</b> (Value is incorrect (out of range) for this tag)  |
| The message resent by the client has a <i>MsgSeqNum</i> (34) <b>lower</b> than the expected one  | OEG issues a <b>Logout</b> (5) with <i>SessionStatus</i> (1409) = <b>9</b> (Received MsgSeqNum(34) is too low)  |
| The message resent by the client has a <i>MsgSeqNum</i> (34) <b>higher</b> than the expected one   | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>22</b> (MsgSeqNum too high)   |
| The client issues a <i>SequenceReset</i> (4) with <i>GapFillFlag</i> (123) set to <b>N</b>   | OEG issues a <b>Logout</b> (5) with <i>SessionStatus</i> (1409) = <b>105</b> (SequenceReset - Reset Mode not allowed)   |
| The client issues a <i>SequenceReset</i> (4) with <i>NewSeqNo</i> (36) <b>lower</b> than the <i>MsgSeqNum</i> (34)   | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>19</b> (NewSeqNo too low)   |
| The client issues an <b>HeartBeat</b> (0), <b>TestRequest</b> (1), <b>ResendRequest</b> (2), <b>Logout</b> (5) or <b>Logon</b> (A) with <i>PossDupFlag</i> (43) set to <b>Y</b> while OEG is waiting for a gap to be filled  | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>23</b> (Invalid MsgType while waiting for Gap fill)   |
| The client sends a message with <i>PossDupFlag</i> (43) set to <b>Y</b> when OEG is not in Gap Fill Mode   | OEG issues a <b>Reject</b> (3) with <i>SessionRejectReason</i> (373) = <b>24</b> (PossDupFlag set to Y when OEG is not in Gap Fill Mode)  |

**4.10 DIRECT RESPONSES TO APPLICATION MESSAGES**

This section lists outbound messages that are sent as direct response to the individual received inbound messages received from the clients, in various cases.



This section provides only the responding message and does not represent complete behaviour for various functionalities in which they may be used. For details on the exchange of messages expected for individual functionalities clients should review the kinematics documents.

The table below provides responses for the following cases:

- **Acknowledgement:** which represents successful receipt and processing into the system of the technical and functional structure and content of an inbound message. In specific functional cases (e.g. breach of trading collars) an acknowledgment may be followed by a rejection that must be correctly handled by the client's system.
- **Functional or Technical Rejection:**
  - Functional Rejection: which represents an error that is raised when the inbound message may have correct technical structure and content, but does not meet the functional rules defined for the system / market / functionality. All such rejections are replied with an error code, [field *ErrorCode* (9955)] that is identified as 'Functional' in the error list document.
  - Technical rejection: which represents an error that is raised when the inbound message may not have correct technical structure or content. All such rejections are replied with an error code, [field *ErrorCode* (9955)] that is identified as 'Technical' in the error list document.
- **Session Level Rejection:** messages that are poorly formatted, cannot be correctly interpreted or do not meet rules identified for management of FIX connection, sequence and gap fill mechanisms mentioned in a dedicated section of this document.

Reason for such rejection is identified through the combination of tags: *SessionRejectReason* (373), *RefTagID* (371), *RefMsgType* (372) and *RefSeqNum* (45).

| Inbound Application Message   | Responding Outbound Message |  |                         |
|-------------------------------|-----------------------------|--|-------------------------|
|                               | Acknowledgement             | Functional or Technical Rejection  | Session Level Rejection |
| NewOrderSingle (D)            | ExecutionReport (8)         | ExecutionReport (8)  | Reject (3)              |
| MassQuote (i)                 | MassQuoteAck (b)            | Errors in Quote Repeating group: MassQuoteAck (b)<br>In All Other Cases: OrderCancelReject (9) | Reject (3)              |
| OrderCancelRequest (F)        | ExecutionReport (8)         | OrderCancelReject (9)  | Reject (3)              |
| OrderCancelReplaceRequest (G) | ExecutionReport (8)         | Collar Breach: ExecutionReport (8)<br>In All other cases: OrderCancelReject (9)                | Reject (3)              |
| OwnershipRequest (U18)        | OwnershipRequestAck (U29)   | RequestAckMessage (Uy)   | Reject (3)              |
| PriceInput (UI)               | RequestAckMessage (Uy)      | RequestAckMessage (Uy)   | Reject (3)              |
| LiquidityProviderCommand (UZ) | RequestAckMessage (Uy)      | RequestAckMessage (Uy)   | Reject (3)              |
| OrderMassStatusRequest (AF)   | ExecutionReport (8)         | RequestAckMessage (Uy)   | Reject (3)              |
| OrderMassCancelRequest (q)    | OrderMassCancelReport (r)   | OrderCancelReject (9)  | Reject (3)              |
| TradeCaptureReport (AE)       | TradeCaptureReportAck (AR)  | TradeCaptureReportAck (AR)   | Reject (3)              |
| FundPriceInput (U44)          | FundPriceInputAck (U45)     | TradeCaptureReportAck (AR)   | Reject (3)              |
| SecurityDefinitionRequest (c) | SecurityDefinition (d)      | ■ Errors in strategy leg definition:<br>SecurityDefinition (d)                                 | Reject (3)              |
| NewWholesaleOrder (U64)       | WholesaleOrderAck (U65)     | ■ Errors in strategy leg definition:<br>WholesaleOrderAck (U65)                                | Reject (3)              |
| CrossOrder (U67)              | ExecutionReport (8)         | ExecutionReport (8)  | Reject (3)              |



| Inbound Application Message      | Responding Outbound Message |                                   |                         |
|----------------------------------|-----------------------------|-----------------------------------|-------------------------|
|                                  | Acknowledgement             | Functional or Technical Rejection | Session Level Rejection |
| ERGCommand (U68)                 | ERGCommandAck (U69)         | ERGCommandAck (U69)               | Reject (3)              |
| GetRiskControls (U70)            | RiskControlDetails (U71)    | RiskControlDetails (U71)          | Reject (3)              |
| RequestForImpliedExecution (U66) | RequestAckMessage (Uy)      | RequestAckMessage (Uy)            | Reject (3)              |
| QuoteRequest (R)                 | ExecutionReport (8)         | QuoteRequestReject (AG)           | Reject (3)              |
| IOI (6)                          | IOINotification (U73)       | IOINotification (U73)             | Reject (3)              |

## 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 |
| Structured Products | SP  |
| Equity Derivatives  | EQD |
| Index Derivatives   | IDD |
| Commodities         | CMO |
| Drop Copy           | DC  |
| 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 not be sent 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 ADMINISTRATION MESSAGES

All administrative messages are available on the following Optiq Segments:



### 5.2.1 Logon (A)

Client ◀▶ OEG

#### 5.2.1.1 Message Description

The **Logon** (A) message is used by the members 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.

When **Logon** (A) message is used as inbound message, it must contain the following fields:

- *LogicalAccessID* (21021): it must be populated by the client according to the Logical Access used.
- *OEPartitionID* (21019): it must be populated according to the partition the client connects to.
- *NextExpectedMsgSeqNum* (789): it is the sequence number plus one (+1) of the last message received by the client from the Exchange on a specific OE Session.
- *SoftwareProvider* (21050): it is an optional field that should be populated for client using software provider services.
- *QueueingIndicator* (21020): defines whether the orders are rejected or queued in case of throttling.
- *HeartBtInt* (108): always set to the value defined by the exchange.
- *DefaultApplVerID* (1137): always set to 9 (FIX50SP2).
- *EncryptMethod* (98): always set to 0 (No encryption).

If the logon is successful the OEG sends back a **Logon** (A) message providing the sequence number of the last message received from the client. Otherwise the OEG sends back a **Logout** (5) message providing the reason of the rejection (*SessionStatus* (1409)) and closes the connection.

Additionally, OEG will send a **Reject** (3) message if the **Logon** (A) is poorly formatted.

#### Usage of the NextExpectedMsgSeqNum

At the first logon of the trading day the member must set the field *NextExpectedMsgSeqNum* (789) to 1, as no message can be received before a successful Logon.

In case of an unintentional disconnection the client must use the field *NextExpectedMsgSeqNum* 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. In this case, the gap will be filled automatically, prior to receiving any messages with sequences above the gap and without the generation of a **ResendRequest** (2) message to the client.

#### 5.2.1.2 Message Structure

| Tag   | Field                 | Short Description  | Format | Length | Values                          | Presence  |
|-------|-----------------------|--|--------|--------|---------------------------------|-----------|
|       | Header                |  |        |        |                                 |           |
| 108   | HeartBtInt            | Heartbeat interval (in seconds).   | Int    | 3      | Numerical                       | Mandatory |
| 98    | EncryptMethod         | Method of encryption for the new FIX session.  | Int    | 1      | Always set to 0 (No encryption) | Mandatory |
| 21019 | OEPartitionID         | Identifies uniquely an OE Optiq partition by which the engine is reached.  | Int    | 5      | From 0 to 2 <sup>16</sup> -2    | Mandatory |
| 21021 | LogicalAccessID       | Identifier of the Logical Access.  | Int    | 10     | From 0 to 2 <sup>32</sup> -2    | Mandatory |
| 789   | NextExpectedMsgSeqNum | Indicates the sequence number plus one (+1) of the last message received by the Client from the Exchange on the OE Session.                                  | SeqNum | 10     | Integer.                        | Mandatory |
| 21020 | QueueingIndicator     | Indicates whether the client requests its orders to be queued or rejected in case of throttling. (0: False - Reject ; 1: True - Queue).                      | Int    | 1      | (See field description)         | Mandatory |
| 1137  | DefaultApplVerID      | Specifies the service pack release being applied, by default, to the message at the session level.   | String | 1      | (See field description)         | Mandatory |
| 21050 | SoftwareProvider      | Free text field entered by the client in the Logon (A) message, identifying the provider of the software used for exchange of messages for trading purposes. | String | 8      | Free text field                 | Optional  |
|       | Trailer               |  |        |        |                                 |           |

## 5.2.2 ResendRequest (2)

Client ◀▶ OEG

### 5.2.2.1 Message Description

The **ResendRequest (2)** message can be issued either by the Client or the OEG and is used in the following situations:

- When a gap is detected on the sequence number;
- If the receiving application loses a message;
- As function of the initialization process;

If the Client application receives a **ResendRequest (2)**, with a sequence gap, it is critical that the Client application resends the appropriate messages before issuing its own ResendRequest (2).

The resending request can be done in three different ways:

- Request a single message: *BeginSeqNo* = *EndSeqNo*;
- Request a range of messages: *BeginSeqNo* = First message of the range and *EndSeqNo* = last message of the range;
- Request all messages sent after a particular message: *BeginSeqNo* = First message of the range and *EndSeqNo* = '0' (Zero meaning 'infinity');

In all the messages that are sent as the result of a **ResendRequest (2)**:

- the *PossDupFlag (43)* field, in the Header, must be set to 'Y';
- the *OrigSendingTime (122)* must be filled with the correct value or, if not possible, must be set to the same value as the *SendingTime (52)*.

All the messages sent by the Client after the gap is detected will be ignored by OEG, including the one that originates from the gap detection – except if it is the **Logon** (A). The message that originates the gap detection will be part of the Resend Request range. While a **ResendRequest** (2) is pending, OEG will process only messages with *PossDupFlag* (43) set to 'Y'. Sending new messages will only be allowed after the gap is filled.

### 5.2.2.2 Message Structure

| Tag | Field      | Short Description                          | Format | Len | Values                       | Presence  |
|-----|------------|--|--------|-----|------------------------------|-----------|
|     | Header     |  |        |     |                              |           |
| 7   | BeginSeqNo | Message sequence number for first message. | SeqNum | 10  | From 1 to 2 <sup>32</sup> -2 | Mandatory |
| 16  | EndSeqNo   | Message sequence number for last message.  | SeqNum | 10  | From 1 to 2 <sup>32</sup> -2 | Mandatory |
|     | Trailer    |  |        |     |                              |           |

## 5.2.3 Reject (3)

Client ◀ OEG

### 5.2.3.1 Message Description

The OEG will use this message to reject:

- poorly formatted inbound messages. In this case, the message provides the reason of the rejection (SessionRejectReason [373]);
- unknown **MsgType** (35). In this case, the message provides the error code: SessionRejectReason (373) = **11** (Invalid message type).

Members should keep a record of which messages the OEG rejects and never resend them.

For rejection of messages over the throttling limit, OEG will send a **Reject** (3) message, with field *SessionRejectReason* (373) used to indicate the type of throttling limit breached.

### 5.2.3.2 Message Structure

| Tag | Field               | Short Description   | Format | Len | Values   | Presence    |
|-----|---------------------|---|--------|-----|--|-------------|
|     | Header              |   |        |     |  |             |
| 45  | RefSeqNum           | Identifies the message sequence number (MsgSeqNum (34)) of the message being rejected.              | SeqNum | 10  | From 1 to 2 <sup>32</sup> -2                           | Mandatory   |
| 371 | RefTagID            | Identifies the tag number of the FIX field being referenced as the reason triggering the rejection. | Int    | 6   | Integer  | Conditional |
| 372 | RefMsgType          | The MsgType (35) of the FIX message being referenced.   | String | 3   | Value received in the rejected inbound message, if any | Conditional |
| 373 | SessionRejectReason | Provides the logon rejection reason.  | Int    | 2   | (See field description)                                | Mandatory   |
|     | Trailer             |   |        |     |  |             |

## 5.2.4 SequenceReset (4)

Client ◀▶ OEG

### 5.2.4.1 Message Description

The **SequenceReset** (4) message may be sent by the Client or the OEG as an answer to a **ResendRequest** (2) message.

The **SequenceReset** (4) - **Gap Fill Mode** can be used if the sending application chooses not to send an internal message to the Exchange, the **SequenceReset** (4) marks the place of that message. Note that, if the message that needs to be resent is an administrative one they will always be replaced by **SequenceReset** (4). In this case, the **SequenceReset** (4) will have to be sent with the *GapFillFlag* (123) set to 'Y'.

The value in the *NewSeqNo* (36) will always represent the *MsgSeqNum* of the next message that will be sent by the Client or the OEG. OEG will consider that the gap is filled if *NewSeqNo* (36) is set to a value greater than or equal to the *ResendRequest*'s *EndSeqNo* (16).

While a *ResendRequest* (2) is pending, if the Client:

- sends a **SequenceReset – Gap Fill Mode** message with *MsgSeqNum* higher than the expected sequence number, the matching engine issues a **Reject** (3) with field *SessionRejectReason*(373) set to 22 = *MsgSeqNum*(34) too high;
- sends to the Exchange a message with *NewSeqNo* lower or equal to the *MsgSeqNum* and *MsgSeqNum* equals to the expected sequence number, the matching engine rejects the message with a **Reject** (3) and *SessionRejectReason* (373) set to '19' (*NewSeqNo*(36) too low);

*Example:* If the Exchange issues a **ResendRequest** (2) with *BeginSeqNo* = 10 and *EndSeqNo* = 15 and the messages from 11-14 are administrative messages (others than the **Reject** (3)). The client should proceed as below:

- Resend 10 with *PossDupFlag* set to 'Y';
- **SequenceReset** (4) with *GapFillFlag* (123) set to 'Y' to replace 11, 12, 13, 14 and with the *NewSeqNo* (36) set to 15;
- Resend 15 with *PossDupFlag* set to 'Y';

The Matching Engine will never allow the use of the **SequenceReset** (4) - **Reset Mode**. If the Client sends to the Exchange this message he will receive a **Logout** (5) from OEG, with field *SessionStatus* (1409) set to 105 = *SequenceReset - Reset Mode not allowed*.

### 5.2.4.2 Message Structure

| Tag | Field       | Short Description   | Format  | Len | Values                       | Presence  |
|-----|-------------|---|---------|-----|------------------------------|-----------|
|     | Header      |   |         |     |                              |           |
| 36  | NewSeqNo    | Identifies the <i>MsgSeqNum</i> (34) of the next message to be received from the counterpart application. | SeqNum  | 10  | From 1 to 2 <sup>32</sup> -2 | Mandatory |
| 123 | GapFillFlag | Purpose of sequence reset.  | Boolean | 1   | (See field description)      | Optional  |
|     | Trailer     |   |         |     |                              |           |

## 5.2.5 Logout (5)

Client ◀▶ OEG

### 5.2.5.1 Message Description

The **Logout** (5) message with *SessionStatus* = **100** (*Regular Logout By Client*) is sent by the client in order to close the connection with the Exchange. The exchange responds with a **Logout** (5) message with *SessionStatus* = **4** (*Session logout complete*)

In regular cases, at the end of day the Exchange sends a **Logout** (5) message with *SessionStatus* = **101** (*End Of Day*) to the clients before dropping the connection.

The party initiating the logout must be the party that breaks the TCP connection.

Please note that in both cases (message initiated by the client or by the Exchange) it will trigger the Cancel On Disconnect mechanism if it is enabled.

### 5.2.5.2 Message Structure

| Tag  | Field                | Short Description  | Format | Len | Values                  | Presence  |
|------|----------------------|--|--------|-----|-------------------------|-----------|
|      | Header               |  |        |     |                         |           |
| 1409 | <i>SessionStatus</i> | Provides the code associated to the reason for the logout. | Int    | 3   | (See field description) | Mandatory |
|      | Trailer              |  |        |     |                         |           |

## 5.2.6 Heartbeat (0)

Client ◀▶ OEG

### 5.2.6.1 Message Description

The **Heartbeat** (0) message is used during periods of inactivity, either by the Exchange or the client, to notify each other that the inactivity is not due to a technical issue.

The message is sent:

- after *n* second(s) of inactivity to notify the opposite side that the connection functions properly.
- in response to a **TestRequest** (1) sent by either party. In this case it must contain the *TestReqID* (112) transmitted in the **TestRequest** (1) message.

The parameter *n* has a specific value defined for each Optiq Segment. Please refer to the *Euronext Markets – Optiq OEG Connectivity Specifications* document for the values of the parameter *n*.

After a **TestRequest** (1) is sent, the opposite side has *n* seconds to answer with an **HeartBeat** (0) having the same *TestReqID* as the one in the initial **TestRequest** (1). During the *n* seconds delay period:

- all application messages will be processed normally;
- any **Heartbeat** (0) message having a *TestReqID* different than the one in the **TestRequest** (1) initial message will be rejected;
- any **Heartbeat** (0) message without the *TestReqID* field will be accepted but ignored;
- any **Heartbeat** (0) message wrongly formatted will be rejected;

### 5.2.6.2 Message Structure

| Tag | Field     | Short Description                                | Format | Len | Values    | Presence    |
|-----|-----------|--|--------|-----|-----------|-------------|
|     | Header    |  |        |     |           |             |
| 112 | TestReqID | Test Request ID to be returned in Heartbeat (0). | String | 24  | Numerical | Conditional |
|     | Trailer   |  |        |     |           |             |

### 5.2.7 TestRequest (1)

Client ◀▶ OEG

#### 5.2.7.1 Message Description

The **TestRequest** (1) message can be sent either by the client or the Exchange. It is used during periods of inactivity (when no messages have been exchanged) to check whether the other party is still connected.

The message is sent after  $n$  second(s) of inactivity on the opposite side. Then:

- The opposite application has  $n$  second(s) delay to respond to the **TestRequest** (1) message by sending a **Heartbeat** (0) message containing the TestReqID (112).
- Otherwise if the opposite application does not issue an **Heartbeat** (0) within the given delay, the message sender should close the connection. (Note that, on the Exchange side, this triggers the Cancel on Disconnect mechanism, if the latter is enabled).

The **TestRequest** (1) message can also be sent by the client to the OEG at any moment and the OEG will answer with a **Heartbeat** (0) message.

The parameter ' $n$ ' has a specific value defined for each Optiq Segment. Please refer to the *Euronext Markets -Optiq OEG Connectivity Specifications* document for the values of the parameter ' $n$ '.

#### 5.2.7.2 Message Structure

| Tag | Field     | Short Description                                | Format | Len | Values    | Presence  |
|-----|-----------|--|--------|-----|-----------|-----------|
|     | Header    |  |        |     |           |           |
| 112 | TestReqID | Test Request ID to be returned in Heartbeat (0). | String | 24  | Numerical | Mandatory |
|     | Trailer   |  |        |     |           |           |



## 5.3 APPLICATION MESSAGES

### 5.3.1 NewOrderSingle (D)

Client ► OEG

Available for:        

#### 5.3.1.1 Message Description

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

For ETF MTF, the **NewOrderSingle** (D) message can be used by the Liquidity Providers to answer a specific **QuoteRequest** (R) message and by the RFQ issuer to confirm the RFQ.

Please note that:

- for orders other than Limit Orders, Iceberg Orders and Stop Limit Orders (Market, Stop, Peg, and MTL) the Price (44) must not be provided.
- for orders sent on the Euronext Block MTF and as a reply to an indication of interest, the IOIID (23) must be set to the value of *the ExchangeIOIID (21114)* provided by the Exchange in the *IOINotification (U73)* sent to acknowledge the IOI (6). In case the value provided doesn't match an existing indication of interest the order is rejected;

The following fields are used for clearing purposes: *ClearingInstruction (577)*, *AccountCode (6399)*, *PartyID (448)*, and *PartyRole (452)*. Please note that *PartyID (448)* and *PartyRole (452)* are also used for other purposes.

#### Components Usage within the Message

This message contains **three components and one nested component**:

- The first component **Parties** is composed of the fields: *NoPartyIDs (453)*, *PartyID (448)*, *PartyIDSource (447)*, *PartyRole (452)* and *PartyRoleQualifier (2376)*;
- The second component **OrderAttributeGrp** is composed of the fields: *NoOrderAttributes (2593)*, *OrderAttributeType (2594)*, *OrderAttributeValue (2595)*.
  - For Cross orders this section is repeated twice for each field that was provided by the client (e.g. fields required for identification of AGGR, PNAL, Commodity Derivative and Underlying Risk Reduction, etc.). As elsewhere the first instance of the field represents information provided for the **buy** side and the second represents information provided for the **sell** side.
- The third component **SideCrossOrdModGrp** is composed of the fields: *NoSides (552)*, *Side (54)*, *ClearingInstruction (577)*, *Text (58)*, *Account (1)*, *AccountCode (6399)*, *LPRole (20021)*, *TechnicalOrdType (9941)*, *PostingAction (7443)* and of *nested repeating group*.
  - For Cross orders this section is repeated twice for each field that was provided by the client. As elsewhere the first instance of the field represents information provided for the **buy** side and the second represents information provided for the **sell** side.
- The nested repeating group **NestedParties** is composed of *NoNestedPartyIDs (539)*, *NestedPartyID (524)*, *NestedPartyIDSource (525)*, *NestedPartyRole (538)* and *NestedPartyRoleQualifier (2384)*.
  - For Cross orders this section is repeated twice for each field that was provided by the client (e.g. fields required to provide the ClientIdentificationShortCode and InvestmentDecisionWFirmShortCode information, etc.). As elsewhere the first instance of the field represents information provided for the **buy** side and the second represents information provided for the **sell** side.

Use of the groups and values within them:

- ExecutionwithinFirmShortCode should be provided via the **Parties** repeating group
- With noted exceptions ClientidentificationShortCodes should be provided via the **NestedParties** repeating group

- The NonExecutingBrokerShortCodes should be provided via the **NestedParties** repeating groups
- The repeating group **NestedParties** is also used to specify the Clearing Firm for the order
- The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group
- The third repeating group **SideCrossOrdModGrp** is used to identify the order side

### MIFID II short code related data fields

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

#### ExecutionwithinFirmShortCode

Presence Condition: Mandatory

- **Case 1:** Specifying ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier (2376)* = **24** (Natural person)
- **Case 2:** Specifying ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing trader)
  - ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)
- **Case 3:** Specifying ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **3** (Client ID)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

#### ClientIdentificationShortCode

Presence Condition: Conditional Group. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO.

For cases 4 and 5, explained below, values 1 and 2 available for *NestedPartyID* (524) are reserved for internal use by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** Specifying ClientIdentificationShortCode where the client is a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **23** (Firm or legal entity)
- **Case 5:** Specifying ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)

- ◆ *NestedPartyRole* (538) = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier* (2384) = **24** (Natural person)
- **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)  
In this case the NestedParties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:
  - ◆ *OrderAttributeType* (2594) = **0** (Aggregated order)
  - ◆ *OrderAttributeValue* (2595) = “Y”
- **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)  
In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:
  - ◆ *OrderAttributeType* (2594) = **1** (Pending allocation)
  - ◆ *OrderAttributeValue* (2595) = “Y”
- **Case 8:** In case the message originates from a **DEA** (Direct Electronic Access) client, information should be provided as following:
  - ◆ *OrderOrigination* (1724) = **5** (Order received from a direct access or sponsored access customer)

**AND**

  - ◆ *ClientIdentificationShortCode* should be provided using one of the combinations provided in cases 4 through 7 above, as required

#### InvestmentDecisionwithinFirmShortCode

Presence Condition: Conditional Group. Mandatory if (1) AccountCode is Liquidity Provider, Related Party or House, OR in case investment decision maker is an Algorithm (2) AND the message did not originate from DEA client.

- **Case 9:** Specifying InvestmentDecisionwithinShortCode where a natural person is responsible for the investment decision
  - ◆ *NestedPartyID* (524) = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
  - ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
  - ◆ *NestedPartyRoleQualifier* (2384) = **24** (Natural person)

**AND**

  - ◆ *OrderOrigination* (1724) is **NOT** set
- **Case 10:** Specifying InvestmentDecisionwithinShortCode where an algorithm was responsible for the investment decision
  - ◆ *NestedPartyID* (524) = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
  - ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
  - ◆ *NestedPartyRoleQualifier* (2384) = **22** (Algorithm)

**AND**

  - ◆ *OrderOrigination* (1724) is **NOT** set

#### NonExecutionBrokerShortCode

Presence Condition: Optional

- **Case 11:** Specifying NonExecutionBrokerShortCode
  - ◆ *NestedPartyID* (524) = field in which the **short code** is provided

- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **26** (Correspondent broker)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity)

### Other Identifiers

- For identification of an order submitted for a commodity derivative or a warrant with a commodity underlying, if the potential trade would reduce the risk clients should also use **OrderAttributeGrp** repeating group, and identify the values as following:
  - ◆ *OrderAttributeType* (2594) = **3** (Risk Reduction Code)
  - ◆ *OrderAttributeValue* (2595) = "Y"

### Trading & Clearing related data fields

- The component **SideCrossOrdModGrp** is a mandatory repeating group that must be repeated **once for Buy and Sell orders and twice for Cross orders**<sup>6</sup>.

### Clearing Firm ID

- If provided, the following combination of fields identifies how clients should populate the Clearing Firm ID
  - ◆ *NestedPartyID* (524) = field in which the **ID** is provided
  - ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
  - ◆ *NestedPartyRole* (538) = **4** (Clearing Firm)
  - ◆ *NestedPartyRoleQualifier* (2384) = **3** (General clearing member) OR **4** (Individual clearing member)

When used in the inbound messages to specify the Clearing Firm ID the maximum length for the *NestedPartyID* (524) field is 8 characters long, and value may be alphanumeric.

### Client ID / Long Client ID

- If provided, the following describes how clients should populate the Client ID data for each market:

For the Cash Markets – Client ID data should be provided as combination of fields identified below. As this data is provided via the *NestedParties* repeating group – the repeating group may have from 1 to 5 occurrences.

- ◆ *NestedPartyID* (524) = field in which the **ID** is provided
- ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
- ◆ *NestedPartyRole* (538) = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity) OR **24** (Natural person)

When used in the inbound messages to specify the Client ID, the maximum length for the *NestedPartyID* (524) field is 8 characters long, and value may be alphanumeric.

If the field *LongClientID* (21804) is also provided for the Cash markets, it will be ignored.

For the Derivatives Markets – Client ID data should be provided using the field *LongClientID* (21804), which can be used to its maximum length of 16 characters.

Due to this, for the Derivatives markets *NestedParties* repeating group may have from 1 to 4 occurrences. If the *NestedParties* combination for Client ID is provided for the Derivatives markets – the message will be rejected.

<sup>6</sup> Cross orders on COB using *NewOrderSingle* (D) message can be submitted only for the Cash markets.

## 5.3.1.2 Message Structure

| Tag   | Field              | Short Description  | Format       | Len | Values   | Presence    |
|-------|--------------------|--|--------------|-----|--|-------------|
|       | Header             |  |              |     |  |             |
| 60    | TransactTime       | Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).   | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 11    | ClOrdID            | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String       | 20  | From -2^63+1 to 2^63-1   | Mandatory   |
| 48    | SecurityID         | Exchange identification code of the instrument/contract.   | String       | 10  | From 0 to 2^32-2   | Mandatory   |
| 22    | SecurityIDSource   | Gives the type of SecurityID.  | String       | 1   | (See field description)  | Mandatory   |
| 20020 | EMM                | Defines the Exchange Market Mechanism applied on each platform.  | Int          | 2   | (See field description)  | Mandatory   |
| 44    | Price              | Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).   | Price        | 20  | From -2^63+1 to 2^63-1   | Conditional |
| 38    | OrderQty           | Total order quantity, per quantity unit.(To be calculated with Quantity Decimals).   | Qty          | 20  | From 0 to 2^64-2   | Mandatory   |
| 40    | OrdType            | Type of Order.   | Char         | 1   | (See field description)  | Mandatory   |
| 59    | TimeInForce        | Specifies the maximum validity of an order.  | Char         | 1   | (See field description)  | Mandatory   |
| 336   | TradingSessionID   | 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. | String       | 3   | (See field description)  | Conditional |
| 29    | LastCapacity       | Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.   | Char         | 1   | (See field description)  | Mandatory   |
| 21081 | NonExecClID        | This field will be used as unique client Key. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc.   | Int          | 5   | From 0 to 2^16-1   | Optional    |
| 453   | NoPartyIDs         | Number of PartyID entries.   | NumInGroup   | 1   | Always set to 1  | Mandatory   |
| 448   | PartyID            | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String       | 11  | Alphanumeric   | Mandatory   |
| 447   | PartyIDSource      | Source of PartyID value.   | Char         | 1   | (See field description)  | Mandatory   |
| 452   | PartyRole          | Identifies the type or role of the PartyID (448) specified.  | Int          | 3   | (See field description)  | Mandatory   |
| 2376  | PartyRoleQualifier | Used to further qualify the value of PartyRole(452).   | Int          | 2   | (See field description)  | Mandatory   |

| Tag   | Field                       | Short Description  | Format            | Len | Values   | Presence    |
|-------|-----------------------------|--|-------------------|-----|--|-------------|
| 21015 | STPAggressorIndicator       | Field used as instruction for order handling.<br>- STP resting order: indicates whether the STP rule is "cancel resting order" or not. (0: STP Resting Order deactivated; 1: Cancel Resting Order)<br>- STP incoming order: indicates whether the STP rule is "cancel incoming order" or not. (0: STP Incoming Order deactivated; 1: Cancel Incoming Order)<br>- STP is not applicable for Dark Orders | Int               | 1   | (See field description)                        | Optional    |
| 21016 | DisclosedQtyRandomIndicator | Indicates whether the client requests or not a randomization for the DisplayQty (1138) of his iceberg order.   | Int               | 1   | (See field description)                        | Conditional |
| 21018 | CancelOnDisconnectIndicator | Indicates whether the order is not in scope of the Cancel On Disconnect mechanism (order is persisted) or if order should be handled as defined by default. (0: Default Configuration ; 1: Order not in the scope of Cancel On Disconnect - Order is to be persisted)  | Int               | 1   | (See field description)                        | Mandatory   |
| 1094  | PegPriceType                | Defines the type of the peg order.   | Int               | 1   | (See field description)                        | Conditional |
| 211   | PegOffsetValue              | Tick offset for a pegged order.  | Int               | 3   | From -127 to 127                               | Conditional |
| 20052 | DarkExecutionInstruction    | Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions.  | MultipleCharValue | 9   | (See field description)                        | Conditional |
| 1724  | OrderOrigination            | Identifies the origin of the order.  | Int               | 1   | (See field description)                        | Conditional |
| 2593  | NoOrderAttributes           | Number of order attribute entries.   | NumInGroup        | 1   | If provided, From 1 to 2                       | Optional    |
| 2594  | OrderAttributeType          | The type of order attribute.   | Int               | 1   | (See field description)                        | Optional    |
| 2595  | OrderAttributeValue         | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String            | 1   | (See field description)                        | Optional    |
| 2362  | SelfMatchPreventionID       | For Future Use.  | String            | 5   | From 0 to 2 <sup>16</sup> -2                   | Optional    |
| 99    | StopPx                      | Stop Trigger Price is mandatory for stop orders.   | Price             | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Conditional |
| 20004 | UndisclosedPrice            | [N/A] (For Future Use, Pending Regulatory Approval) Optional price for the hidden part of an iceberg order.  | Price             | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Optional    |
| 1138  | DisplayQty                  | Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)   | Qty               | 20  | From 0 to 2 <sup>64</sup> -2                   | Conditional |

| Tag   | Field                    | Short Description   | Format       | Len | Values   | Presence    |
|-------|--------------------------|---|--------------|-----|--|-------------|
| 110   | MinQty                   | Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).   | Qty          | 20  | Value '0' by default and depending to a minimum value for the given instrument and/or market type                                      | Optional    |
| 126   | ExpireTime               | [N/A] Field used as time of order expiration for GTT orders.  | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 00000000-99999999 (nanoseconds) | Conditional |
| 432   | ExpireDate               | Field used as date of order expiration for GTD orders.  | LocalMktDate | 8   | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31   | Conditional |
| 20005 | UndisclosedIcebergType   | [N/A](For Future Use, Pending Regulatory Approval) Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.                   | Int          | 1   | (See field description)  | Conditional |
| 20175 | TriggeredStopTimeInForce | Specifies the maximum validity of an triggered stop order.  | Char         | 1   | (See field description)  | Conditional |
| 131   | QuoteReqID               | Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.  | String       | 20  | From 0 to 2^64-2   | Conditional |
| 21037 | RFQAnswerIndicator       | Indicates whether the message is, or not, a quote sent as an answer to a QuoteRequest (R) message.  | Int          | 1   | (See field description)  | Conditional |
| 21038 | RFQConfirmationIndicator | Indicates whether the message is, or not, an order sent as a confirmation of a QuoteRequest (R) message.  | Int          | 1   | (See field description)  | Conditional |
| 21800 | ConditionalOrderFlag     | Field used to specify if the order is a conditional or a firm order.  | Char         | 1   | (See field description)  | Conditional |
| 21801 | FRMARAMPLP               | 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 DE MAR AMP LP). | Char         | 1   | 0 = Not subject to FR MAR AMP LP (AMAFI) (default)<br>1 = Subject to FR MAR AMP LP (AMAFI)   | Optional    |
| 23    | IOIID                    | Unique identifier of IOI message.   | String       | 20  | From -2^63+1 to 2^63-1   | Optional    |
| 552   | NoSides                  | Number of sides.  | NumInGroup   | 1   | From 1 to 2  | Mandatory   |
| 54    | Side                     | Indicates the side of the order.  | Char         | 1   | (See field description)  | Mandatory   |
| 577   | ClearingInstruction      | Clearing Instruction.   | Int          | 4   | (See field description)  | Optional    |
| 58    | Text                     | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.  | String       | 18  | Alphanumeric   | Optional    |
| 1     | Account                  | Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.   | String       | 12  | Alphanumeric   | Optional    |
| 6399  | AccountCode              | 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.                        | Int          | 1   | (See field description)  | Mandatory   |



| Tag   | Field                    | Short Description  | Format            | Len | Values                   | Presence    |
|-------|--------------------------|--|-------------------|-----|--------------------------|-------------|
| 20021 | LPRole                   | Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".  | Int               | 2   | (See field description)  | Conditional |
| 9941  | TechnicalOrdType         | 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.  | Char              | 1   | (See field description)  | Optional    |
| 7443  | PostingAction            | Open Close Indicator, Posting action. This field is part of the clearing aggregate.  | MultipleCharValue | 19  | (See field description)  | Optional    |
| 21804 | LongClientID             | 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. | String            | 16  | (See field description)  | Optional    |
| 539   | NoNestedPartyIDs         | Number of NestedPartyID entries.   | NumInGroup        | 1   | If provided, From 1 to 5 | Conditional |
| 524   | NestedPartyID            | Party identifier/code within a repeating group. See NestedPartyIDSource (525) and NestedPartyRole (538).   | String            | 11  | Alphanumeric             | Conditional |
| 525   | NestedPartyIDSource      | Source of NestedPartyID (524) value.   | Char              | 1   | (See field description)  | Conditional |
| 538   | NestedPartyRole          | Identifies the type or role of the NestedPartyID (524) specified.  | Int               | 3   | (See field description)  | Conditional |
| 2384  | NestedPartyRoleQualifier | Used to further qualify the value of NestedPartyRole(538).   | Int               | 2   | (See field description)  | Conditional |
|       | Trailer                  |  |                   |     |                          |             |

### 5.3.2 ExecutionReport (8)

Client ◀OEG

Available for: EQ FND FXI SP EQD IDD CMO DC BLK

#### 5.3.2.1 Message Description

The **ExecutionReport (8)** message is sent by the matching engine amongst the following situations:

- Response to **NewOrderSingle (D)** request when the request is accepted and the order created as well as when it is rejected;
- Response to **QuoteRequest (R)** message when the request is accepted:
  - For the Funds segment - It confirms the creation of the new RFQ; In this case this message specifies the Quote Request ID of the original submitted Quote in the *OrderID* (37) field;
  - For the Derivatives segments – It confirms acceptance of the message for publication of the request for liquidity to the Market; In this case this message specifies the Quote Request ID of the original submitted Quote Request (for RFQ) in both the *OrderID* (37) and *QuoteReqID* (131) fields, with the same value;
- Response to **OrderCancelReplaceRequest (G)** message in case of acceptance (an **OrderCancelReject (9)** is returned instead in case of rejection); it indicates that the order modification/confirmation is done and holds information associated with the order;



- Response to **OrderCancelRequest** (F) message in case of acceptance (an **OrderCancelReject** (9) is returned instead in case of rejection); it indicates that the order cancellation is done:
  - For an individual order cancellation message **sent by the same Logical access and OE session** that sent the order, a **ExecutionReport** (8) message, as a notification of the cancellation, is sent to that Logical Access and OE session.
    - ◆ *Example:* LA1 / OE1 sends the order, then LA1 / OE1 sends a cancellation. **ExecutionReport** (8) message, as a notification of the cancellation, 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 **ExecutionReport** (8) message, as a notification of the cancellation, 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
- Response to **OrderMassCancelRequest** (q) message in case of acceptance (an **OrderCancelReject** (9) is returned instead in case of rejection for each rejected cancellation); In this case, one **ExecutionReport** (8) message is sent for each cancelled order. In case of a mass cancellation following a OEG disconnection, the field ClOrdID (11) is not filled in each Execution Report: the reference of the cancelled order is hold by the field OrigClOrdID (41):
  - For a mass cancel command (with granularity of a firm) while the **OrderMassCancelRequest** (r) message is sent to the Logical Access and/or OE session that submitted it, the **ExecutionReport** (8) messages, sent as a cancellation notification, for the individual impacted orders are sent to the Logical Accesses and OE sessions that originally submitted the orders.
    - ◆ *Example:* LA1 / OE1 sends the order1, LA3 / OE3 sends order2. Then LA2 / OE2 sends a **OrderMassCancelRequest** (q). **OrderMassCancelReport** (r) is sent to LA2 / OE2. Individual Kill messages are sent to the Logical Accesses that own the order.
- Response to **OrderMassStatusRequest** (AF) message.
- Response to **CrossOrder** (U67) request when the request is accepted and the order created as well as when it is rejected;

### Executions Wholesales and Strategies (for the Derivatives markets)

The executions for wholesale transactions done on strategies send individual **ExecutionReport** (8) 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.

### ExecutionReport (8) Message Signature Tags

The following table identifies the reason for which the **ExecutionReport** (8) message was sent, with a description of the various cases and provides the values of tags *ExecType* (150) and *OrdStatus* (39) used in each case:

| Cases when ExecutionReport (8) is sent     | Details of the Case  | ExecType (Tag 150) | OrdStatus (Tag 39) |
|--|--|--------------------|--------------------|
| <b>New Order Submission &amp; Creation</b> |  |                    |                    |
| New Order                                  | <i>Message 8 sent:</i> in response to a <b>NewOrderSingle</b> (D) that is successfully received and accepted   | 0                  | 0                  |
| Rejection of New Order                     | <i>Message 8 sent:</i> in response to a <b>NewOrderSingle</b> (D) or a <b>QuoteRequest</b> (R) message, that is received and rejected  | 8                  | 8                  |
| Iceberg Order Conversion                   | <i>Message 8 sent:</i> in response to a <b>NewOrderSingle</b> (D) message when the Iceberg order is transformed into a Limit order when it is below the minimum allowed size | h                  | 0                  |
| New RFQ                                    | <i>Message 8 sent:</i> in response to a <b>QuoteRequest</b> (R) that is successfully received and accepted   | j                  | 0                  |
| New CrossOrder (Derivatives)               | <i>Message 8 sent:</i> in response to a <b>CrossOrder</b> (U67) that is successfully received and accepted   | 2                  | 0                  |

| Cases when ExecutionReport (8) is sent                             | Details of the Case  | ExecType (Tag 150) | OrdStatus (Tag 39) |
|--|--|--------------------|--------------------|
| <b>FUTURE USE</b><br>Order Creation                                | <b>FUTURE USE</b><br><i>Message 8 sent:</i> to report an order creation by the Market Operations   | i                  | 0                  |
| <b>Order Modification</b>  |  |                    |                    |
| Modification of an Order   | <i>Message 8 sent:</i> in response to an <b>OrderCancelReplaceRequest</b> (G), for an order that has not participated in trading the message indicates that request is successfully received and accepted, and the Order is modified | 5                  | 5                  |
| Order Enters after Collar Breach Confirmation                      | <i>Message 8 sent:</i> when an Order enters the book following collar breach confirmation  | d                  | 5                  |
| <b>Individual Order Cancellation</b>                               |  |                    |                    |
| Individual Order Cancelled by User                                 | <i>Message 8 sent:</i> to report cancellation of an Order in response to an <b>OrderCancelRequest</b> (F), when the cancel request is received from a client, that was successfully received and accepted                            | 4                  | 4                  |
| Individual Order cancelled due to Kill Switch by Market Operations | <i>Message 8 sent:</i> to report cancellation of an Order when the cancel request is a consequence of a Kill switch command sent from the Market Operations  | V                  | 4                  |
| Individual Order cancelled by Market Operations                    | <i>Message 8 sent:</i> to report cancellation of an Order due to manual intervention from Market Operations  | U                  | 4                  |
| Individual Order cancelled by Risk Manager                         | <i>Message 8 sent:</i> to report cancellation of an Order when the cancel request is a request sent from a risk manager  | P                  | 4                  |
| Individual Order cancelled by Clearing Risk Manager                | <i>Message 8 sent:</i> to report cancellation of an Order when the cancel request is a request sent from a risk manager  | v                  | 4                  |
| Individual reactor Order Cancellation (Derivatives)                | <i>Message 8 sent:</i> to report cancellation of a Reactor Order when it doesn't match with the conditions submitted by the Initiator  | 1                  | 4                  |
| <b>Mass Cancellation of Orders</b>                                 |  |                    |                    |
| Mass Cancellation of Orders by User                                | <i>Message 8 sent:</i> in response to an <b>OrderMassCancelRequest</b> (q) received and accepted, to report the cancellation of an order requested by the client   | 4                  | 4                  |
| Mass Cancellation of Orders by Market Operations                   | <i>Message 8 sent:</i> when the mass cancel request is initiated by the Market Operations  | U                  | 4                  |
| <b>Order Elimination &amp; Automatic Cancellation</b>              |  |                    |                    |
| Elimination on Reaching Time or Trading Phase of Expiration        | <i>Message 8 sent:</i> when Order expired upon reaching its time or phase of elimination (VFU/VFC order eliminated at the end of the uncrossing, GTT/GTD order eliminated at its expiration time/date, etc.)                         | 3                  | 3                  |
| Elimination of IOC order's remaining quantity                      | <i>Message 8 sent:</i> when IOC order is partially filled, and then the remaining unfilled quantity is cancelled on entry  | X                  | 4                  |
| Elimination due to Corporate Event                                 | <i>Message 8 sent:</i> when Order is eliminated by a Corporate Event   | O                  | 4                  |
| Expiration at the end of the Trading Session                       | <i>Message 8 sent:</i> when Order is eliminated at the end of the trading session due to expiration of its time of validity  | C                  | C                  |
| Cancellation due to PAKO   | <i>Message 8 sent:</i> when Order is eliminated at the start of the PAKO phase   | Y                  | 4                  |
| Cancellation by STP  | <i>Message 8 sent:</i> when a resting Order eliminated by the Self-Trade Prevention (STP)  | a                  | 4                  |
| Cancellation due to Knock-Out                                      | <i>Message 8 sent:</i> when Order is cancelled due to Knock-Out of an instrument   | g                  | 4                  |
| Cancellation due to COD mechanism                                  | <i>Message 8 sent:</i> when Order is cancelled due to triggering of the Cancel On Disconnect (COD) mechanism   | b                  | 4                  |
| Cancellation due to RFQ expiration                                 | <i>Message 8 sent:</i> when Order is cancelled due to cancelled due to RFQ expiration, on the funds segment  | r                  | 4                  |

| Cases when ExecutionReport (8) is sent                | Details of the Case  | ExecType (Tag 150) | OrdStatus (Tag 39) |
|---|--|--------------------|--------------------|
| Cancellation due to RFQ cancellation                  | <i>Message 8 sent:</i> when Order is cancelled due to RFQ cancellation, on the funds segment   | f                  | 4                  |
| Cancellation due to RFQ remaining quantity killed     | <i>Message 8 sent:</i> when Order is cancelled due to RFQ remaining quantity killed, on the funds segment  | q                  | 4                  |
| Cancellation due to RFQ confirmation                  | <i>Message 8 sent:</i> when Order is cancelled due to RFQ confirmation, on the funds segment   | s                  | 4                  |
| Cancelled due to Potential Matching                   | <i>Message 8 sent:</i> when a Conditional Order is cancelled due to Potential Matching   | c                  | 4                  |
| Cancelled due to a potential trade outside FSP limits | <i>Message 8 sent:</i> when an order is Cancelled due to a potential trade outside FSP limits.   | n                  | 4                  |
| Cancelled triggered by Trade Price Validation         | <i>Message 8 sent:</i> when an order is Cancelled when in scope of triggered Trade Price Validation (TPV).   | w                  | 4                  |
| Elimination of RFC Queued order                       | <i>Message 8 sent:</i> when RFC queued order is eliminated due to a potential order activation outside of trading hours  | !                  | 4                  |
| <b>Order Fill / Trade Execution</b>                   |  |                    |                    |
| Partial Fill  | <i>Message 8 sent:</i> to report partial execution of an Order, which results in a trade   | F                  | 1                  |
| Fill  | <i>Message 8 sent:</i> to report full execution of an Order, which results in a trade  | F                  | 2                  |
| <b>Trade Cancellation</b>                             |  |                    |                    |
| Trade Cancellation                                    | <i>Message 8 sent:</i> when the trade is cancelled. All cases of Trade Cancellation are identified in the same way. In all such cases the trade leading to the execution of the order is cancelled and the order, or the Derivatives Wholesales or RFC submissions, remain in the state they were after the trade. | H                  | H                  |
| <b>System Triggered Events</b>                        |  |                    |                    |
| Stop order  | <i>Message 8 sent:</i> As a notification of triggering of a Stop-Market / Stop-Limit order   | L                  | S                  |
| Re-filled Iceberg order                               | <i>Message 8 sent:</i> As a notification of a refill of an Iceberg order   | e                  | O                  |
| MTL order transformation                              | <i>Message 8 sent:</i> As a notification of a resting Market to Limit (MTL) order being transformed into a Limit order during uncrossing   | L                  | T                  |
| VFU / VFC order                                       | <i>Message 8 sent:</i> As a notification of a Valid for Uncrossing or Valid For Closing order reaching the Uncrossing phase where it is triggered  | L                  | Q                  |
| <b>Order Status &amp; Ownership Request</b>           |  |                    |                    |
| Order Status  | <i>Message 8 sent:</i> in response to an <b>OrderMassStatusRequest</b> (AF) message  | m                  | R                  |
| Ownership Request                                     | <i>Message 8 sent:</i> in response to an <b>OwnershipRequest</b> (U18) message   | k                  | I                  |

### Private & Public feed reconciliation (Cash Segments Only)

The **ExecutionReport** (8) message allows clients to reconcile their orders with the Market Data feed by using the field *OrderPriority* (21004).

This mechanism is explained in more details in the Kinematics for the Cash markets in Section 1.2.5.1 *Private and Public feed reconciliation*. Public and Private feed reconciliation of order messages does not apply to the Derivatives markets.

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

Please note that the field *OrderPriority* (21004) is provided for newly received Stop orders, and all orders shown to the market. List below identifies the cases in which it is provided:

- In the **ExecutionReport** (8) message as a response to a **NewOrderSingle** (D) or to an **OrderCancelReplaceRequest** (G) with *ConfirmFlag* (9930) set to '1 = Confirmed';
- In the **ExecutionReport** (8) message as a response to a new order entry;
- In the **ExecutionReport** (8) message as a notification of a triggered Stop-market/Stop-limit order; *Currently used on the Cash markets only*
- In the **ExecutionReport** (8) message as a notification of a triggered Valid For Uncrossing (VFU) or Valid For Closing (VFC) order; *Currently used on the Cash markets only*
- In the **ExecutionReport** (8) message for a refilled Iceberg Order. *Currently used on the Cash markets only*

For orders that are still hidden for the market (ex. an un-triggered Stop order) the *OrderPriority* will not be provided.

### Unsolicited Reports

The **ExecutionReport** (8) message may be used to relay order execution reports:

- **Order Partial Fill execution report:** the **ExecutionReport** (8) message is used to relay the notification of an order's partial fill.
- **Order Fill execution report:** the **ExecutionReport** (8) message is used to relay the notification of an order's full fill.
- In outbound application messages the field *ClOrdID* (11) is not provided for unsolicited messages.

The **ExecutionReport** (8) message may be used to relay Market Operations reports:

- **Market Operations order creation report:** For Future Use only, Currently not supported
- **Market Operations trade cancellation reports:** two **ExecutionReport** (8) messages are used to relay the notification of a trade cancellation by Market Operations (one message per order involved).
- **Order Expiration report:** the **ExecutionReport** (8) message is used to relay the notification of an order's expiration.
- **Order Collar rejection report:** the **ExecutionReport** (8) message is used to relay the notification of an order's rejection for collars.
- **Order PAKO Cancellation report:** the **ExecutionReport** (8) message is used to relay the notification of an order's cancellation when an instrument is moving into Payment After Knock-Out (PAKO) period. *Currently used on the Cash markets only*

#### Note

The situation where an order on the Cash markets is rejected for collar implies that it must at least have been created or modified, possibly partially filled; the rejection for collars always follows immediately these "before-rejection" events. Hence, when the expression "order collar rejection report" is used, it includes the Execution Reports of the latter events.

Please note that conditional fields are provided only if they are present in the corresponding inbound message.

### 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 Cash Markets

The TVTIC is the concatenation of:

- The ExecID (max 10 characters, no left padding with zeroes);
- The instrument ISIN code (12 characters).

The different ways to get a trade TVTIC are:

- ◆ Using the public Market Data feed, extracting the ExecID from the *MiFID Execution ID* field in the **Full Trade Information** (1004) message (the last 10 characters of this field, excluding the prefixed “0”) and getting the ISIN code from the **Standing Data** (1007) message;
- ◆ Using the private Order Entry feed, getting the ExecID from the FIX **Execution Report** (8) message and using the public Market Data feed getting the ISIN code from the **Standing Data** (1007) message;
- ◆ Retrieving the TVTIC field from the EOD Day Trade file (**FTRRM**);

## For Derivatives Markets

- For trades on individual instruments (Derivatives outright instruments):

The TVTIC is the concatenation of:

- The ExecID (max 10 characters, no left padding with zeroes);
- The instrument ISIN code (12 characters).

The different ways to get a trade TVTIC are:

- ◆ Using the public Market Data feed, extracting the *MiFID Execution ID* field in the **Full Trade Information** (1004) message (excluding the prefixed “0” preceding the ExecutionID);
- ◆ Using the private Order Entry feed, getting the ExecID from the FIX **Execution Report** (8) message and using the public Market Data feed getting the ISIN code from the **Outright Standing Data** (1014) message.

- For transactions on complex instruments (Derivatives Strategies Trades on Central Order Book (COB) or Large in Scale (LiS) Packages Trades on Derivatives Wholesales) MiFID II reporting being at leg level, clients should build the TVTIC of each trade at the leg level:

The TVTIC is built as follows:

- For COB Strategy Leg Trades: TVTIC = Leg ExecID (max 10 characters, no left padding with zeroes) + Leg ISIN code (12 characters)
- For LiS Package Leg Trades: TVTIC = Leg ExecID (max 10 characters, no left padding with zeroes) + Leg ISIN code (12 characters)

- For COB Strategy Leg Trades:

- ◆ Using the public Market Data feed, extracting the ExecID from the *MiFID Execution ID* field in the **Full Trade Information** (1004) leg message (the last 10 characters of this field, excluding the prefixed “0”) and getting the ISIN code from the **Outright Standing Data** (1014) message
- ◆ Using the private Order Entry feed, getting the ExecID from the FIX **Execution Report** (8) leg message and using the public Market Data feed getting the ISIN code from the **Outright Standing Data** (1014) message.

**Note:** Each strategy trade is always published alongside the corresponding trades at leg level. The composition of strategy can be retrieved from **Strategy Standing Data** (1012) message

- For LiS Package Leg Trades:

- ◆ Using the private Order Entry feed, getting the ExecID from the FIX **Execution Report** (8) message received for the LiS Package Transaction and using the public Market Data feed getting the ISIN code of the Leg Symbol Index from the **Outright Standing Data** (1014). The Leg Symbol Index is communicated in the **LIS Package Structure** (1016) for the LIS Package Transaction.

## Components Use within the Message

This message contains three components and one nested component:

- The first component **Parties** is composed of the fields: *NoPartyIDs* (453), *PartyID* (448), *PartyIDSource* (447), *PartyRole* (452) and *PartyRoleQualifier* (2376);
- The second component **OrderAttributeGrp** is composed of the fields: *NoOrderAttributes* (2593), *OrderAttributeType* (2594), *OrderAttributeValue* (2595);
- The third component **SideCrossOrdModGrp** is composed of the fields: *NoSides* (552), *Side* (54), *ClearingInstruction* (577), *Text* (58), *Account* (1), *AccountCode* (6399), *LPRole* (20021), *TechnicalOrdType* (9941), *PostingAction* (7443) and of nested repeating group
- The nested repeating group **NestedParties** is composed of *NoNestedPartyIDs* (539), *NestedPartyID* (524), *NestedPartyIDSource* (525), *NestedPartyRole* (538) and *NestedPartyRoleQualifier* (2384).

Provision of the groups and values within them reflect information provided to the exchange by the clients, and is represented as following:

- ExecutionwithinFirmShortCode is provided via the **Parties** repeating group
- With noted exceptions ClientidentificationShortCodes is provided via the **NestedParties** repeating group
- With exception to Algorithmic trading, InvestmentDecisionwithinFirmShortCode is provided via the **NestedParties** repeating groups.
- The NonExecutingBrokerShortCodes is provided via the **NestedParties** repeating groups.
- The additional MIFID II short code related identifiers are specified using **OrderAttributeGrp** group.
- The third repeating group **SideCrossOrdModGrp** is used to identify the order side
- Repeating group **NestedParties** is also used to specify the Clearing Firm for the order

#### For the Cancellation of Strategy trades on the Derivatives Markets

For Strategy trades the **ExecutionReport** (8) message is sent for each individual leg of the strategy. In such cases, the field *ParentExecID* (21094) identifies the *ExecID* (17) provided in the original trade message. This allows to map all cancellations of individual legs to the original message sent for the strategy trade. The individual *ExecID* (17) in such trade cancellation messages is the 'leg' Execution IDs of each individual leg provided in the repeating group of the original trade message.

For cancellation of a LIS wholesale trade the trade cancellation messages include the *LISTransactionID* (21085) to help map the individual cancellation to the overall wholesale transaction.

#### 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.

#### Temporary and Final prices

For TRF and MOC contracts, the field *EvaluatedPrice* (21802) can contain either the "Temporary" or the "Final" Price. To identify which type of trade message is sent, customers may rely on the value in the field *TradeType* (21010).

If field *TradeType* (21010) is equal to one of the provisional price values (100, 101 or 102) then the message is providing a Temporary Price.

If field *TradeType* (21010) is equal to one of the conventional trade values (1, 2 or 4) then the message is providing the Final Price.



## MIFID II short code related data fields

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

### ExecutionwithinFirmShortCode

Presence Condition: Conditional Group. For Cash markets: Provided on Drop Copy only. For Derivatives markets: also provided in via the trading OEG

- **Case 1:** ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier (2376)* = **24** (Natural person)
- **Case 2:** ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing trader)
  - ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)
- **Case 3:** ExecutionwithinFirmShortCode for a client
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **3** (Client ID)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

### ClientIdentificationShortCode

Presence Condition: Conditional Group. For Cash markets: Provided on Drop Copy only. For Derivatives markets: also provided in via the trading OEG. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO.

- **Case 4:** ClientIdentificationShortCode where the client is a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **23** (Firm or legal entity)
- **Case 5:** ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **24** (Natural person)
- **Case 6:** ClientIdentificationShortCode for an Aggregated order (“AGGR” value)
 

In this case the Parties group is not used, and in its place data is provide using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType (2594)* = **0** (Aggregated order)
  - ◆ *OrderAttributeValue (2595)* = “Y”

- **Case 7:** ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)  
In this case the Parties group is not used. In its place data is provided using the **OrderAttributeGrp** nested group as following:
  - ◆ OrderAttributeType (2594) = **1** (Pending allocation)
  - ◆ OrderAttributeValue (2595) = “Y”
- **Case 8:** In case the message originates from a **DEA** (Direct Electronic Access) client, information should be provided as following:
  - ◆ OrderOrigination (1724) = **5** (Order received from a direct access or sponsored access customer)

**AND**

  - ◆ ClientIdentificationShortCode should be provided using one of the combinations provided in cases 4 through 7 above, as required

**Note:** The ClientIdentificationShortCode field is not provided for rejection of Cross orders.

### InvestmentDecisionwithinFirmShortCode

Presence Condition: Conditional Group. Mandatory if (1) AccountCode is Liquidity Provider, Related Party or House, OR in case investment decision maker is an Algorithm (2) AND the message did not originate from DEA client.

- **Case 9:** InvestmentDecisionwithinShortCode where a natural person is responsible for the investment decision
  - ◆ NestedPartyID (524) = field in which the **short code** is provided
  - ◆ NestedPartyIDSource (525) = **P** (Short code identifier)
  - ◆ NestedPartyRole (538) = **122** (Investment decision maker)
  - ◆ NestedPartyRoleQualifier (2384) = **24** (Natural person)

**AND**

  - ◆ OrderOrigination (1724) is NOT set
- **Case 10:** InvestmentDecisionwithinShortCode where an algorithm was responsible for the investment decision
  - ◆ NestedPartyID (524) = field in which the **short code** is provided
  - ◆ NestedPartyIDSource (525) = **P** (Short code identifier)
  - ◆ NestedPartyRole (538) = **122** (Investment decision maker)
  - ◆ NestedPartyRoleQualifier (2384) = **22** (Algorithm)

**AND**

  - ◆ OrderOrigination (1724) is NOT set

### NonExecutionBrokerShortCode

Presence Condition: Optional

- **Case 11:** NonExecutionBrokerShortCode
  - ◆ NestedPartyID (524) = field in which the **short code** is provided
  - ◆ NestedPartyIDSource (525) = **P** (Short code identifier)
  - ◆ NestedPartyRole (538) = **26** (Correspondent broker)
  - ◆ NestedPartyRoleQualifier (2384) = **23** (Firm or legal entity)

### Other Identifiers

- For identification of an order submitted for a commodity derivative or a warrant with a commodity underlying, if the potential trade would reduce the risk, data is provided using **OrderAttributeGrp** repeating group, and identifies the values as following:



- ◆ *OrderAttributeType* (2594) = **3** (Risk Reduction Code)
- ◆ *OrderAttributeValue* (2595) = “Y”

## Trading & Clearing related data fields

### Clearing Firm ID

- If provided in the inbound message, the following combination of fields that provide the Clearing Firm ID.
  - ◆ *NestedPartyID* (524) = field in which the **ID** is provided
  - ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
  - ◆ *NestedPartyRole* (538) = **4** (Clearing Firm)
  - ◆ *NestedPartyRoleQualifier* (2384) = **3** (General clearing member) OR **4** (Individual clearing member)

### Client ID / Long Client ID

- If provided in the inbound messages the following describes the fields that provide the Client ID.

For the Cash Markets – Client ID data should be provided as combination of fields identified below.

- ◆ *NestedPartyID* (524) = field in which the **ID** is provided
- ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
- ◆ *NestedPartyRole* (538) = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity) OR **24** (Natural person)

For the Derivatives Markets – Client ID data should be provided using the field *LongClientID* (21804).

## 5.3.2.2 Message Structure

| Tag   | Field                           | Short Description   | Format       | Len | Values   | Presence    |
|-------|---------------------------------|---|--------------|-----|--|-------------|
|       | Header                          |   |              |     |  |             |
| 60    | <i>TransactTime</i>             | Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).  | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21005 | <i>ClientMessageSendingTime</i> | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | <i>OEGINFromMember</i>          | 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).               | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | <i>OEGOUTToME</i>               | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                                | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |

| Tag   | Field                    | Short Description  | Format            | Len | Values   | Presence    |
|-------|--------------------------|--|-------------------|-----|--|-------------|
| 21002 | BookINTime               | 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) | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                    | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                           | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 11    | ClOrdID                  | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String            | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 41    | OrigClOrdID              | Identifies the Client Order ID of the original order, used to identify the previous order on cancel and replacement requests.                                      | String            | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 48    | SecurityID               | Exchange identification code of the instrument/contract.   | String            | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory   |
| 22    | SecurityIDSource         | Gives the type of SecurityID.  | String            | 1   | (See field description)  | Mandatory   |
| 20020 | EMM                      | Defines the Exchange Market Mechanism applied on each platform.  | Int               | 2   | (See field description)  | Conditional |
| 37    | OrderID                  | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.   | String            | 20  | From 0 to 2 <sup>64</sup> -2   | Mandatory   |
| 39    | OrdStatus                | Identifies the current status of the order.  | Char              | 1   | (See field description)  | Mandatory   |
| 21004 | OrderPriority            | Rank giving the priority of the order. The order with the lowest value of Order Priority has the highest priority.   | Int               | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
| 20052 | DarkExecutionInstruction | Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions.                        | MultipleCharValue | 9   | (See field description)  | Conditional |
| 44    | Price                    | Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).   | Price             | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 38    | OrderQty                 | Total order quantity, per quantity unit.(To be calculated with Quantity Decimals).   | Qty               | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |

| Tag   | Field                    | Short Description   | Format | Len | Values                  | Presence    |
|-------|--------------------------|---|--------|-----|-------------------------|-------------|
| 31    | LastPx                   | The Last Traded Price indicates the price of last fill on an instrument (to be calculated with the Price/Index Decimals).   | Price  | 20  | From -2^63+1 to 2^63-1  | Conditional |
| 32    | LastQty                  | The Last Traded Quantity indicates the quantity of last fill on an instrument (to be calculated with the Quantity Decimals).  | Qty    | 20  | From 0 to 2^64-2        | Conditional |
| 151   | LeavesQty                | Indicates the remaining quantity of an order, i.e. the quantity open for further execution.   | Qty    | 20  | From -1 to 2^64-2       | Mandatory   |
| 17    | ExecID                   | 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. | String | 10  | From 0 to 2^32-2        | Mandatory   |
| 21094 | ParentExecID             | Unique identifier of a parent trade executed on the strategy.   | String | 10  | From 0 to 2^32-2        | Optional    |
| 21093 | ParentSecurityID         | Exchange identification code used to point to the strategy in the leg specific messages   | String | 10  | From 0 to 2^32-2        | Optional    |
| 150   | ExecType                 | Describes the specific ExecutionReport (8) while OrdStatus (39) will always identify the current order status (e.g. Partially Filled).  | Char   | 1   | (See field description) | Mandatory   |
| 99    | StopPx                   | Stop Trigger Price is mandatory for stop orders.  | Price  | 20  | From -2^63+1 to 2^63-1  | Conditional |
| 20004 | UndisclosedPrice         | [N/A] (For Future Use, Pending Regulatory Approval) Optional price for the hidden part of an Iceberg order.   | Price  | 20  | From -2^63+1 to 2^63-1  | Conditional |
| 1138  | DisplayQty               | Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)  | Qty    | 20  | From 0 to 2^64-2        | Conditional |
| 20005 | UndisclosedIcebergType   | [N/A](For Future Use, Pending Regulatory Approval) Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.               | Int    | 1   | (See field description) | Conditional |
| 20175 | TriggeredStopTimeInForce | Specifies the maximum validity of an triggered stop order.  | Char   | 1   | (See field description) | Conditional |
| 131   | QuoteReqID               | Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.  | String | 20  | From 0 to 2^64-2        | Conditional |
| 584   | MassStatusReqID          | Unique Identifier assigned by the client to the OrderMassStatusRequest (AF).  | String | 20  | From -2^63+1 to 2^63-1  | Conditional |

| Tag   | Field                    | Short Description   | Format     | Len | Values  | Presence    |
|-------|--------------------------|---|------------|-----|---|-------------|
| 378   | ExecRestatementReason    | The reason for restatement when ExecutionReport (8) message is sent with ExecType (150) = 'D' (Restated) or used when communicating an unsolicited cancel.                                    | Int        | 1   | (See field description)   | Optional    |
| 21037 | RFQAnswerIndicator       | Indicates whether the message is, or not, a quote sent as an answer to a QuoteRequest (R) message.  | Int        | 1   | (See field description)   | Conditional |
| 21038 | RFQConfirmationIndicator | Indicates whether the message is, or not, an order sent as a confirmation of a QuoteRequest (R) message.  | Int        | 1   | (See field description)   | Conditional |
| 21800 | ConditionalOrderFlag     | Field used to specify if the order is a conditional or a firm order.  | Char       | 1   | (See field description)   | Conditional |
| 21801 | FRMARAMPLP               | 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 DE MAR AMP LP). | Char       | 1   | 0 = Not subject to FR MAR AMP LP (default)<br>1 = Subject to FR MAR AMP LP                        | Optional    |
| 453   | NoPartyIDs               | Number of PartyID entries.  | NumInGroup | 1   | If provided, From 1 to 2  | Conditional |
| 448   | PartyID                  | Party identifier/code. See PartyIDSource (447) and PartyRole (452).   | String     | 11  | Alphanumeric  | Conditional |
| 447   | PartyIDSource            | Source of PartyID value.  | Char       | 1   | (See field description)   | Conditional |
| 452   | PartyRole                | Identifies the type or role of the PartyID (448) specified.   | Int        | 3   | (See field description)   | Conditional |
| 2376  | PartyRoleQualifier       | Used to further qualify the value of PartyRole(452).  | Int        | 2   | (See field description)   | Conditional |
| 1724  | OrderOrigination         | Identifies the origin of the order.   | Int        | 1   | (See field description)   | Conditional |
| 2593  | NoOrderAttributes        | Number of order attribute entries.  | NumInGroup | 1   | If provided, From 1 to 2  | Conditional |
| 2594  | OrderAttributeType       | The type of order attribute.  | Int        | 1   | (See field description)   | Conditional |
| 2595  | OrderAttributeValue      | The value associated with the order attribute type specified in OrderAttributeType (2594).  | String     | 1   | (See field description)   | Conditional |
| 29    | LastCapacity             | Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.  | Char       | 1   | (See field description)   | Conditional |
| 110   | MinQty                   | Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).   | Qty        | 20  | Value '0' by default and depending to a minimum value for the given instrument and/or market type | Conditional |
| 21013 | AckPhase                 | Indicates the trading phase during which the Matching Engine has processed the event that has triggered this ExecutionReport (8) message.   | Char       | 1   | (See field description)   | Conditional |

| Tag   | Field                | Short Description   | Format            | Len | Values  | Presence    |
|-------|----------------------|---|-------------------|-----|---|-------------|
| 21014 | AckQualifiers        | Field used to provide additional information on the corresponding order. A single field can contain up to 8 values, space delimited, provided in different positions.   | MultipleCharValue | 15  | (See field description)                               | Conditional |
| 21010 | TradeType            | Type of trade.  | Int               | 3   | (See field description)                               | Conditional |
| 21023 | ExecPhase            | Indicates the trading phase during which the trade has occurred.  | Char              | 1   | (See field description)                               | Conditional |
| 21080 | TradeQualifier       | Trade Qualifier. This field can contain up to 7 values, space delimited, provided in different positions.   | MultipleCharValue | 13  | (See field description)                               | Conditional |
| 375   | ContraBroker         | ID of the clearing house or ID of the Counterpart Firm.   | String            | 20  | From 0 to 2^64-2                                      | Conditional |
| 21019 | OEPartitionID        | Identifies uniquely an OE Optiq partition by which the engine is reached.   | Int               | 5   | From 0 to 2^16-2                                      | Conditional |
| 21021 | LogicalAccessID      | Identifier of the Logical Access.   | Int               | 10  | From 0 to 2^32-2                                      | Conditional |
| 21096 | 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.  | Int               | 1   | 0 = False<br>1 = True                                 | Optional    |
| 21802 | EvaluatedPrice       | 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             | 20  | From -2^63+1 to 2^63-1                                | Conditional |
| 21803 | MessagePriceNotation | 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.  | Int               | 2   | 1 = Price<br>2 = Spread in basis points<br>3 = Spread | Conditional |
| 21805 | FinalSecurityID      | This field is used for the Market On Close (MOC) contracts to provide the symbol index of the final future instrument   | String            | 10  | From 0 to 2^32-2                                      | Conditional |
| 21806 | FinalExecID          | 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  | String            | 10  | From 0 to 2^32-2                                      | Conditional |
| 555   | NoLegs               | Number of legs entries for the requested strategy.  | NumInGroup        | 2   | From 1 to 7   | Conditional |
| 600   | LegSymbol            | Identifies the contract of this instrument by its Symbol Index.   | String            | 10  | From 0 to 2^32-2                                      | Mandatory   |


| Tag  | Field               | Short Description  | Format       | Len | Values   | Presence    |
|------|---------------------|--|--------------|-----|--|-------------|
| 602  | LegSecurityID       | Numerical leg instrument identifier (SymbolIndex) valid for the life of the instrument.  | String       | 10  | From 0 to 2 <sup>32</sup> -2                           | Conditional |
| 603  | LegSecurityIDSource | Gives the type of LegSecurityID (602).   | String       | 1   | (See field description)                                | Conditional |
| 637  | LegLastPx           | Leg Last Traded Price  | Price        | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1         | Conditional |
| 1418 | LegLastQty          | Leg Last Traded Quantity   | Qty          | 20  | From 0 to 2 <sup>64</sup> -2                           | Conditional |
| 624  | LegSide             | Indicates the side of the trade leg.   | Char         | 1   | (See field description)                                | Conditional |
| 1893 | LegExecID           | The Leg Execution ID is unique per instrument and per day. It is the unique identifier of a trade for each leg of the strategy trade. This field is provided in case of fill, partial fill or trade cancellation for a strategy.       | String       | 10  | From 0 to 2 <sup>32</sup> -2                           | Conditional |
| 19   | ExecRefID           | The ExecRefID (19) is an unique identifier of a trade per instrument. This field is provided in case of trade cancellation.  | String       | 10  | Sequential number. From 0 to 2 <sup>32</sup> -2        | Conditional |
| 432  | ExpireDate          | Field used as date of order expiration for GTD orders.   | LocalMktDate | 8   | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31 | Conditional |
| 14   | CumQty              | Cumulated quantity (to be calculated with Quantity Decimals).  | Qty          | 20  | From -1 to 2 <sup>64</sup> -2                          | Mandatory   |
| 336  | TradingSessionID    | 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. | String       | 3   | (See field description)                                | Conditional |
| 40   | OrdType             | Type of Order.   | Char         | 1   | (See field description)                                | Conditional |
| 59   | TimeInForce         | Specifies the maximum validity of an order.  | Char         | 1   | (See field description)                                | Conditional |
| 552  | NoSides             | Number of sides.   | NumInGroup   | 1   | From 1 to 2  | Conditional |
| 54   | Side                | Indicates the side of the order.   | Char         | 1   | (See field description)                                | Conditional |
| 577  | ClearingInstruction | Clearing Instruction.  | Int          | 4   | (See field description)                                | Conditional |
| 58   | Text                | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.   | String       | 18  | Alphanumeric   | Conditional |
| 1    | Account             | Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.  | String       | 12  | Alphanumeric   | Conditional |
| 6399 | AccountCode         | 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.   | Int          | 1   | (See field description)                                | Conditional |

| Tag   | Field                    | Short Description  | Format            | Len | Values   | Presence    |
|-------|--------------------------|--|-------------------|-----|--|-------------|
| 20021 | LPRole                   | Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".  | Int               | 2   | (See field description)  | Conditional |
| 9941  | TechnicalOrdType         | 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.  | Char              | 1   | (See field description)  | Conditional |
| 7443  | PostingAction            | Open Close Indicator, Posting action. This field is part of the clearing aggregate.  | MultipleCharValue | 19  | (See field description)  | Optional    |
| 21804 | LongClientID             | 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.   | String            | 16  | (See field description)  | Optional    |
| 539   | NoNestedPartyIDs         | Number of NestedPartyID entries.   | NumInGroup        | 1   | From 1 to 5  | Conditional |
| 524   | NestedPartyID            | Party identifier/code within a repeating group. See NestedPartyIDSource (525) and NestedPartyRole (538).   | String            | 11  | Alphanumeric   | Conditional |
| 525   | NestedPartyIDSource      | Source of NestedPartyID (524) value.   | Char              | 1   | (See field description)  | Conditional |
| 538   | NestedPartyRole          | Identifies the type or role of the NestedPartyID (524) specified.  | Int               | 3   | (See field description)  | Conditional |
| 2384  | NestedPartyRoleQualifier | Used to further qualify the value of NestedPartyRole(538).   | Int               | 2   | (See field description)  | Conditional |
| 126   | ExpireTime               | [N/A] Field used as time of order expiration for GTT orders.   | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21015 | STPAggressorIndicator    | Field used as instruction for order handling.<br>- STP resting order: indicates whether the STP rule is "cancel resting order" or not. (0: STP Resting Order deactivated; 1: Cancel Resting Order)<br>- STP incoming order: indicates whether the STP rule is "cancel incoming order" or not. (0: STP Incoming Order deactivated; 1: Cancel Incoming Order)<br>- STP is not applicable for Dark Orders | Int               | 1   | (See field description)  | Conditional |
| 2362  | SelfMatchPreventionID    | For Future Use.  | String            | 5   | From 0 to 2^16-2   | Conditional |

| Tag   | Field                          | Short Description   | Format | Len | Values   | Presence    |
|-------|--------------------------------|---|--------|-----|--|-------------|
| 21016 | DisclosedQtyRandIndicator      | Indicates whether the client requests or not a randomization for the DisplayQty (1138) of his iceberg order.  | Int    | 1   | (See field description)                        | Conditional |
| 21018 | CancelOnDisconnectionIndicator | Indicates whether the order is not in scope of the Cancel On Disconnect mechanism (order is persisted) or if order should be handled as defined by default. (0: Default Configuration ; 1: Order not in the scope of Cancel On Disconnect - Order is to be persisted) | Int    | 1   | (See field description)                        | Conditional |
| 1094  | PegPriceType                   | Defines the type of the peg order.  | Int    | 1   | (See field description)                        | Conditional |
| 211   | PegOffsetValue                 | Tick offset for a pegged order.   | Int    | 3   | From -127 to 127                               | Conditional |
| 9955  | ErrorCode                      | Error code in case of rejection.  | Int    | 5   | From 0 to 2 <sup>16</sup> -2                   | Conditional |
| 9962  | CollarRejType                  | Hit collar type (high or low) in case of order rejection due to collar breach.  | Char   | 1   | (See field description)                        | Conditional |
| 21001 | BreachedCollarPrice            | Breached collar price in case of collar rejection.  | Price  | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Conditional |
| 21085 | LISTransactionID               | ID that can be used to associated Executions belonging to the same LIS Transaction.   | String | 10  | From 0 to 2 <sup>32</sup> -2                   | Conditional |
| 21807 | KillReason                     | Future Use  | Char   | 5   | (See field description)                        | Conditional |
|       | Trailer                        |   |        |     |  |             |

### 5.3.3 MassQuote (i)

Client ► OEG

Available for: 

#### 5.3.3.1 Message Description

This message is used by Liquidity Providers (LP) to send several quotes (bid and ask orders) on different instruments in one unique message. A given LP using Quotes 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.

On the Warrants & Certificates segment a **MassQuote** (i) message can include from 1 to 150 quotes double-sided quotes. As a consequence, the **MassQuote** (i) message has a variable size. Each quote occurrence includes the *SecurityID* and the *EMM*, a *BidPrice* and *BidQuantity* or an *OfferPrice* and *OfferQuantity* or both.

In a single **MassQuote** (i) message, **clients must only use instruments belonging to the same Partition as the one to which they sent the message**. Quotes that are sent for instruments that do not belong to the current Partition 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. For a given instrument the bid price must be strictly less than the ask price.

This message is also used to manage the modification and cancellation of quotes, where the following rules apply:

- 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.
- To modify/create only one side of a Quote, the Price and Quantity of the side to be ignored should not be populated. This will **not be** considered as a cancellation.

When errors are detected in one or several repeated fields the Exchange responds with the **MassQuoteAck** (b) message and rejects only the invalid quotes (see message usage in **MassQuoteAck** (b)).

When an error is detected in any field except a repeated field, the matching engine responds with the **OrderCancelReject** (9) message (reason of the rejection provided in the *ErrorCode* field) and rejects the entire content of the **MassQuote**.

When the message is valid, the matching engine responds to the request with the **MassQuoteAck** (b) message.

When a given *SecurityID* code is duplicated in the **MassQuote** (i) message, only the last occurrence of the quote containing the instrument is taken into account (the others are ignored).

In the block of the message the *RFEAnswer* specifies whether the **MassQuote** (i) message is a direct response to a **RequestForExecution** (UM) message or not. This way if a Liquidity Provider submits a **MassQuote** (i) message with the *RFEAnswer* set to "Yes" after a **RequestForExecution** (UM), it will immediately trigger executions on 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 *RFEAnswer* set to "No" the **MassQuote** (i) message will not immediately trigger the executions.

### Clearing Data and Short Codes management:

The Clearing Data and MiFID Short Codes associated to the quotes are managed on instrument basis 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 a blank 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 **MassQuote** (i) message with **both** *BidSize* and *OfferSize* set to zero (0). As identified above, this behaviour equally applies when the quote has been totally matched.

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.

## Components Usage within the Message:

This message contains three components:

The first component **OrderAttributeGrp** is composed of the fields: NoOrderAttributes, OrderAttributeType, OrderAttributeValue

The second component **Parties** is composed of the fields: NoPartyIDs, PartyID, PartyIDSource, PartyRole and PartyRoleQualifier

The nested repeating group **NestedParties** is composed of NoNestedPartyIDs, NestedPartyID, NestedPartyIDSource, NestedPartyRole and NestedPartyRoleQualifier.

Use of the groups and values within them:

ExecutionwithinFirmShortCode should be provided via the **Parties** repeating group

With noted exceptions ClientidentificationShortCodes should be provided via the **NestedParties** repeating group

With exception to Algorithmic trading, InvestmentDecisionwithinFirmShortCode should be provided via the **NestedParties** repeating groups

The NonExecutingBrokerShortCodes should be provided via the **NestedParties** repeating groups

The repeating group **NestedParties** is also used to specify the Clearing Firm for the order

The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group

## MIFID II short code related data fields:

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

### ExecutionwithinFirmShortCode

Presence Condition: Mandatory

- **Case 1:** Specifying ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier (2376)* = **24** (Natural person)
- **Case 2:** Specifying ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing trader)
  - ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)
- **Case 3:** Specifying ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **3** (Client ID)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

**ClientIdentificationShortCode**

**Presence Condition:** Conditional Group. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO.

For cases 4 and 5, explained below, values 1 and 2 available for NestedPartyID (524) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** Specifying ClientIdentificationShortCode where the client is a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **23** (Firm or legal entity)
- **Case 5:** Specifying ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **24** (Natural person)
- **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)
 

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType (2594)* = **0** (Aggregated order)
  - ◆ *OrderAttributeValue (2595)* = “Y”
- **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)
 

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType (2594)* = **1** (Pending allocation)
  - ◆ *OrderAttributeValue (2595)* = “Y”
- **Case 8:** In case the message originates from a **DEA** (Direct Electronic Access) client, information should be provided as following:
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **23** (Firm or legal entity) OR **24** (Natural person)

AND

  - ◆ *OrderOrigination (1724)* = **5** (Order received from a direct access or sponsored access customer)

**InvestmentDecisionwithinFirmShortCode**

**Presence Condition:** Conditional Group. Mandatory if (1) AccountCode is Liquidity Provider, Related Party or House, OR in case investment decision maker is an Algorithm (2) AND the message did not originate from DEA client.

- **Case 9:** Specifying InvestmentDecisionwithinShortCode where a natural person is responsible for the investment decision:
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)

- ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
- ◆ *NestedPartyRoleQualifier* (2384) = **24** (Natural person)

**AND**

- ◆ *OrderOrigination* (1724) is NOT set

- **Case 10:** Specifying *InvestmentDecisionwithinShortCode* where an algorithm was responsible for the investment decision:

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
- ◆ *NestedPartyRoleQualifier* (2384) = **22** (Algorithm)

**AND**

- ◆ *OrderOrigination* (1724) is NOT set

**NonExecutionBrokerShortCode**

Presence Condition: Optional

- **Case 11:** Specifying *NonExecutionBrokerShortCode*:

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **26** (Correspondent broker)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity)

**Other Identifiers**

- For identification of an order submitted for a commodity derivative or a warrant with a commodity underlying, if the potential trade would reduce the risk clients should also use ***OrderAttributeGrp*** repeating group, and identify the values as following:

- ◆ *OrderAttributeType* (2594) = **3** (Risk Reduction Code)
- ◆ *OrderAttributeValue* (2595) = "Y"

**Clearing related data fields:**

- The clearing Firm related fields should be specified as following:

– ***Clearing Firm ID:***

- ◆ *NestedPartyID* (524) = field in which the **ID** is provided
- ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
- ◆ *NestedPartyRole* (538) = **4** (Clearing Firm)
- ◆ *NestedPartyRoleQualifier* (2384) = **3** (General clearing member) OR **4** (Individual clearing member)

– ***Client ID:***

- ◆ *NestedPartyID* (524) = field in which the **ID** is provided
- ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
- ◆ *NestedPartyRole* (538) = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity) OR **24** (Natural person)

- When used in the inbound messages for specifying the Clearing Firm ID and the Client ID, the maximum length for the *NestedPartyID* (524) field is 8 characters long, and value may be alphanumeric.


## 5.3.3.2 Message Structure

| Tag   | Field                    | Short Description  | Format     | Len | Values   | Presence    |
|-------|--------------------------|--|------------|-----|--|-------------|
|       | Header                   |  |            |     |  |             |
| 117   | QuoteID                  | Quote identifier.  | String     | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 29    | LastCapacity             | Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.   | Char       | 1   | (See field description)                        | Mandatory   |
| 6399  | AccountCode              | 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. | Int        | 2   | (See field description)                        | Mandatory   |
| 20021 | LPRole                   | Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".  | Int        | 2   | (See field description)                        | Mandatory   |
| 1724  | OrderOrigination         | Identifies the origin of the order.  | Int        | 1   | (See field description)                        | Conditional |
| 2593  | NoOrderAttributes        | Number of order attribute entries.   | NumInGroup | 1   | If provided, From 1 to 2                       | Optional    |
| 2594  | OrderAttributeType       | The type of order attribute.   | Int        | 1   | (See field description)                        | Optional    |
| 2595  | OrderAttributeValue      | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String     | 1   | (See field description)                        | Optional    |
| 20022 | RFEAnswer                | Indicate whether the Quotes message is an answer to a RequestForExecution (34) message or not. (0: No [False] ; 1: Yes [True])   | Int        | 1   | (See field description)                        | Mandatory   |
| 577   | ClearingInstruction      | Clearing Instruction.  | Int        | 4   | (See field description)                        | Optional    |
| 58    | Text                     | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.   | String     | 18  | Alphanumeric                                   | Optional    |
| 453   | NoPartyIDs               | Number of PartyID entries.   | NumInGroup | 1   | Always set to 1                                | Mandatory   |
| 448   | PartyID                  | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String     | 11  | Alphanumeric                                   | Mandatory   |
| 447   | PartyIDSource            | Source of PartyID value.   | Char       | 1   | (See field description)                        | Mandatory   |
| 452   | PartyRole                | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description)                        | Mandatory   |
| 2376  | PartyRoleQualifier       | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description)                        | Mandatory   |
| 539   | NoNestedPartyIDs         | Number of NestedPartyID entries.   | NumInGroup | 1   | If provided, From 1 to 5                       | Conditional |
| 524   | NestedPartyID            | Party identifier/code within a repeating group. See NestedPartyIDSource (525) and NestedPartyRole (538).   | String     | 11  | Alphanumeric                                   | Conditional |
| 525   | NestedPartyIDSource      | Source of NestedPartyID (524) value.   | Char       | 1   | (See field description)                        | Conditional |
| 538   | NestedPartyRole          | Identifies the type or role of the NestedPartyID (524) specified.  | Int        | 3   | (See field description)                        | Conditional |
| 2384  | NestedPartyRoleQualifier | Used to further qualify the value of NestedPartyRole(538).   | Int        | 2   | (See field description)                        | Conditional |

| Tag   | Field            | Short Description  | Format            | Len | Values                               | Presence  |
|-------|------------------|--|-------------------|-----|--------------------------------------|-----------|
| 1     | Account          | Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.  | String            | 12  | Alphanumeric                         | Optional  |
| 9941  | TechnicalOrdType | 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.                              | Char              | 1   | (See field description)              | Optional  |
| 7443  | PostingAction    | Open Close Indicator, Posting action. This field is part of the clearing aggregate.  | MultipleCharValue | 19  | (See field description)              | Optional  |
| 296   | NoQuoteSets      | The number of sets of quotes in the message  | NumInGroup        | 3   | From 1 to 150                        | Mandatory |
| 302   | QuoteSetID       | Unique ID for the Quote set.   | String            | 10  | From 1 to 2^32-2                     | Mandatory |
| 304   | TotNoQuotEntries | Total number of quotes for the quote set across all messages. Should be the sum of all NoQuoteEntries (295) in each message that has repeating quotes that are part of the same quote set. | Int               | 1   | Always equal to NoQuoteEntries (295) | Mandatory |
| 295   | NoQuoteEntries   | Number of entries in Quotes repeating group.   | NumInGroup        | 1   | Always set to 1                      | Mandatory |
| 299   | QuoteEntryID     | Uniquely identifies the quote across the complete set of all quotes for a given quote provider.  | String            | 10  | From 0 to 2^32-2                     | Mandatory |
| 48    | SecurityID       | Exchange identification code of the instrument/contract.   | String            | 10  | From 0 to 2^32-2                     | Mandatory |
| 22    | SecurityIDSource | Gives the type of SecurityID.  | String            | 1   | (See field description)              | Mandatory |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform.  | Int               | 2   | (See field description)              | Mandatory |
| 134   | BidSize          | Quote bid quantity, (To be calculated with Quantity Decimals).   | Qty               | 20  | From 0 to 2^64-1                     | Optional  |
| 132   | BidPx            | Quote bid price, (To be calculated with Price/Index Level Decimals).   | Price             | 20  | From -2^63+1 to 2^63-1               | Optional  |
| 135   | OfferSize        | Quote offer quantity, (To be calculated with Quantity Decimals).   | Qty               | 20  | From 0 to 2^64-1                     | Optional  |
| 133   | OfferPx          | Quote offer price, (To be calculated with Price/Index Level Decimals).   | Price             | 20  | From -2^63+1 to 2^63-1               | Optional  |
|       | Trailer          |  |                   |     |                                      |           |

### 5.3.4 MassQuoteAck (b)

Client ◀OEG

Available for: 

#### 5.3.4.1 Message Description

This message is used by the Matching Engine to respond to the **MassQuote** (i) message sent by Liquidity Providers when no error is detected in any non-repeated field of the MassQuote request.

In case of error in any non-repeated field in the **MassQuote** (i) request, the matching engine rejects the **MassQuote** (i) request with an **OrderCancelReject** (9) message and the reason of the rejection provided in the *ErrorCode* (9955) field.

On the Warrants & Certificates segment, for each occurrence of the **MassQuote** (i) aggregate provided in the request (from 1 to 150 occurrences), a related occurrence of the **MassQuoteAck** (b) aggregate per *SecurityID (48)* and *EMM (20020)* may be found in the **MassQuoteAck** (b) message. As a result, the **MassQuoteAck** (b) message has a variable size.

The **MassQuoteAck** (b) aggregate includes the *SecurityID (48)* and the *EMM (20020)*, a *BidErrorCode (9934)* and an *OfferErrorCode (9935)* 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 *SecurityID (48)* of the input Quotes aggregate, both the *BidErrorCode (9934)* and *OfferErrorCode (9935)* are provided in the associated **MassQuoteAck** (b) aggregate.
- If an error is detected in the *BidSize (134)* or *BidPx (132)* field, the error code is provided in the *BidErrorCode (9934)* field.
- If an error is detected in *OfferSize (135)* or *OfferPx (133)* field, the error code is provided in the *OfferErrorCode (9935)* field.

When no error is detected in these fields, *BidErrorCode (9934)* and *OfferErrorCode (9935)* are not provided.

#### 5.3.4.2 Message Structure

| Tag   | Field                    | Short Description   | Format           | Len | Values  | Presence    |
|-------|--------------------------|---|------------------|-----|---|-------------|
|       | Header                   |   |                  |     |   |             |
| 21005 | ClientMessageSendingTime | 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) | UTCTimesta<br>mp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | OEGINFromMember          | 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).               | UTCTimesta<br>mp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | BookINTime               | 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)    | UTCTimesta<br>mp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                       | UTCTimesta<br>mp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                              | UTCTimesta<br>mp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |



| Tag   | Field               | Short Description  | Format                | Len | Values   | Presence    |
|-------|---------------------|--|-----------------------|-----|--|-------------|
| 7764  | OEGOUTToME          | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).   | UTCTimesta<br>mp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 117   | QuoteID             | Quote identifier.  | String                | 20  | From -2^63+1 to 2^63-1   | Mandatory   |
| 297   | QuoteStatus         | Status of the mass quote acknowledgement.  | Int                   | 2   | (See field description)  | Mandatory   |
| 6399  | AccountCode         | 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.                     | Int                   | 2   | (See field description)  | Mandatory   |
| 20021 | LPRole              | Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".  | Int                   | 2   | (See field description)  | Mandatory   |
| 577   | ClearingInstruction | Clearing Instruction.  | Int                   | 4   | (See field description)  | Optional    |
| 1     | Account             | Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.  | String                | 12  | Alphanumeric   | Optional    |
| 9941  | TechnicalOrdType    | 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.                              | Char                  | 1   | (See field description)  | Optional    |
| 7443  | PostingAction       | Open Close Indicator, Posting action. This field is part of the clearing aggregate.  | MultipleChar<br>Value | 19  | (See field description)  | Optional    |
| 21014 | AckQualifiers       | Field used to provide additional information on the corresponding order. A single field can contain up to 8 values, space delimited, provided in different positions.                      | MultipleChar<br>Value | 15  | (See field description)  | Conditional |
| 296   | NoQuoteSets         | The number of sets of quotes in the message  | NumInGroup            | 3   | From 1 to 150  | Optional    |
| 302   | QuoteSetID          | Unique ID for the Quote set.   | String                | 10  | From 1 to 2^32-2   | Optional    |
| 304   | TotNoQuotEntries    | Total number of quotes for the quote set across all messages. Should be the sum of all NoQuoteEntries (295) in each message that has repeating quotes that are part of the same quote set. | Int                   | 1   | Always equal to NoQuoteEntries (295)   | Optional    |



| Tag   | Field                 | Short Description  | Format     | Len | Values                       | Presence    |
|-------|-----------------------|--|------------|-----|------------------------------|-------------|
| 295   | NoQuoteEntries        | Number of entries in Quotes repeating group.   | NumInGroup | 1   | Always set to 1              | Optional    |
| 299   | QuoteEntryID          | Uniquely identifies the quote across the complete set of all quotes for a given quote provider.        | String     | 10  | From 0 to 2 <sup>32</sup> -2 | Conditional |
| 1747  | BidQuoteID            | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.             | String     | 20  | From 0 to 2 <sup>64</sup> -2 | Conditional |
| 1748  | OfferQuoteID          | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.             | String     | 20  | From 0 to 2 <sup>64</sup> -2 | Conditional |
| 48    | SecurityID            | Exchange identification code of the instrument/contract.   | String     | 10  | From 0 to 2 <sup>32</sup> -2 | Mandatory   |
| 22    | SecurityIDSource      | Gives the type of SecurityID.  | String     | 1   | (See field description)      | Mandatory   |
| 20020 | EMM                   | Defines the Exchange Market Mechanism applied on each platform.  | Int        | 2   | (See field description)      | Mandatory   |
| 9934  | BidErrorCode          | Error code returned when quote contains an invalid bid.  | Int        | 6   | From 0 to 2 <sup>16</sup> -2 | Conditional |
| 9935  | OfferErrorCode        | Error code returned when a quote contains an invalid offer.  | Int        | 6   | From 0 to 2 <sup>16</sup> -2 | Conditional |
| 21008 | BuyRevisionIndicator  | Indicates whether the bid quote is a new quote, a replacement of a previous quote or a cancellation.   | Int        | 1   | (See field description)      | Conditional |
| 21009 | SellRevisionIndicator | Indicates whether the offer quote is a new quote, a replacement of a previous quote or a cancellation. | Int        | 1   | (See field description)      | Conditional |
|       | Trailer               |  |            |     |                              |             |

### 5.3.5 OrderCancelRequest (F)

Client ► OEG

Available for:        

#### 5.3.5.1 Message Description

The **OrderCancelRequest (F)** 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.

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).

On ETF MTF platform, the **OrderCancelRequest** (F) message can be used to request the cancellation of an active RFQ previously created with the **QuoteRequest** (R) message. In this situation, the *OrderID* (37) should contain the *QuoteReqID* (131) and *OrderCategory* (21041) must be set to *Quote Request*. It can also be used to request the cancellation of an LP Answer, in this situation the *OrderID* (37) along with *OrderCategory* (21041) set to RFQ LP Answer must be specified in the request. It can be submitted either by Euronext members or by Non Euronext buy-side RFQ (Request for Quote) trading issuers.

**Important Note:** An active order can be cancelled by specifying the *ClOrdID* (11) of the original order:

- If the **OrderCancelRequest** (F) message contains both *OrderID* (37) and *OrigClOrdID* (41), the matching engine uses the *OrderID* (37) to cancel the order. If the *OrderID* (37) specified in the message is not found in the active orders list, the order modification is rejected. If the *OrderID* (37) specified in the message is found the matching engine does not check that the *OrigClOrdID* (41) of the order found (“cancelled” order) matches with the *OrigClOrdID* (41) contained in the **OrderCancelRequest** (F) message.

In the case where the values of the *Side* and/or *OrdType* provided in the **OrderCancelRequest** (F) message do not match with the *Side* and *OrdType* (40) of the targeted order it will lead to the rejection of the request with the error code 2101 “Unknown Order ID”. (For triggered Stop orders, the value in field *OrdType* (40) must be equal to Limit, for Stop-limit, or Market for Stop-market order, corresponding to the type of stop order originally submitted.)

#### Important Notes

By default, live orders submitted intraday are automatically cancelled on a network disconnection (OE Session or OEG disconnection).

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 tag *CancelOnDisconnectionIndicator* (21018) is set to “1” for an order, this order will not be cancelled even if the Cancel On Disconnect kicks in for the OE Session it belongs to.

When the Cancel On Disconnect mechanism is triggered, the cancellation involves only orders entered on the current day. All still active orders, entered the previous days, remain in the order book.

### Components Usage within the Message

This message contains one component Parties is composed of the fields: *NoPartyIDs* (453), *PartyID* (448), *PartyIDSource* (447), *PartyRole* (452) and *PartyRoleQualifier* (2376);

This component is used to provide data for the *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCode* MIFID II field for risk management purposes such as kill switch.

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

#### **ExecutionwithinFirmShortCode**

**Presence Condition:** Mandatory, first use of Parties group is assumed to be for indication of *ExecutionwithinFirmShortCode*

- **Case 1:** *ExecutionwithinFirmShortCode* where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 2:** *ExecutionwithinFirmShortCode* where an algorithm is responsible for the execution of the transaction

- ◆ *PartyID* (448) = field in which the **short code** is provided
- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **12** (Executing trader)
- ◆ *PartyRoleQualifier* (2376) = **22** (Algorithm)

■ **Case 3:** ExecutionwithinFirmShortCode for a Client

- ◆ *PartyID* (448) = field in which the **short code** is provided
- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **3** (Client ID)
- ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

### **ClientIdentificationShortCode**

Presence Condition: Conditional Group. Second use of Parties group in this message is assumed to be for indication of ClientIdentificationShortCode. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO. In case ExecutionwithinFirmShortCode is provided for Case 3 the same information is submitted a second time for either Case 4 or 5. In this case, if the information in the repeating group is not identical, the message is rejected.

For cases 4 and 5, explained below, values 1 and 2 available for PartyID (448) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

■ **Case 4:** Specifying ClientIdentificationShortCode where the client is a legal entity

- ◆ *PartyID* (448) = field in which the **short code** is provided
- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **3** (Client ID)
- ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity)

■ **Case 5:** Specifying ClientIdentificationShortCode where the client is not a legal entity

- ◆ *PartyID* (448) = field in which the **short code** is provided
- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **3** (Client ID)
- ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)

■ **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

- ◆ *OrderAttributeType* (2594) = **0** (Aggregated order)
- ◆ *OrderAttributeValue* (2595) = “Y”

■ **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

- ◆ *OrderAttributeType* (2594) = **1** (Pending allocation)
- ◆ *OrderAttributeValue* (2595) = “Y”

## 5.3.5.2 Message Structure

| Tag   | Field               | Short Description  | Format       | Len | Values   | Presence    |
|-------|---------------------|--|--------------|-----|--|-------------|
|       | Header              |  |              |     |  |             |
| 11    | ClOrdID             | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Mandatory   |
| 48    | SecurityID          | Exchange identification code of the instrument/contract.   | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory   |
| 22    | SecurityIDSource    | Gives the type of SecurityID.  | String       | 1   | (See field description)  | Mandatory   |
| 20020 | EMM                 | Defines the Exchange Market Mechanism applied on each platform.  | Int          | 2   | (See field description)  | Mandatory   |
| 37    | OrderID             | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.   | String       | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
| 41    | OrigClOrdID         | Identifies the Client Order ID of the original order, used to identify the previous order on cancel and replacement requests.                  | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 54    | Side                | Indicates the side of the order.   | Char         | 1   | (See field description)  | Mandatory   |
| 453   | NoPartyIDs          | Number of PartyID entries.   | NumInGroup   | 1   | From 1 to 2  | Mandatory   |
| 448   | PartyID             | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String       | 11  | Alphanumeric   | Mandatory   |
| 447   | PartyIDSource       | Source of PartyID value.   | Char         | 1   | (See field description)  | Mandatory   |
| 452   | PartyRole           | Identifies the type or role of the PartyID (448) specified.  | Int          | 3   | (See field description)  | Mandatory   |
| 2376  | PartyRoleQualifier  | Used to further qualify the value of PartyRole(452).   | Int          | 2   | (See field description)  | Mandatory   |
| 2593  | NoOrderAttributes   | Number of order attribute entries.   | NumInGroup   | 1   | If provided, From 1 to 2   | Optional    |
| 2594  | OrderAttributeType  | The type of order attribute.   | Int          | 1   | (See field description)  | Optional    |
| 2595  | OrderAttributeValue | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String       | 1   | (See field description)  | Optional    |
| 60    | TransactTime        | Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).   | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 40    | OrdType             | Type of Order.   | Char         | 1   | (See field description)  | Mandatory   |
| 1094  | PegPriceType        | Defines the type of the peg order.   | Int          | 1   | (See field description)  | Conditional |
| 21041 | OrderCategory       | 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". | Char         | 1   | (See field description)  | Conditional |
|       | Trailer             |  |              |     |  |             |

## 5.3.6 OrderCancelReplaceRequest (G)

Client ► OEG

Available for:        

### 5.3.6.1 Message Description

The **OrderCancelReplaceRequest** (G) message is used in two situations:

- Modify **active orders in the order book**, note that only the originating Firm (regardless of the Logical Access) is authorized to modify its orders.
- Confirming a new order that can be executed upon entry, but whose matching price hits a collar (in that case, the remaining quantity of that order is rejected). In this case the *ConfirmFlag* (9930) has to be set to 1. *Used for the Cash markets only*

An active order can be modified by specifying the *OrderID* (37) of the original order or the *OrigClOrdID* (41):

- If the **OrderCancelReplaceRequest** (G) message contains both *OrderID* (37) and *OrigClOrdID* (41), the matching engine uses the *OrderID* (37) to cancel the order. If the *OrderID* (37) specified in the message is not found in the active orders list, the order modification is rejected. If the *OrderID* (37) specified in the message is found the matching engine does not check that the *ClOrdID* (11) of the order found ("modified" order) matches with the *OrigClOrdID* (41) contained in the **OrderCancelReplaceRequest** (G) message.

Please note that the field *ClOrdID* (11) is an identifier of the **OrderCancelReplaceRequest** (G) request.

The MiFID short codes included in this message concern the **OrderCancelReplaceRequest** (G) itself - it will not lead to any modification of the MiFID short codes previously submitted and associated to the live order to be modified.

#### Handling of fields not available for modification

- *AccountCode* (6399) and *LPRole* (20021) fields present in this message will always be ignored by the system, which means that clients are not able to modify *AccountCode* (6399) / *LPRole* (20021) of their live orders. If modification is required clients must cancel their existing order and submit a new one with a *NewOrderSingle* (D) message.
- While fields *Side* (54) and *OrdType* (40) are part of the message structure, modification of these values is not allowed, and the values provided must match the values originally set on submission of the order. In the case where the values in the **OrderCancelReplaceRequest** (G) message do not match with the *Side* (54) and *OrdType* (40) 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 *OrdType* (40) must be equal to Limit, for Stop-limit, or Market for Stop-market order, corresponding to the type of stop order originally submitted).
- Modification of *TimeInForce* (59)

For the Cash Markets - Modification of *TimeInForce* (59) 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 'At Close' (7) or Good for Auction (GFA) (B) to any other validity.

For the Derivatives Markets - Modification of *TimeInForce* (59) is not permitted. If a **OrderCancelReplaceRequest** (G) message is submitted with a different value for *TimeInForce* (59) than the original order, the modification request will be rejected.

#### Components Usage within the Message

This message contains three components:

- The first component **OrderAttributeGrp** is composed of the fields: *NoOrderAttributes* (2593), *OrderAttributeType* (2594), *OrderAttributeValue* (2595)

- The second component **Parties** is composed of the fields: *NoPartyIDs* (453), *PartyID* (448), *PartyIDSource* (447), *PartyRole* (452) and *PartyRoleQualifier* (2376)
- The nested repeating group **NestedParties** is composed of *NoNestedPartyIDs* (539), *NestedPartyID* (524), *NestedPartyIDSource* (525), *NestedPartyRole* (538) and *NestedPartyRoleQualifier* (2384).

Use of the groups and values within them:

- ExecutionwithinFirmShortCode should be provided via the **Parties** repeating group
- With noted exceptions ClientidentificationShortCodes should be provided via the **NestedParties** repeating group
- The NonExecutingBrokerShortCodes should be provided via the **NestedParties** repeating groups
- The repeating group **NestedParties** is also used to specify the *Clearing Firm* for the order
- The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group

### MIFID II short code related data fields

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

#### ExecutionwithinFirmShortCode

Presence Condition: Mandatory

- **Case 1:** Specifying ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 2:** Specifying ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing trader)
  - ◆ *PartyRoleQualifier* (2376) = **22** (Algorithm)
- **Case 3:** Specifying ExecutionwithinFirmShortCode for a Client:
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

#### ClientIdentificationShortCode

Presence Condition: Conditional Group. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO.

For cases 4 and 5, explained below, values 1 and 2 available for NestedPartyID (524) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** Specifying ClientIdentificationShortCode where the client is a legal entity
  - ◆ *NestedPartyID* (524) = field in which the **short code** is provided

- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity)
- **Case 5:** Specifying *ClientIdentificationShortCode* where the client is not a legal entity
  - ◆ *NestedPartyID* (524) = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
  - ◆ *NestedPartyRole* (538) = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier* (2384) = **24** (Natural person)
- **Case 6:** Specifying *ClientIdentificationShortCode* for an Aggregated order (“AGGR” value)  
In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:
  - ◆ *OrderAttributeType* (2594) = 0 (Aggregated order)
  - ◆ *OrderAttributeValue* (2595) = “Y”
- **Case 7:** Specifying *ClientIdentificationShortCode* for an order for which short code is still pending allocation (“PNAL” value)  
In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:
  - ◆ *OrderAttributeType* (2594) = 1 (Pending allocation)
  - ◆ *OrderAttributeValue* (2595) = “Y”
- **Case 8:** In case the message originates from a **DEA** (Direct Electronic Access) client, information should be provided as following:
  - ◆ *OrderOrigination* (1724) = **5** (Order received from a direct access or sponsored access customer)

**AND**

  - ◆ *ClientIdentificationShortCode* should be provided using one of the combinations provided in cases 4 through 7 above, as required

### Other Identifiers

- For identification of an order submitted for a commodity derivative or a warrant with a commodity underlying, if the potential trade would reduce the risk clients should also use **OrderAttributeGrp** repeating group, and identify the values as following:
  - ◆ *OrderAttributeType* (2594) = **3** (Risk Reduction Code)
  - ◆ *OrderAttributeValue* (2595) = “Y”

### Clearing related data fields

- The clearing Firm related fields should be specified as following:

#### Clearing Firm ID

- If provided, the following combination of fields identifies how clients should populate the Clearing Firm ID
  - ◆ *NestedPartyID* (524) = field in which the **ID** is provided
  - ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
  - ◆ *NestedPartyRole* (538) = **4** (Clearing Firm)
  - ◆ *NestedPartyRoleQualifier* (2384) = **3** (General clearing member) OR **4** (Individual clearing member)

When used in the inbound messages to specify the Clearing Firm ID the maximum length for the *NestedPartyID* (524) field is 8 characters long, and value may be alphanumeric.



**Client ID / Long Client ID**

■ If provided, the following describes how clients should populate the Client ID data for each market:

For the Cash Markets – Client ID data should be provided as combination of fields identified below. As this data is provided via the NestedParties repeating group – the repeating group may have from 1 to 5 occurrences.

- ◆ *NestedPartyID* (524) = field in which the **ID** is provided
- ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
- ◆ *NestedPartyRole* (538) = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity) OR **24** (Natural person)

When used in the inbound messages to specify the Client ID, the maximum length for the *NestedPartyID* (524) field is 8 characters long, and value may be alphanumeric.

If the field *LongClientID* (21804) is also provided for the Cash markets, it will be ignored.

For the Derivatives Markets – Client ID data must be provided using the field *LongClientID* (21804), which can be used to its maximum length of 16 characters.

Due to this, for the Derivatives markets NestedParties repeating group may have from 1 to 4 occurrences. If the NestedParties combination for Client ID is provided for the Derivatives markets – the message will be rejected.

**5.3.6.2 Message Structure**

| Tag   | Field            | Short Description   | Format       | Len | Values   | Presence    |
|-------|------------------|---|--------------|-----|--|-------------|
|       | Header           |   |              |     |  |             |
| 60    | TransactTime     | Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).  | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 11    | ClOrdID          | An identifier of a message assigned by the Client when submitting an order to the Exchange.                                   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Mandatory   |
| 48    | SecurityID       | Exchange identification code of the instrument/contract.  | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory   |
| 22    | SecurityIDSource | Gives the type of SecurityID.   | String       | 1   | (See field description)  | Mandatory   |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform.   | Int          | 2   | (See field description)  | Mandatory   |
| 37    | OrderID          | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.                                    | String       | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
| 41    | OrigClOrdID      | Identifies the Client Order ID of the original order, used to identify the previous order on cancel and replacement requests. | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 453   | NoPartyIDs       | Number of PartyID entries.  | NumInGroup   | 1   | Always set to 1  | Mandatory   |
| 448   | PartyID          | Party identifier/code. See PartyIDSource (447) and PartyRole (452).   | String       | 11  | Alphanumeric   | Mandatory   |



| Tag   | Field                              | Short Description  | Format     | Len | Values                  | Presence    |
|-------|------------------------------------|--|------------|-----|-------------------------|-------------|
| 447   | PartyIDSource                      | Source of PartyID value.   | Char       | 1   | (See field description) | Mandatory   |
| 452   | PartyRole                          | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description) | Mandatory   |
| 2376  | PartyRoleQualifier                 | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description) | Mandatory   |
| 539   | NoNestedPartyIDs                   | Number of NestedPartyID entries.   | NumInGroup | 1   | From 1 to 5             | Conditional |
| 524   | NestedPartyID                      | Party identifier/code within a repeating group. See NestedPartyIDSource (525) and NestedPartyRole (538).   | String     | 11  | Alphanumeric            | Conditional |
| 525   | NestedPartyIDSource                | Source of NestedPartyID (524) value.   | Char       | 1   | (See field description) | Conditional |
| 538   | NestedPartyRole                    | Identifies the type or role of the NestedPartyID (524) specified.  | Int        | 3   | (See field description) | Conditional |
| 2384  | NestedPartyRoleQualifier           | Used to further qualify the value of NestedPartyRole(538).   | Int        | 2   | (See field description) | Conditional |
| 44    | Price                              | Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).   | Price      | 20  | From -2^63+1 to 2^63-1  | Conditional |
| 38    | OrderQty                           | Total order quantity, per quantity unit.(To be calculated with Quantity Decimals).   | Qty        | 20  | From 0 to 2^64-2        | Mandatory   |
| 40    | OrdType                            | Type of Order.   | Char       | 1   | (See field description) | Mandatory   |
| 54    | Side                               | Indicates the side of the order.   | Char       | 1   | (See field description) | Mandatory   |
| 59    | TimeInForce                        | Specifies the maximum validity of an order.  | Char       | 1   | (See field description) | Mandatory   |
| 20021 | LPRole                             | [NA] Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".   | Int        | 5   | (See field description) | Optional    |
| 6399  | AccountCode                        | [NA] 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.  | Int        | 2   | (See field description) | Optional    |
| 21015 | STPAggressorIndicator              | Field used as instruction for order handling.<br>- STP resting order: indicates whether the STP rule is "cancel resting order" or not. (0: STP Resting Order deactivated; 1: Cancel Resting Order)<br>- STP incoming order: indicates whether the STP rule is "cancel incoming order" or not. (0: STP Incoming Order deactivated; 1: Cancel Incoming Order)<br>- STP is not applicable for Dark Orders | Int        | 1   | (See field description) | Optional    |
| 21016 | DisclosedQtyRandomizationIndicator | Indicates whether the client requests or not a randomization for the DisplayQty (1138) of his iceberg order.   | Int        | 1   | (See field description) | Optional    |

| Tag   | Field                       | Short Description   | Format            | Len | Values   | Presence    |
|-------|-----------------------------|---|-------------------|-----|--|-------------|
| 21018 | CancelOnDisconnectIndicator | Indicates whether the order is not in scope of the Cancel On Disconnect mechanism (order is persisted) or if order should be handled as defined by default. (0: Default Configuration ; 1: Order not in the scope of Cancel On Disconnect - Order is to be persisted) | Int               | 1   | (See field description)  | Mandatory   |
| 1094  | PegPriceType                | Defines the type of the peg order.  | Int               | 1   | (See field description)  | Conditional |
| 211   | PegOffsetValue              | Tick offset for a pegged order.   | Int               | 3   | From -127 to 127   | Conditional |
| 20052 | DarkExecutionInstruction    | Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions.   | MultipleCharValue | 9   | (See field description)  | Conditional |
| 1724  | OrderOrigination            | Identifies the origin of the order.   | Int               | 1   | (See field description)  | Conditional |
| 2593  | NoOrderAttributes           | Number of order attribute entries.  | NumInGroup        | 1   | If provided, From 1 to 2   | Optional    |
| 2594  | OrderAttributeType          | The type of order attribute.  | Int               | 1   | (See field description)  | Optional    |
| 2595  | OrderAttributeValue         | The value associated with the order attribute type specified in OrderAttributeType (2594).  | String            | 1   | (See field description)  | Optional    |
| 2362  | SelfMatchPreventionID       | For Future Use.   | String            | 5   | From 0 to 2 <sup>16</sup> -2   | Optional    |
| 58    | Text                        | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.  | String            | 18  | Alphanumeric   | Optional    |
| 99    | StopPx                      | Stop Trigger Price is mandatory for stop orders.  | Price             | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 20004 | UndisclosedPrice            | [N/A] (For Future Use, Pending Regulatory Approval) Optional price for the hidden part of an Iceberg order.   | Price             | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Optional    |
| 1138  | DisplayQty                  | Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)  | Qty               | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
| 126   | ExpireTime                  | [N/A] Field used as time of order expiration for GTT orders.  | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 432   | ExpireDate                  | Field used as date of order expiration for GTD orders.  | LocalMktDate      | 8   | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31   | Conditional |
| 336   | TradingSessionID            | 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.                                | String            | 3   | (See field description)  | Conditional |

| Tag   | Field                    | Short Description  | Format            | Len | Values   | Presence    |
|-------|--------------------------|--|-------------------|-----|--|-------------|
| 20175 | TriggeredStopTimeInForce | Specifies the maximum validity of an triggered stop order.   | Char              | 1   | (See field description)  | Conditional |
| 20005 | UndisclosedIcebergType   | [N/A](For Future Use, Pending Regulatory Approval) Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.  | Int               | 1   | (See field description)  | Optional    |
| 1     | Account                  | Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.  | String            | 12  | Alphanumeric   | Optional    |
| 21804 | LongClientID             | 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.   | String            | 16  | (See field description)  | Optional    |
| 9941  | TechnicalOrdType         | 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.  | Char              | 1   | (See field description)  | Optional    |
| 7443  | PostingAction            | Open Close Indicator, Posting action. This field is part of the clearing aggregate.  | MultipleCharValue | 19  | (See field description)  | Optional    |
| 577   | ClearingInstruction      | Clearing Instruction.  | Int               | 4   | (See field description)  | Optional    |
| 9930  | ConfirmFlag              | Indicates if the order entry or modification is confirmed by the broker issuing the order or not.<br><br>If the order is not confirmed by the issuing broker, additional checks on price and quantity are performed by the Trading Engine. On the other hand, a confirmed order is not subject to this additional checks.<br><br>Field also used in cancel/replace request to confirm a collar pass-through in case of rejection due to collar breach. | Char              | 1   | (See field description)  | Optional    |
| 21800 | ConditionalOrderFlag     | Field used to specify if the order is a conditional or a firm order.   | Char              | 1   | (See field description)  | Conditional |
| 21801 | FRMARAMP 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 DE MAR AMP LP).  | Char              | 1   | 0 = Not subject to FR MAR AMP LP (default)<br>1 = Subject to FR MAR AMP LP | Optional    |
|       | Trailer                  |  |                   |     |  |             |

### 5.3.7 OrderCancelReject (9)

Client ◀OEG

Available for:        

#### 5.3.7.1 Message Description

The **OrderCancelReject** (9) message is used to notify the request issuer that the following messages were not processed by the matching engine:

- OrderCancelRequest (F)
- OrderCancelReplaceRequest (G)
- OrderMassCancelRequest (q)
- MassQuote (i)

Please refer to the [Error Code List](#) document for an exhaustive list of those cases.

The *ClOrdID* (11) provided in the Reject message identifies the request which is rejected; it does not refer to an order of the order book. Only the *OrigClOrdID* (41) field will refer to the targeted order. Hence in case of a rejection of an **OrderCancelRequest** (F) message, the *ClOrdID* (11) field will refer to the *ClOrdID* (11) provided in the rejected **OrderCancelRequest** (F) request, not to the targeted order.

If a client sends an Invalid value in a field, then in place of this value the **OrderCancelReject** (9) messages will not provide any value.

If a client sends an unknown ID (such as *SecurityID* (48), *OrderID* (37), *OrigClOrdID* (41)...) which, however, can be decoded by the system, this value is provided back to the client in the **OrderCancelRequest** (F), exactly as entered.

The reason of the rejection is provided by the *ErrorCode* (9955), and a text for explanations of the error is provided in the [Error Code List](#).

#### Rejection Behaviour

In Optiq orders are identified by multiple characteristics as follows: *OrderID* (37) / *OrigClOrdID* (41), *Side* (54), *OrdType* (40) and *SenderCompID* (49). 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.

#### 5.3.7.2 Message Structure

| Tag | Field  | Short Description | Format | Len | Values | Presence |
|-----|--------|-------------------|--------|-----|--------|----------|
|     | Header |                   |        |     |        |          |

| Tag   | Field                    | Short Description   | Format       | Len | Values   | Presence    |
|-------|--------------------------|---|--------------|-----|--|-------------|
| 21005 | ClientMessageSendingTime | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | OEGINFromMember          | 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).               | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTToME               | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                                | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | BookINTime               | 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)    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                       | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                              | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 11    | ClOrdID                  | An identifier of a message assigned by the Client when submitting an order to the Exchange.   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 48    | SecurityID               | Exchange identification code of the instrument/contract.  | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Conditional |
| 22    | SecurityIDSource         | Gives the type of SecurityID.   | String       | 1   | (See field description)  | Conditional |
| 20020 | EMM                      | Defines the Exchange Market Mechanism applied on each platform.   | Int          | 2   | (See field description)  | Conditional |
| 37    | OrderID                  | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.  | String       | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
| 9955  | ErrorCode                | Error code in case of rejection.  | Int          | 5   | From 0 to 2 <sup>16</sup> -2   | Conditional |
| 434   | CxlRejResponseTo         | Identifies the type of request that the OrderCancelReject (9) is in response to.  | Char         | 1   | (See field description)  | Mandatory   |
| 9962  | CollarRejType            | Hit collar type (high or low) in case of order rejection due to collar breach.  | Char         | 1   | (See field description)  | Conditional |
| 21001 | BreachedCollarPrice      | Breached collar price in case of collar rejection.  | Price        | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |

| Tag   | Field           | Short Description   | Format            | Len | Values                       | Presence    |
|-------|-----------------|---|-------------------|-----|------------------------------|-------------|
| 39    | OrdStatus       | Identifies the current status of the order.   | Char              | 1   | (See field description)      | Mandatory   |
| 21014 | AckQualifiers   | Field used to provide additional information on the corresponding order. A single field can contain up to 8 values, space delimited, provided in different positions. | MultipleCharValue | 15  | (See field description)      | Conditional |
| 21021 | LogicalAccessID | Identifier of the Logical Access  | Int               | 10  | From 0 to 2 <sup>32</sup> -2 | Conditional |
| 21019 | OEPartitionID   | Identifies uniquely an OE Optiq partition by which the engine is reached  | Int               | 5   | From 0 to 2 <sup>16</sup> -2 | Conditional |
|       | Trailer         |   |                   |     |                              |             |

### 5.3.8 RequestAckMessage (Uy)

Client ◀OEG

Available for: EQ FND FXI SP EQD IDD CMO DC

#### 5.3.8.1 Message Description

This message is used by the Matching Engine to acknowledge a **PricelInput** (UI) message request and a **LiquidityProviderCommand** (UZ) sent by Liquidity Providers, for cash markets, and **RequestForImpliedExecution** (U66) for the derivatives markets, when the message is accepted.

The fields *RequestID* (21060) and *RefMsgType* (372) identify the request message and its type.

The **RequestAckMessage** (Uy) message is also used to notify the request issuer that the following messages were not processed by the matching engine:

- PricelInput (UI)
- LiquidityProviderCommand (UZ)
- OwnershipRequest (U18)
- OrderMassStatusRequest (AF)
- RequestForImpliedExecution (U66)

The field *ErrorCode* (9955) will provide the reason in case of request rejection. If the request is accepted, this field will not be filled.

Please refer to the [Error Code List](#) file (.csv) for an exhaustive list of those cases.

#### 5.3.8.2 Message Structure

| Tag   | Field                    | Short Description   | Format       | Len | Values   | Presence    |
|-------|--------------------------|---|--------------|-----|--|-------------|
|       | Header                   |   |              |     |  |             |
| 21005 | ClientMessageSendingTime | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssssss = 000000000-999999999 (nanoseconds) | Conditional |

| Tag   | Field            | Short Description  | Format       | Len | Values   | Presence    |
|-------|------------------|--|--------------|-----|--|-------------|
| 5979  | OEGINFromMember  | 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).            | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTToME       | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                             | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | BookINTime       | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | BookOUTTime      | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME      | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                           | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21060 | RequestID        | Unique message identifier as assigned by the Client when submitting the message request.   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 48    | SecurityID       | Exchange identification code of the instrument/contract.   | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Conditional |
| 22    | SecurityIDSource | Gives the type of SecurityID.  | String       | 1   | (See field description)  | Conditional |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform.  | Int          | 2   | (See field description)  | Mandatory   |
| 372   | RefMsgType       | The MsgType (35) of the FIX message being referenced.  | String       | 3   | Value received in the rejected inbound message, if any   | Conditional |
| 9955  | ErrorCode        | Error code in case of rejection.   | Int          | 5   | From 0 to 2 <sup>16</sup> -2   | Conditional |
| 10076 | LPActionCode     | Action the LP wants to apply on the specified instrument of warrant type.  | Char         | 1   | (See field description)  | Conditional |
|       | Trailer          |  |              |     |  |             |

### 5.3.9 OwnershipRequest (U18)

Client ► OEG

Available for:        

#### 5.3.9.1 Message Description

The **OwnershipRequest** (U18) message is used by the clients to change the ownership of an active order from an 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 (**OrderCancelReplaceRequest** (G)) also leads to an ownership migration.

The scope of the ownership can be a single order by specifying the *OrderID* (37) and *SecurityID* (48) of the targeted order. It could also be all orders of the specified *SecurityID* (48) belonging to the targeted Logical Access (*LogicalAccessID* (21021)).

The **OwnershipRequest** (U18) is acknowledged by the **OwnershipRequestAck** (U29), and by **ExecutionReport** (8) message(s) which provides the details of the affected order(s).

When an error is detected in any field of the message, the matching engine responds with the **RequestAckMessage** (Uy) message and the associated error code.

#### Components Usage within the Message

This message contains 2 components:

- The first component **Parties** is composed of the fields: *NoPartyIDs* (453), *PartyID* (448), *PartyIDSource* (447), *PartyRole* (452) and *PartyRoleQualifier* (2376) - this component is used to provide data for the *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCode* MIFID II field for risk management purposes such as kill switch;
- The second component **OrderAttributeGrp** is composed of the fields: *NoOrderAttributes* (2593), *OrderAttributeType* (2594), *OrderAttributeValue* (2595).

Use of the groups and values within them:

- *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCodes* should be provided via the **Parties** repeating group;
- The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group;

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

#### ExecutionwithinFirmShortCode

Presence Condition: Mandatory, first use of **Parties** group is assumed to be for indication of *ExecutionwithinFirmShortCode*

- **Case 1**: *ExecutionwithinFirmShortCode* where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing Trader)



- ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 2:** ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing trader)
  - ◆ *PartyRoleQualifier* (2376) = **22** (Algorithm)
- **Case 3:** ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

### **ClientIdentificationShortCode**

Presence Condition: Conditional Group. Second use of Parties group in this message is assumed to be for indication of ClientIdentificationShortCode. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO. In case ExecutionwithinFirmShortCode is provided for Case 3 the same information is submitted a second time for either Case 4 or 5. In this case, if the information in the repeating group is not identical, the message is rejected.

For cases 4 and 5, explained below, values 1 and 2 available for PartyID (448) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** ClientIdentificationShortCode where the client is a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity)
- **Case 5:** ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)
 

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType* (2594) = **0** (Aggregated order)
  - ◆ *OrderAttributeValue* (2595) = “Y”
- **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)
 

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType* (2594) = **1** (Pending allocation)
  - ◆ *OrderAttributeValue* (2595) = “Y”

## 5.3.9.2 Message Structure

| Tag   | Field               | Short Description  | Format     | Len | Values   | Presence    |
|-------|---------------------|--|------------|-----|--|-------------|
|       | Header              |  |            |     |  |             |
| 11    | ClOrdID             | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String     | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 37    | OrderID             | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.   | String     | 20  | From 0 to 2 <sup>64</sup> -2                   | Conditional |
| 41    | OrigClOrdID         | Identifies the Client Order ID of the original order, used to identify the previous order on cancel and replacement requests.                  | String     | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Conditional |
| 48    | SecurityID          | Exchange identification code of the instrument/contract.   | String     | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory   |
| 22    | SecurityIDSource    | Gives the type of SecurityID.  | String     | 1   | (See field description)                        | Mandatory   |
| 453   | NoPartyIDs          | Number of PartyID entries.   | NumInGroup | 1   | From 1 to 2                                    | Mandatory   |
| 448   | PartyID             | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String     | 11  | Alphanumeric                                   | Mandatory   |
| 447   | PartyIDSource       | Source of PartyID value.   | Char       | 1   | (See field description)                        | Mandatory   |
| 452   | PartyRole           | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description)                        | Mandatory   |
| 2376  | PartyRoleQualifier  | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description)                        | Mandatory   |
| 2593  | NoOrderAttributes   | Number of order attribute entries.   | NumInGroup | 1   | If provided, always set to 1                   | Optional    |
| 2594  | OrderAttributeType  | The type of order attribute.   | Int        | 1   | (See field description)                        | Optional    |
| 2595  | OrderAttributeValue | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String     | 1   | (See field description)                        | Optional    |
| 20020 | EMM                 | Defines the Exchange Market Mechanism applied on each platform.  | Int        | 2   | (See field description)                        | Mandatory   |
| 21019 | OEPartitionID       | Identifies uniquely an OE Optiq partition by which the engine is reached.  | Int        | 5   | From 0 to 2 <sup>16</sup> -2                   | Optional    |
| 21021 | LogicalAccessID     | Identifier of the Logical Access.  | Int        | 10  | From 0 to 2 <sup>32</sup> -2                   | Conditional |
| 21041 | OrderCategory       | 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". | Char       | 1   | (See field description)                        | Conditional |
|       | Trailer             |  |            |     |  |             |

### 5.3.10 OwnershipRequestAck (U29)

Client ◀OEG

Available for:        

#### 5.3.10.1 Message Description

The **OwnershipRequestAck** (U29) message is sent twice by the matching engine to confirm that the **OwnershipRequest** (U18) has been taken into account. The first **OwnershipRequestAck** (U29) message has *TotalAffectedOrders* (533) set to -1, and repeats all the fields as they were submitted in the **OwnershipRequest** (U18). Subsequently the member will receive an **ExecutionReport** (8) message per order affected by the command.

When the ownership request is totally processed the member will receive a last **OwnershipRequestAck** (U29) message to notify the member of the *TotalAffectedOrders* (533).

#### 5.3.10.2 Message Structure

| Tag   | Field               | Short Description  | Format | Len | Values   | Presence    |
|-------|---------------------|--|--------|-----|--|-------------|
|       | Header              |  |        |     |  |             |
| 11    | ClOrdID             | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 48    | SecurityID          | Exchange identification code of the instrument/contract.   | String | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory   |
| 22    | SecurityIDSource    | Gives the type of SecurityID.  | String | 1   | (See field description)                        | Mandatory   |
| 37    | OrderID             | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.   | String | 20  | From 0 to 2 <sup>64</sup> -2                   | Conditional |
| 21019 | OEPartitionID       | Identifies uniquely an OE Optiq partition by which the engine is reached.  | Int    | 5   | From 0 to 2 <sup>16</sup> -2                   | Conditional |
| 21021 | LogicalAccessID     | Identifier of the Logical Access.  | Int    | 10  | From 0 to 2 <sup>32</sup> -2                   | Conditional |
| 533   | TotalAffectedOrders | Number of orders affected following a global request. It is set to -1 to indicate that the request is processed.                               | Int    | 10  | From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1 | Mandatory   |
| 21041 | OrderCategory       | 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". | Char   | 1   | (See field description)                        | Conditional |
|       | Trailer             |  |        |     |  |             |

### 5.3.11 QuoteRequest (R)

Client ▶OEG

Available for:    

#### 5.3.11.1 Message Description

The **QuoteRequest** (R) message is used by the clients to indicate that they have an interest on 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 market data publication.

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 only in publication of a public message via MDG from a trading perspective. Upon reception of this Market Data message, registered (if any on the contract) Responsive Market Makers are required to provide liquidity.

For ETF Access platform, this message submission can be performed either by Euronext members or by Non Euronext buy-side RFQ (Request for Quote) trading issuers.

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

Field *Side* (54) is optional as the client may or may not specify those parameters depending of the nature of the request.

For the Derivatives Markets: if the client does not wish to indicate quantity, the field *OrderQty* (38) should be filled with zero (0) and will be ignored.

For ETF Access platform: this message submission can be performed either by Euronext members or by Non Euronext buy-side RFQ (Request for Quote) trading issuers.

## Components Usage within the Message

This message contains one component **Parties** which is composed of the fields: *NoPartyIDs* (453), *PartyID* (448), *PartyIDSource* (447), *PartyRole* (452) and *PartyRoleQualifier* (2376) this component is used to provide data for the ExecutionwithinFirmShortCode and ClientIdentificationShortCode MIFID II field for risk management purposes such as kill switch.

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

### ExecutionwithinFirmShortCode

Presence Condition: Mandatory, first use of Parties group is assumed to be for indication of ExecutionwithinFirmShortCode

- **Case 1:** ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 2:** ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing trader)
  - ◆ *PartyRoleQualifier* (2376) = **22** (Algorithm)
- **Case 3:** ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID* (448) = field in which the **short code** is provided

- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **3** (Client ID)
- ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

### ClientIdentificationShortCode

Presence Condition: Conditional Group. Second use of Parties group in this message is assumed to be for indication of ClientIdentificationShortCode. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO. In case ExecutionwithinFirmShortCode is provided for Case 3 the same information is submitted a second time for either Case 4 or 5.

For cases 4 and 5, explained below, values 1 and 2 available for PartyID (448) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4**: ClientIdentificationShortCode where the client is a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity)
- **Case 5**: ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)

### 5.3.11.2 Message Structure

| Tag   | Field                    | Short Description   | Format            | Len | Values   | Presence  |
|-------|--------------------------|---|-------------------|-----|--|-----------|
|       | Header                   |   |                   |     |  |           |
| 60    | TransactTime             | Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).  | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory |
| 11    | ClOrdID                  | An identifier of a message assigned by the Client when submitting an order to the Exchange.   | String            | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Mandatory |
| 48    | SecurityID               | Exchange identification code of the instrument/contract.  | String            | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory |
| 22    | SecurityIDSource         | Gives the type of SecurityID.   | String            | 1   | (See field description)  | Mandatory |
| 20020 | EMM                      | Defines the Exchange Market Mechanism applied on each platform.   | Int               | 2   | (See field description)  | Mandatory |
| 54    | Side                     | Indicates the side of the order.  | Char              | 1   | (See field description)  | Optional  |
| 38    | OrderQty                 | Total order quantity, per quantity unit.(To be calculated with Quantity Decimals).  | Qty               | 20  | From 0 to 2 <sup>64</sup> -2   | Mandatory |
| 20052 | DarkExecutionInstruction | Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions. | MultipleCharValue | 9   | (See field description)  | Optional  |

| Tag  | Field              | Short Description  | Format     | Len | Values  | Presence    |
|------|--------------------|--|------------|-----|---|-------------|
| 110  | MinQty             | Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).  | Qty        | 20  | Value '0' by default and depending to a minimum value for the given instrument and/or market type | Optional    |
| 453  | NoPartyIDs         | Number of PartyID entries.   | NumInGroup | 1   | From 1 to 2   | Mandatory   |
| 448  | PartyID            | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String     | 11  | Alphanumeric  | Mandatory   |
| 447  | PartyIDSource      | Source of PartyID value.   | Char       | 1   | (See field description)   | Mandatory   |
| 452  | PartyRole          | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description)   | Mandatory   |
| 2376 | PartyRoleQualifier | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description)   | Mandatory   |
| 6399 | AccountCode        | 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. | Int        | 2   | (See field description)   | Conditional |
|      | Trailer            |  |            |     |   |             |

### 5.3.12 QuoteRequestReject (AG)

Client ◀OEG

Available for: FND EQD IDD CMO

#### 5.3.12.1 Message Description

The Quote Request Reject message is used to respond to the Client's **QuoteRequest** (R) that has not succeeded.


#### 5.3.12.2 Message Structure

| Tag   | Field                    | Short Description  | Format       | Len | Values   | Presence  |
|-------|--------------------------|--|--------------|-----|--|-----------|
|       | Header                   |  |              |     |  |           |
| 5979  | OEGINFromMember          | 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).            | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory |
| 7764  | OEGOUTToME               | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                             | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory |
| 21002 | BookINTime               | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory |
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                           | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory |
| 131   | QuoteReqID               | Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.   | String       | 20  | From 0 to 2 <sup>64</sup> -2   | Mandatory |
| 658   | QuoteRequestRejectReason | Reason the QuoteRequest (R) was rejected.  | Int          | 2   | (See field description)  | Mandatory |
| 11    | ClOrdID                  | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Mandatory |
| 58    | Text                     | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.   | String       | 18  | Alphanumeric   | Optional  |
| 146   | NoRelatedSym             | Number of related symbols (instruments) in a message   | NumInGroup   | 3   | Always set to 1  | Mandatory |

| Tag | Field            | Short Description  | Format | Len | Values                  | Presence  |
|-----|------------------|--|--------|-----|-------------------------|-----------|
| 48  | SecurityID       | Exchange identification code of the instrument/contract. | String | 10  | From 0 to 2^32-2        | Mandatory |
| 22  | SecurityIDSource | Gives the type of SecurityID.                            | String | 1   | (See field description) | Mandatory |
|     | Trailer          |  |        |     |                         |           |

### 5.3.13 AskForQuote (UL)

Client ◀OEG

Available for: 

#### 5.3.13.1 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. *AFQReason* (9939) identifies the case that triggers this request.

#### 5.3.13.2 Message Structure

| Tag   | Field            | Short Description  | Format | Len | Values                  | Presence  |
|-------|------------------|--|--------|-----|-------------------------|-----------|
|       | Header           |  |        |     |                         |           |
| 48    | SecurityID       | Exchange identification code of the instrument/contract.                                       | String | 10  | From 0 to 2^32-2        | Mandatory |
| 22    | SecurityIDSource | Gives the type of SecurityID.  | String | 1   | (See field description) | Mandatory |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform.                                | Int    | 2   | (See field description) | Mandatory |
| 9939  | AFQReason        | Indicates the reason why the AskForQuote (UL) message has been sent to the Liquidity Provider. | Char   | 1   | (See field description) | Mandatory |
|       | Trailer          |  |        |     |                         |           |

### 5.3.14 UserNotification (CB)

Client ◀OEG

Available for:       

#### 5.3.14.1 Message Description

UserNotification (CB) 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, and the scope on which this action has been applied.

After notification of suspension is sent, and until this suspension is cleared, any following messages are rejected using **ExecutionReport (8)** message with error code 2512 "Suspended by EMS".

■ For RiskGuard the UserNotification (CB) is sent:

- if client's access has been Blocked or Unblocked on a given contract, and the scope for which this action has been applied;
- if Order Size Limit has been activated or deactivated on a given contract, and the scope on which this action has been applied.

After notification of Suspension or Block or Order Size Limit Activation and until the restriction is lifted, any of the following inbound messages (except for strategies creation) are rejected with an appropriated error code.

The field *UserStatus (926)* in this message indicates the nature of action and the case of Kill functionality the scope taken on the access and/or orders. In case of suspension the scope is provided either in the field *InstrumentScopeSecurityID (1538)* or *RiskFamily (20165)*.

The text in the field *UserStatus (926)* 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   | 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. |

#### Scope:

**For Kill Switch:** *TargetCompID (56)* is always provided (in the header) but it represents the scope of the kill only in case the action has been taken when specified by *UserStatus (926)* as Firm;

**For Risk Guard:** *TargetCompID (56)* is always provided (in the header) but it represents the scope of the action only in case the *UserStatus (926)* references Firm, Trader – Algo, DEA or Order Size Limit;

| Scope                             | Description   | Identifier Field               |
|-----------------------------------|---|--------------------------------|
| Trader-Algo                       | <p><b>For Kill Switch:</b> a trader or an algorithm will be in scope, applied based on the value specified in the field <i>PartyID (448)</i>, when used to provide the <i>ExecutionWithinFirmShortCode</i> information. In this case the field <i>PartyID (448)</i>, in the message will be populated with the stipulated value and <i>PartyIDSource (447)</i>, <i>PartyRole (452)</i>, <i>PartyRoleQualifier (2376)</i> are used to allow the identification of the provided ID.</p> <p><b>For Risk Guard:</b> a Firm + Trader Algo will be in scope, applied based on the <i>TargetPartyID (21095)</i>, used to provide the <i>ExecutionWithinFirmShortCode</i> information. In this case, the field <i>PartyID (448)</i> in the message will be populated with the stipulated value and <i>PartyIDSource (447)</i>, <i>PartyRole (452)</i>, <i>PartyRoleQualifier (2376)</i> are used to allow the identification of the provided ID.</p>  | <i>PartyID (448)</i>           |
| Firm                              | <p><b>For Kill Switch:</b> member, including all of the physical connections and orders associated to the Firm ID will be in scope;</p> <p><b>For Risk Guard:</b> member, including all of the physical connections and orders associated to the Firm ID will be in scope <b>BUT</b> in a per Optiq Segment basis;</p>  | <i>TargetCompID (56)</i>       |
| DEA/ClientIdentificationShortCode | <p><b>For Kill Switch:</b> 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)<br/>In case of Kill command being done for Sponsored Access, the Status will identify “DEA” and the field <i>ClientIdentificationShortCode</i> will not be populated<br/>In case the Kill command is done for the DMA, the command is applied based on the value specified in the field <i>ClientIdentificationShortCode</i>. In this case the field <i>ClientIdentificationShortCode</i> in the message will be populated with the stipulated value</p> <p><b>For Risk Guard:</b> the sub-set of orders/messages submitted under the <i>TargetClientIDShortCode (21108)</i> are killed or the access of the <i>TargetClientIDShortCode (21108)</i> is suspended, blocked or checked against the order size limit, depending on the command submitted by Risk Manager to the Exchange;</p> | <i>PartyID (448)</i>           |
| LogicalAccess                     | <p><b>For Risk Guard:</b> Scope is the sub-set of orders/messages submitted under the <i>TargetLogicalAccessID (21099)</i> are killed or the access of the <i>TargetLogicalAccessID (21099)</i> is suspended or blocked, depending on the command submitted by the Risk Manager to the Exchange.<br/>In case the action is applied at Logical Access level, only the Firm that owns the connection receives the <b>UserNotification (CB)</b>.</p>   | <i>LogicalAccessID (21021)</i> |

## Components Usage within the Message

This message contains two components:

- The first component **Parties** which is composed of the fields: *NoPartyIDs (453)*, *PartyID (448)*, *PartyIDSource (447)*, *PartyRole (452)* and *PartyRoleQualifier (2376)* - this component is used to provide data for the ExecutionWithinFirmShortCode and ClientIdentificationShortCode MIFID II field for risk management purposes such as kill switch;
- The second component **InstrumentScopeGrp** which is composed of the fields: *NoInstrumentScopes (1656)*, *InstrumentScopeSecurityID (1538)*, *InstrumentScopeSecurityIDSource (1539)*, *OrderSizeLimit (21102)*;

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

### ExecutionWithinFirmShortCode

Presence Condition: Conditional

- **Case 1:** ExecutionWithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier (2376)* = **24** (Natural person)
- **Case 2:** ExecutionWithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the short code is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing trader)
  - ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)
- **Case 3:** ExecutionWithinFirmShortCode for a Client
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **3** (Client ID)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)
- **Case 4:** ExecutionWithinFirmShortCode for a Firm or DEA
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **D** (Short code identifier)
  - ◆ *PartyRole (452)* = **1** (Executing Firm)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity)

For **Risk Guard**, only the following combination, concerning ExecutionWithinFirmShortCode, is provided:

- ◆ *PartyID (448)* = field in which the **short code** is provided
- ◆ *PartyIDSource (447)* = **P** (Short code identifier)
- ◆ *PartyRole (452)* = **12** (Executing Trader)

### ClientIdentificationShortCode

Presence Condition: Conditional

- **Case 5:** ClientIdentificationShortCode where the client is a legal entity
  - ◆ *PartyID (448)* = field in which the **short code** is provided

- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **3** (Client ID)
- ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity)
- **Case 6:** *ClientIdentificationShortCode* where the client is not a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 7:** *ClientIdentificationShortCode* in case of a DMA suspension
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Proprietary / Custom Code)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

For **Risk Guard**, only the following combination, concerning *ClientIdentificationShortCode*, is provided:

- ◆ *PartyID* (448) = field in which the **short code** is provided
- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **3** (Client ID)

### 5.3.14.2 Message Structure

| Tag   | Field                           | Short Description  | Format     | Len | Values                       | Presence    |
|-------|---------------------------------|--|------------|-----|------------------------------|-------------|
|       | Header                          |  |            |     |                              |             |
| 926   | UserStatus                      | Status of the user.  | Int        | 3   | (See field description)      | Mandatory   |
| 453   | NoPartyIDs                      | Number of PartyID entries.   | NumInGroup | 1   | If provided, always set to 1 | Conditional |
| 448   | PartyID                         | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String     | 11  | Alphanumeric                 | Conditional |
| 447   | PartyIDSource                   | Source of PartyID value.   | Char       | 1   | (See field description)      | Conditional |
| 452   | PartyRole                       | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description)      | Conditional |
| 2376  | PartyRoleQualifier              | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description)      | Conditional |
| 21021 | LogicalAccessID                 | Identifier of the Logical Access.  | Int        | 10  | From 0 to 2 <sup>32</sup> -2 | Conditional |
| 58    | Text                            | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate. | String     | 18  | Alphanumeric                 | Optional    |
| 20165 | RiskFamily                      | Identifier of the family.  | String     | 8   | Alphanumeric                 | Conditional |
| 1656  | NoInstrumentScopes              | Number of Instrument scopes entries.   | NumInGroup | 1   | If provided, always set to 1 | Conditional |
| 1538  | InstrumentScopeSecurityID       | Security ID.   | String     | 10  | From 0 to 2 <sup>32</sup> -2 | Conditional |
| 1539  | InstrumentScopeSecurityIDSource | Used to limit instrument scope.  | String     | 1   | (See field description)      | Conditional |

| Tag   | Field          | Short Description  | Format | Len | Values           | Presence    |
|-------|----------------|--|--------|-----|------------------|-------------|
| 21102 | OrderSizeLimit | Indicates the Maximum Order Size above which all orders will be rejected by the Matching Engine. | Qty    | 20  | From 0 to 2^64-2 | Conditional |
|       | Trailer        |  |        |     |                  |             |

### 5.3.15 PriceInput (UI)

Client ► OEG

Available for:    

#### 5.3.15.1 Message Description

The matching engine acknowledges the request by sending back a **RequestAckMessage** (Uy) message.

The type of price is specified in the *InputPxType* (9950) 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 Trading Group (Class) please refer to the Trading Manual.

#### Components Usage within the Message

This message contains 2 components:

- The first component **Parties** is composed of the fields: *NoPartyIDs* (453), *PartyID* (448), *PartyIDSource* (447), *PartyRole* (452) and *PartyRoleQualifier* (2376) - this component is used to provide data for the *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCode* MIFID II field for risk management purposes such as kill switch;
- The second component **OrderAttributeGrp** is composed of the fields: *NoOrderAttributes* (2593), *OrderAttributeType* (2594), *OrderAttributeValue* (2595).

Use of the groups and values within them:

- *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCodes* should be provided via the **Parties** repeating group;
- The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group;

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

#### ExecutionwithinFirmShortCode

Presence Condition: Mandatory, first use of Parties group is assumed to be for indication of *ExecutionwithinFirmShortCode*

- **Case 1:** ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier (2376)* = **24** (Natural person)
- **Case 2:** ExecutionwithFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing trader)
  - ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)
- **Case 3:** ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **3** (Client ID)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

**ClientIdentificationShortCode**

**Presence Condition:** Conditional Group. Second use of Parties group in this message is assumed to be for indication of ClientIdentificationShortCode. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO. In case ExecutionwithinFirmShortCode is provided for Case 3 the same information is submitted a second time for either Case 4 or 5. In this case, if the information in the repeating group is not identical, the message is rejected.

For cases 4 and 5, explained below, values 1 and 2 available for PartyID (448) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

■ **Case 4:** ClientIdentificationShortCode where the client is a legal entity

- ◆ PartyID (448) = field in which the **short code** is provided
- ◆ PartyIDSource (447) = **P** (Short code identifier)
- ◆ PartyRole (452) = **3** (Client ID)
- ◆ PartyRoleQualifier (2376) = **23** (Firm or legal entity)

■ **Case 5:** ClientIdentificationShortCode where the client is not a legal entity

- ◆ PartyID (448) = field in which the **short code** is provided
- ◆ PartyIDSource (447) = **P** (Short code identifier)
- ◆ PartyRole (452) = **3** (Client ID)
- ◆ PartyRoleQualifier (2376) = **24** (Natural person)

■ **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

- ◆ OrderAttributeType (2594) = **0** (Aggregated order)
- ◆ OrderAttributeValue (2595) = “Y”

■ **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

- ◆ OrderAttributeType (2594) = **1** (Pending allocation)
- ◆ OrderAttributeValue (2595) = “Y”


### 5.3.15.2 Message Structure

| Tag | Field            | Short Description   | Format     | Len | Values                  | Presence  |
|-----|------------------|---|------------|-----|-------------------------|-----------|
|     | Header           |   |            |     |                         |           |
| 11  | ClOrdID          | An identifier of a message assigned by the Client when submitting an order to the Exchange. | String     | 20  | From -2^63+1 to 2^63-1  | Mandatory |
| 48  | SecurityID       | Exchange identification code of the instrument/contract.                                    | String     | 10  | From 0 to 2^32-2        | Mandatory |
| 22  | SecurityIDSource | Gives the type of SecurityID.   | String     | 1   | (See field description) | Mandatory |
| 453 | NoPartyIDs       | Number of PartyID entries.  | NumInGroup | 1   | From 1 to 2             | Mandatory |
| 448 | PartyID          | Party identifier/code. See PartyIDSource (447) and PartyRole (452).                         | String     | 11  | Alphanumeric            | Mandatory |

| Tag   | Field               | Short Description  | Format     | Len | Values                   | Presence    |
|-------|---------------------|--|------------|-----|--------------------------|-------------|
| 447   | PartyIDSource       | Source of PartyID value.   | Char       | 1   | (See field description)  | Mandatory   |
| 452   | PartyRole           | Identifies the type or role of the PartyID (448) specified.                                | Int        | 3   | (See field description)  | Mandatory   |
| 2376  | PartyRoleQualifier  | Used to further qualify the value of PartyRole(452).                                       | Int        | 2   | (See field description)  | Mandatory   |
| 2593  | NoOrderAttributes   | Number of order attribute entries.   | NumInGroup | 1   | If provided, From 1 to 2 | Optional    |
| 2594  | OrderAttributeType  | The type of order attribute.   | Int        | 1   | (See field description)  | Optional    |
| 2595  | OrderAttributeValue | The value associated with the order attribute type specified in OrderAttributeType (2594). | String     | 1   | (See field description)  | Optional    |
| 20020 | EMM                 | Defines the Exchange Market Mechanism applied on each platform.                            | Int        | 2   | (See field description)  | Mandatory   |
| 44    | Price               | Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).     | Price      | 20  | From -2^63+1 to 2^63-1   | Conditional |
| 9950  | InputPxType         | Type of input price.   | Char       | 1   | (See field description)  | Mandatory   |
|       | Trailer             |  |            |     |                          |             |

### 5.3.16 LiquidityProviderCommand (UZ)

Client ► OEG

Available for: 

#### 5.3.16.1 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 a **RequestAckMessage** (Uy) message.

#### Components Usage within the Message

This message contains 2 components:

- The first component **Parties** is composed of the fields: *NoPartyIDs (453)*, *PartyID (448)*, *PartyIDSource (447)*, *PartyRole (452)* and *PartyRoleQualifier (2376)* - this component is used to provide data for the ExecutionwithinFirmShortCode and ClientIdentificationShortCode MIFID II field for risk management purposes such as kill switch;
- The second component **OrderAttributeGrp** is composed of the fields: *NoOrderAttributes (2593)*, *OrderAttributeType (2594)*, *OrderAttributeValue (2595)*.



Use of the groups and values within them:

- ExecutionwithinFirmShortCode and ClientIdentificationShortCodes should be provided via the **Parties** repeating group;
- The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group;

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

### **ExecutionwithinFirmShortCode**

**Presence Condition:** Mandatory, first use of Parties group is assumed to be for indication of ExecutionwithinFirmShortCode

- **Case 1:** ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ PartyID (448) = field in which the **short code** is provided
  - ◆ PartyIDSource (447) = **P** (Short code identifier)
  - ◆ PartyRole (452) = **12** (Executing Trader)
  - ◆ PartyRoleQualifier (2376) = **22** (Algorithm) OR **23** (Firm or legal entity) OR **24** (Natural person)
- **Case 2:** ExecutionwithFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ PartyID (448) = field in which the **short code** is provided
  - ◆ PartyIDSource (447) = **P** (Short code identifier)
  - ◆ PartyRole (452) = **12** (Executing trader)
  - ◆ PartyRoleQualifier (2376) = **22** (Algorithm)
- **Case 3:** ExecutionwithinFirmShortCode for a Client
  - ◆ PartyID (448) = field in which the **short code** is provided
  - ◆ PartyIDSource (447) = **P** (Short code identifier)
  - ◆ PartyRole (452) = **3** (Client ID)
  - ◆ PartyRoleQualifier (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

### **ClientIdentificationShortCode**

**Presence Condition:** Conditional Group. Second use of Parties group in this message is assumed to be for indication of ClientIdentificationShortCode. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO. In case ExecutionwithinFirmShortCode is provided for Case 3 the same information is submitted a second time for either Case 4 or 5. In this case, if the information in the repeating group is not identical, the message is rejected.

For cases 4 and 5, explained below, values 1 and 2 available for PartyID (448) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** ClientIdentificationShortCode where the client is a legal entity
  - ◆ PartyID (448) = field in which the **short code** is provided
  - ◆ PartyIDSource (447) = **P** (Short code identifier)
  - ◆ PartyRole (452) = **3** (Client ID)
  - ◆ PartyRoleQualifier (2376) = **23** (Firm or legal entity)
- **Case 5:** ClientIdentificationShortCode where the client is not a legal entity
  - ◆ PartyID (448) = field in which the **short code** is provided

- ◆ *PartyIDSource* (447) = P (Short code identifier)
- ◆ *PartyRole* (452) = 3 (Client ID)
- ◆ *PartyRoleQualifier* (2376) = 24 (Natural person)

■ **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

- ◆ *OrderAttributeType* (2594) = 0 (Aggregated order)
- ◆ *OrderAttributeValue* (2595) = “Y”

■ **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

- ◆ *OrderAttributeType* (2594) = 1 (Pending allocation)
- ◆ *OrderAttributeValue* (2595) = “Y”

### 5.3.16.2 Message Structure

| Tag   | Field               | Short Description   | Format     | Len | Values   | Presence  |
|-------|---------------------|---|------------|-----|--|-----------|
|       | Header              |   |            |     |  |           |
| 11    | ClOrdID             | An identifier of a message assigned by the Client when submitting an order to the Exchange. | String     | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory |
| 48    | SecurityID          | Exchange identification code of the instrument/contract.                                    | String     | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory |
| 22    | SecurityIDSource    | Gives the type of SecurityID.   | String     | 1   | (See field description)                        | Mandatory |
| 453   | NoPartyIDs          | Number of PartyID entries.  | NumInGroup | 1   | From 1 to 2                                    | Mandatory |
| 448   | PartyID             | Party identifier/code. See PartyIDSource (447) and PartyRole (452).                         | String     | 11  | Alphanumeric                                   | Mandatory |
| 447   | PartyIDSource       | Source of PartyID value.  | Char       | 1   | (See field description)                        | Mandatory |
| 452   | PartyRole           | Identifies the type or role of the PartyID (448) specified.                                 | Int        | 3   | (See field description)                        | Mandatory |
| 2376  | PartyRoleQualifier  | Used to further qualify the value of PartyRole(452).  | Int        | 2   | (See field description)                        | Mandatory |
| 2593  | NoOrderAttributes   | Number of order attribute entries.  | NumInGroup | 1   | If provided, From 1 to 2                       | Optional  |
| 2594  | OrderAttributeType  | The type of order attribute.  | Int        | 1   | (See field description)                        | Optional  |
| 2595  | OrderAttributeValue | The value associated with the order attribute type specified in OrderAttributeType (2594).  | String     | 1   | (See field description)                        | Optional  |
| 20020 | EMM                 | Defines the Exchange Market Mechanism applied on each platform.                             | Int        | 2   | (See field description)                        | Mandatory |
| 10076 | LPActionCode        | Action the LP wants to apply on the specified instrument of warrant type.                   | Char       | 1   | (See field description)                        | Mandatory |
|       | Trailer             |   |            |     |  |           |

### 5.3.17 OrderMassStatusRequest (AF)

Client ► OEG

Available for:        

#### 5.3.17.1 Message Description

The **OrderMassStatusRequest** (AF) message is used by clients to request the status of a single target order (*OrderID* (37) or *OrigClOrdID* (41)):

- If there is a corresponding live order in the Order Book, the system will acknowledge the request with an **ExecutionReport** (8) message (*ExecType* = 'm') ;
- If there is no corresponding order in the Order Book, the system will reject the request with a **RequestAckMessage** (Uy) message (*ErrorCode* = '2101' - 'Unknown Order').

Please note that the field *MassStatusReqID* (584) is an identifier of the **OrderMassStatusRequest** (AF) message.

When an error is detected in any field of the message, the matching engine responds with the **RequestAckMessage** (Uy) message and the associated error code.

#### Components Usage within the Message

This message contains 2 components:

- The first component **Parties** is composed of the fields: *NoPartyIDs* (453), *PartyID* (448), *PartyIDSource* (447), *PartyRole* (452) and *PartyRoleQualifier* (2376) - this component is used to provide data for the *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCode* MIFID II field for risk management purposes such as kill switch;
- The second component **OrderAttributeGrp** is composed of the fields: *NoOrderAttributes* (2593), *OrderAttributeType* (2594), *OrderAttributeValue* (2595).

Use of the groups and values within them:

- *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCodes* should be provided via the **Parties** repeating group;
- The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group;

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

#### ExecutionwithinFirmShortCode

Presence Condition: Mandatory, first use of Parties group is assumed to be for indication of *ExecutionwithinFirmShortCode*

- **Case 1**: *ExecutionwithinFirmShortCode* where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 2**: *ExecutionwithFirmShortCode* where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided

- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **12** (Executing trader)
- ◆ *PartyRoleQualifier* (2376) = **22** (Algorithm)
- **Case 3:** ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

### ClientIdentificationShortCode

**Presence Condition:** Conditional Group. Second use of Parties group in this message is assumed to be for indication of ClientIdentificationShortCode. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO. In case ExecutionwithinFirmShortCode is provided for Case 3 the same information is submitted a second time for either Case 4 or 5. In this case, if the information in the repeating group is not identical, the message is rejected.

For cases 4 and 5, explained below, values 1 and 2 available for PartyID (448) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** ClientIdentificationShortCode where the client is a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity)
- **Case 5:** ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)
 

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType* (2594) = **0** (Aggregated order)
  - ◆ *OrderAttributeValue* (2595) = “Y”
- **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)
 

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType* (2594) = **1** (Pending allocation)
  - ◆ *OrderAttributeValue* (2595) = “Y”

### 5.3.17.2 Message Structure

| Tag | Field  | Short Description | Format | Len | Values | Presence |
|-----|--------|-------------------|--------|-----|--------|----------|
|     | Header |                   |        |     |        |          |

| Tag   | Field               | Short Description  | Format     | Len | Values   | Presence    |
|-------|---------------------|--|------------|-----|--|-------------|
| 48    | SecurityID          | Exchange identification code of the instrument/contract.   | String     | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory   |
| 22    | SecurityIDSource    | Gives the type of SecurityID.  | String     | 1   | (See field description)                        | Mandatory   |
| 37    | OrderID             | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.   | String     | 20  | From 0 to 2 <sup>64</sup> -2                   | Conditional |
| 41    | OrigClOrdID         | Identifies the Client Order ID of the original order, used to identify the previous order on cancel and replacement requests.                  | String     | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Conditional |
| 453   | NoPartyIDs          | Number of PartyID entries.   | NumInGroup | 1   | From 1 to 2                                    | Mandatory   |
| 448   | PartyID             | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String     | 11  | Alphanumeric                                   | Mandatory   |
| 447   | PartyIDSource       | Source of PartyID value.   | Char       | 1   | (See field description)                        | Mandatory   |
| 452   | PartyRole           | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description)                        | Mandatory   |
| 2376  | PartyRoleQualifier  | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description)                        | Mandatory   |
| 2593  | NoOrderAttributes   | Number of order attribute entries.   | NumInGroup | 1   | If provided, From 1 to 2                       | Optional    |
| 2594  | OrderAttributeType  | The type of order attribute.   | Int        | 1   | (See field description)                        | Optional    |
| 2595  | OrderAttributeValue | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String     | 1   | (See field description)                        | Optional    |
| 584   | MassStatusReqID     | Unique Identifier assigned by the client to the OrderMassStatusRequest (AF).   | String     | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 585   | MassStatusReqType   | Specifies the scope of the OrderMassStatusRequest (AF).  | Int        | 3   | (See field description)                        | Mandatory   |
| 20020 | EMM                 | Defines the Exchange Market Mechanism applied on each platform.  | Int        | 2   | (See field description)                        | Mandatory   |
| 21041 | OrderCategory       | 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". | Char       | 1   | (See field description)                        | Conditional |
|       | Trailer             |  |            |     |  |             |

### 5.3.18 OrderMassCancelRequest (q)

Client ► OEG

Available for:        

#### 5.3.18.1 Message Description

The **OrderMassCancelRequest (q)** 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 *MassCancelRequestType* (530) field defines the scope of the mass cancellation request:

- To cancel orders assigned to an instrument, *MassCancelRequestType* (530) must be set to '1' (cancel orders for a security) and the *SecurityID* (48) field must be populated with the symbol index of the instrument concerned.
- **Derivatives only:** To cancel orders assigned to instruments of a derivative contract, *MassCancelRequestType* (530) must be set to '1' and the *SecurityID* (48) field must be populated with the symbol index of the contract concerned.
- **Cash only:** To cancel orders assigned to instruments attached to a given trading group, *MassCancelRequestType* (530) must be set to 'A' (cancel orders for a security group) and the *ClassID* (9945) field must be populated with the code of the trading group concerned.

Optional additional criteria can be specified: *EMM* (20020)<sup>7</sup>, *Side* (54), *AccountCode* (6399), *LogicalAccessID* (21021), *TargetPartyID* (21095) and *OEPartitionID* (21019). Those filters are used to restrict the scope of the Mass Cancel request. (Please note that *OEPartitionID* (21019) is not taken into account if *LogicalAccessID* (21021) is not populated).

In the field *TargetPartyID* (21095) clients may specify the value of Execution Within Firm Short Code 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 as the Execution Within Firm Short Code within the **OrderMassCancelRequest** (q) message. When an error is detected in any field of the message, the matching engine responds with the **OrderCancelReject** (9) message and the associated error code.

For ETF Access platform, this message submission can be performed either by Euronext members or by Non Euronext buy-side RFQ (Request for Quote) trading issuers.

## Components Usage within the Message

This message contains 2 components:

- The first component **Parties** is composed of the fields: *NoPartyIDs* (453), *PartyID* (448), *PartyIDSource* (447), *PartyRole* (452) and *PartyRoleQualifier* (2376) - this component is used to provide data for the ExecutionwithinFirmShortCode and ClientIdentificationShortCode MIFID II field for risk management purposes such as kill switch;
- The second component **OrderAttributeGrp** is composed of the fields: *NoOrderAttributes* (2593), *OrderAttributeType* (2594), *OrderAttributeValue* (2595).

Use of the groups and values within them:

- ExecutionwithinFirmShortCode and ClientidentificationShortCodes should be provided via the **Parties** repeating group;
- The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group;

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

### ExecutionwithinFirmShortCode

Presence Condition: Mandatory, first use of Parties group is assumed to be for indication of ExecutionwithinFirmShortCode

- **Case 1:** ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided

<sup>7</sup> COB EMMs only.

- ◆ *PartyIDSource* (447) = **P** (Short code identifier)
- ◆ *PartyRole* (452) = **12** (Executing Trader)
- ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 2:** ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing trader)
  - ◆ *PartyRoleQualifier* (2376) = **22** (Algorithm)
- **Case 3:** ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

### ClientIdentificationShortCode

Presence Condition: Conditional Group. Second use of Parties group in this message is assumed to be for indication of ClientIdentificationShortCode. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO. In case ExecutionwithinFirmShortCode is provided for Case 3 the same information is submitted a second time for either Case 4 or 5. In this case, if the information in the repeating group is not identical, the message is rejected.

For cases 4 and 5, explained below, values 1 and 2 available for PartyID (448) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** ClientIdentificationShortCode where the client is a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity)
- **Case 5:** ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)
 

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType* (2594) = **0** (Aggregated order)
  - ◆ *OrderAttributeValue* (2595) = “Y”
- **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)
 

In this case the Parties group is not used. In its place client should provide data using the **OrderAttributeGrp** nested group as following:

  - ◆ *OrderAttributeType* (2594) = **1** (Pending allocation)



◆ *OrderAttributeValue (2595) = "Y"*

## Mass Cancellation Processing

From the Matching Engine perspective, the **OrderMassCancelRequest (q)** request is processed differently:

- On Cash segments, the inbound message queues are handled at the instrument book level; if the request concerns a 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.

As a consequence, a counterpart order can be sent to one of these 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 to be cancelled to match against the entering counterpart order *before* being actually cancelled.

- On Derivative segments, the inbound message queues are handled at the contract level; whether the request concerns a contract or an instrument, the request is queued directly into the contract's inbound queue.

As a consequence, it is not possible for a counterpart order sent on an instrument belonging to the contract *after* the mass cancellation request to match an order to be cancelled, as the counterpart order is queued and processed *after* the mass cancellation request completion.

From the Client perspective, the OEG introduces a mechanism that makes mass cancellation requests to be processed synchronously on both the Cash and Derivatives markets. This means that any request sent by an OE session having started a **OrderMassCancelRequest (q)** request processing will be processed *after* the completion of the mass cancellation processing, whatever the segment considered.

If needed, an OEG session dedicated to mass cancellations may be used to avoid blocking any other operations during the processing of such mass cancellations.

### 5.3.18.2 Message Structure

| Tag  | Field                  | Short Description   | Format       | Len | Values   | Presence    |
|------|------------------------|---|--------------|-----|--|-------------|
|      | Header                 |   |              |     |  |             |
| 60   | TransactTime           | Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).  | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 11   | ClOrdID                | An identifier of a message assigned by the Client when submitting an order to the Exchange.   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Mandatory   |
| 530  | MassCancelRequest Type | Specifies the scope of the OrderMassCancelRequest (q). The specified action is only applicable to the orders already present in the book. | Char         | 1   | (See field description)  | Mandatory   |
| 9945 | ClassID                | Instrument Group / Class Identifier.  | String       | 2   | Alphanumeric   | Conditional |
| 48   | SecurityID             | Exchange identification code of the instrument/contract.  | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Conditional |
| 22   | SecurityIDSource       | Gives the type of SecurityID.   | String       | 1   | (See field description)  | Conditional |
| 453  | NoPartyIDs             | Number of PartyID entries.  | NumInGroup   | 1   | From 1 to 2  | Mandatory   |
| 448  | PartyID                | Party identifier/code. See PartyIDSource (447) and PartyRole (452).   | String       | 11  | Alphanumeric   | Mandatory   |
| 447  | PartyIDSource          | Source of PartyID value.  | Char         | 1   | (See field description)  | Mandatory   |



| Tag   | Field               | Short Description  | Format     | Len | Values                       | Presence    |
|-------|---------------------|--|------------|-----|------------------------------|-------------|
| 452   | PartyRole           | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description)      | Mandatory   |
| 2376  | PartyRoleQualifier  | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description)      | Mandatory   |
| 21095 | TargetPartyID       | Identifier of the ShortCode used as a filter to reduce the scope of the OrderMassCancelRequest (r).  | String     | 11  | Alphanumeric                 | Optional    |
| 2593  | NoOrderAttributes   | Number of order attribute entries.   | NumInGroup | 1   | If provided, From 1 to 2     | Optional    |
| 2594  | OrderAttributeType  | The type of order attribute.   | Int        | 1   | (See field description)      | Optional    |
| 2595  | OrderAttributeValue | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String     | 1   | (See field description)      | Optional    |
| 20020 | EMM                 | Defines the Exchange Market Mechanism applied on each platform.  | Int        | 2   | (See field description)      | Optional    |
| 54    | Side                | Indicates the side of the order.   | Char       | 1   | (See field description)      | Optional    |
| 21019 | OEPartitionID       | Identifies uniquely an OE Optiq partition by which the engine is reached.  | Int        | 5   | From 0 to 2 <sup>16</sup> -2 | Optional    |
| 21021 | LogicalAccessID     | Identifier of the Logical Access.  | Int        | 10  | From 0 to 2 <sup>32</sup> -2 | Optional    |
| 6399  | AccountCode         | 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. | Int        | 2   | (See field description)      | Optional    |
| 21041 | OrderCategory       | 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".                         | Char       | 1   | (See field description)      | Conditional |
|       | Trailer             |  |            |     |                              |             |

### 5.3.19 OrderMassCancelReport (r)

Client ◀OEG

Available for:        

#### 5.3.19.1 Message Description

The **OrderMassCancelReport** (r) message is sent twice by the matching engine to confirm that the **OrderMassCancelRequest** (q) has been taken into account. The first **OrderMassCancelReport** (r) message has *TotalAffectedOrders* (533) set to -1, and repeats all the fields as they were submitted in the **OrderMassCancelReport** (r) request.

The client will receive a single **ExecutionReport** (8) message per successfully cancelled order (if any). Please note that **ExecutionReport** (8) 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 **OrderMassCancelReport** (r) message to notify them of the *TotalAffectedOrders* (533). The number provided by *TotalAffectedOrders* (533) 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).

### Components Usage within the Message

This message contains 1 component:

- The component **Parties** is composed of the fields: *NoPartyIDs (453)*, *PartyID (448)*, *PartyIDSource (447)*, *PartyRole (452)* and *PartyRoleQualifier (2376)* - this component is used to provide data for the *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCode* MIFID II field for risk management purposes such as kill switch;

Use of the groups and values within them:

- *ExecutionwithinFirmShortCode* and *ClientIdentificationShortCodes* should be provided via the **Parties** repeating group;

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

#### ExecutionwithinFirmShortCode

Presence Condition: Mandatory

- **Case 1:** *ExecutionwithinFirmShortCode* where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier (2376)* = **24** (Natural person)
- **Case 2:** *ExecutionwithinFirmShortCode* where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing trader)
  - ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)
- **Case 3:** *ExecutionwithinFirmShortCode* for a Client
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **3** (Client ID)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

#### 5.3.19.2 Message Structure


| Tag | Field  | Short Description | Format | Len | Values | Presence |
|-----|--------|-------------------|--------|-----|--------|----------|
|     | Header |                   |        |     |        |          |

| Tag   | Field                    | Short Description   | Format       | Len | Values   | Presence    |
|-------|--------------------------|---|--------------|-----|--|-------------|
| 21005 | ClientMessageSendingTime | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | OEGINFromMember          | 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).               | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTToME               | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                                | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | BookINTime               | 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)    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                       | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                              | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 11    | ClOrdID                  | An identifier of a message assigned by the Client when submitting an order to the Exchange.   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Mandatory   |
| 533   | TotalAffectedOrders      | Number of orders affected following a global request. It is set to -1 to indicate that the request is processed.  | Int          | 10  | From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1   | Mandatory   |
| 9945  | ClassID                  | Instrument Group / Class Identifier.  | String       | 2   | Alphanumeric   | Conditional |
| 48    | SecurityID               | Exchange identification code of the instrument/contract.  | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Conditional |
| 22    | SecurityIDSource         | Gives the type of SecurityID.   | String       | 1   | (See field description)  | Conditional |
| 20020 | EMM                      | Defines the Exchange Market Mechanism applied on each platform.   | Int          | 2   | (See field description)  | Conditional |
| 54    | Side                     | Indicates the side of the order.  | Char         | 1   | (See field description)  | Conditional |
| 21019 | OEPartitionID            | Identifies uniquely an OE Optiq partition by which the engine is reached.   | Int          | 5   | From 0 to 2 <sup>16</sup> -2   | Conditional |
| 21021 | LogicalAccessID          | Identifier of the Logical Access.   | Int          | 10  | From 0 to 2 <sup>32</sup> -2   | Conditional |

| Tag   | Field                 | Short Description  | Format            | Len | Values                               | Presence    |
|-------|-----------------------|--|-------------------|-----|--------------------------------------|-------------|
| 6399  | AccountCode           | 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. | Int               | 2   | (See field description)              | Conditional |
| 1369  | MassActionReportID    | Exchange allocated order mass cancel report ID.  | String            | 20  | Value provided by the Trading Engine | Mandatory   |
| 530   | MassCancelRequestType | Specifies the scope of the OrderMassCancelRequest (q). The specified action is only applicable to the orders already present in the book.                              | Char              | 1   | (See field description)              | Mandatory   |
| 531   | MassCancelResponse    | Specifies the action taken by counterparty order handling system as a result of the OrderMassCancelRequest (AF).   | Char              | 1   | (See field description)              | Mandatory   |
| 21041 | OrderCategory         | 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".                         | Char              | 1   | (See field description)              | Conditional |
| 21014 | AckQualifiers         | Field used to provide additional information on the corresponding order. A single field can contain up to 8 values, space delimited, provided in different positions.  | MultipleCharValue | 15  | (See field description)              | Conditional |
| 21095 | TargetPartyID         | Identifier of the ShortCode used as a filter to reduce the scope of the OrderMassCancelRequest (q).  | String            | 11  | Alphanumeric                         | Optional    |
| 453   | NoPartyIDs            | Number of PartyID entries.   | NumInGroup        | 1   | From 1 to 2                          | Mandatory   |
| 448   | PartyID               | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String            | 11  | Alphanumeric                         | Mandatory   |
| 447   | PartyIDSource         | Source of PartyID value.   | Char              | 1   | (See field description)              | Mandatory   |
| 452   | PartyRole             | Identifies the type or role of the PartyID (448) specified.  | Int               | 3   | (See field description)              | Mandatory   |
| 2376  | PartyRoleQualifier    | Used to further qualify the value of PartyRole (452).  | Int               | 2   | (See field description)              | Mandatory   |
|       | Trailer               |  |                   |     |                                      |             |

### 5.3.20 RFQNotification (U35)

Client ◀OEG

Available for: 

#### 5.3.20.1 Message Description

The **RFQNotification** (U35) message is sent by the matching engine to inform Liquidity Providers about the new RFQ characteristics previously received from an RFQ issuer (Client who sent the RFQ) through the **QuoteRequest** (R) message.

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

## 5.3.20.2 Message Structure

| Tag   | Field                    | Short Description  | Format            | Len | Values   | Presence    |
|-------|--------------------------|--|-------------------|-----|--|-------------|
|       | Header                   |  |                   |     |  |             |
| 21002 | BookINTime               | 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) | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                    | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                           | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTToME               | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                             | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 131   | QuoteReqID               | Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.   | String            | 20  | From 0 to 2 <sup>64</sup> -2   | Mandatory   |
| 48    | SecurityID               | Exchange identification code of the instrument/contract.   | String            | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory   |
| 22    | SecurityIDSource         | Gives the type of SecurityID.  | String            | 1   | (See field description)  | Mandatory   |
| 20020 | EMM                      | Defines the Exchange Market Mechanism applied on each platform.  | Int               | 2   | (See field description)  | Mandatory   |
| 38    | OrderQty                 | Total order quantity, per quantity unit. (To be calculated with Quantity Decimals).  | Qty               | 20  | From 0 to 2 <sup>64</sup> -2   | Mandatory   |
| 54    | Side                     | Indicates the side of the order.   | Char              | 1   | (See field description)  | Optional    |
| 20052 | DarkExecutionInstruction | Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions.                        | MultipleCharValue | 9   | (See field description)  | Mandatory   |
| 110   | MinQty                   | Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).  | Qty               | 20  | Value '0' by default and depending to a minimum value for the given instrument and/or market type  | Optional    |
| 21041 | OrderCategory            | 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".                     | Char              | 1   | (See field description)  | Conditional |

| Tag  | Field       | Short Description  | Format | Len | Values                  | Presence |
|------|-------------|--|--------|-----|-------------------------|----------|
| 6399 | AccountCode | 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. | Int    | 2   | (See field description) | Optional |
|      | Trailer     |  |        |     |                         |          |

### 5.3.21 RFQMatchingStatus (U36)

Client ◀OEG

Available for: FND

#### 5.3.21.1 Message Description

The **RFQMatchingStatus** (U36) message is sent by the matching engine to inform the RFQ issuer about the potential matching situation (*PotentialMatchingPrice* (21030), *PotentialMatchingQuantity* (21031), and *NumberOfLPs* (21034)) at the time the message is sent.


#### 5.3.21.2 Message Structure

| Tag   | Field            | Short Description  | Format       | Len | Values   | Presence    |
|-------|------------------|--|--------------|-----|--|-------------|
|       | Header           |  |              |     |  |             |
| 21002 | BookINTime       | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 21003 | BookOUTTime      | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME      | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                           | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTToME       | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                             | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 48    | SecurityID       | Exchange identification code of the instrument/contract.   | String       | 10  | From 0 to 2^32-2   | Mandatory   |
| 22    | SecurityIDSource | Gives the type of SecurityID.  | String       | 1   | (See field description)  | Mandatory   |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform.  | Int          | 2   | (See field description)  | Mandatory   |

| Tag   | Field                     | Short Description  | Format | Len | Values   | Presence    |
|-------|---------------------------|--|--------|-----|--|-------------|
| 131   | QuoteReqID                | Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.                           | String | 20  | From 0 to 2 <sup>64</sup> -2                   | Mandatory   |
| 21030 | PotentialMatchingPrice    | The Potential Matching Price indicates to the RFQ issuer the matching price for the "Potential Matching Quantity". | Price  | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Conditional |
| 21031 | PotentialMatchingQuantity | The potential matching quantity indicates the maximum volume that would be matched in case of an RFQ validation.   | Qty    | 20  | From 0 to 2 <sup>64</sup> -2                   | Mandatory   |
| 54    | Side                      | Indicates the side of the order.   | Char   | 1   | (See field description)                        | Mandatory   |
| 21034 | NumberOfLPs               | Indicates the number of LPs who sent an answer to a specific RFQ.  | Int    | 2   | From 0 to 2 <sup>8</sup> -2                    | Conditional |
|       | Trailer                   |  |        |     |  |             |

### 5.3.22 RFQLPMatchingStatus (U37)

Client ◀OEG

Available for: 

#### 5.3.22.1 Message Description

The **RFQLPMatchingStatus** (U37) message is sent by the matching engine to inform the Liquidity Provider about the potential matching quantity at the time the message is sent.

The field *PotentialMatchingQuantity* (21031) will contain the potential aggregated matching quantity for all the concerned LP's answers for the identified RFQ (provided by the *QuoteReqID* (131)).


#### 5.3.22.2 Message Structure

| Tag   | Field       | Short Description  | Format       | Len | Values   | Presence    |
|-------|-------------|--|--------------|-----|--|-------------|
|       | Header      |  |              |     |  |             |
| 21002 | BookINTime  | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 21003 | BookOUTTime | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                           | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |

| Tag   | Field                     | Short Description  | Format       | Len | Values   | Presence    |
|-------|---------------------------|--|--------------|-----|--|-------------|
| 7764  | OEGOUTToME                | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC). | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 48    | SecurityID                | Exchange identification code of the instrument/contract.   | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory   |
| 22    | SecurityIDSource          | Gives the type of SecurityID.  | String       | 1   | (See field description)  | Mandatory   |
| 20020 | EMM                       | Defines the Exchange Market Mechanism applied on each platform.  | Int          | 2   | (See field description)  | Mandatory   |
| 131   | QuoteReqID                | Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.   | String       | 20  | From 0 to 2 <sup>64</sup> -2   | Mandatory   |
| 21031 | PotentialMatchingQuantity | The potential matching quantity indicates the maximum volume that would be matched in case of an RFQ validation.                       | Qty          | 20  | From 0 to 2 <sup>64</sup> -2   | Mandatory   |
| 54    | Side                      | Indicates the side of the order.   | Char         | 1   | (See field description)  | Mandatory   |
|       | Trailer                   |  |              |     |  |             |

### 5.3.23 RequestForExecution (UM)

Client ◀OEG

Available for: 

#### 5.3.23.1 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 **MassQuote** (i) message for further explanations.

#### 5.3.23.2 Message Structure

| Tag   | Field            | Short Description   | Format | Len | Values                       | Presence  |
|-------|------------------|---|--------|-----|------------------------------|-----------|
|       | Header           |   |        |     |                              |           |
| 48    | SecurityID       | Exchange identification code of the instrument/contract.        | String | 10  | From 0 to 2 <sup>32</sup> -2 | Mandatory |
| 22    | SecurityIDSource | Gives the type of SecurityID.                                   | String | 1   | (See field description)      | Mandatory |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform. | Int    | 2   | (See field description)      | Mandatory |
|       | Trailer          |   |        |     |                              |           |



### 5.3.24 SecurityDefinitionRequest (c)

Client ► OEG

Available for: EQD IDD CMO

#### 5.3.24.1 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 **SecurityDefinition** (d) message. In case of positive acknowledgement, message provides the *SecurityID* (48) - 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 *SecuritySubType* (762) 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<sub>1</sub>, as a buy;
- Ratio 1 for the second leg L<sub>2</sub>, as a sell;
- Front leg expiry precedes second leg expiry.

This corresponds to the definition of the spread strategy L<sub>1</sub>-L<sub>2</sub>.

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 **SecurityDefinition** (d).

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 **SecurityDefinitionRequest** (c) 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 *LegSecurityType* (609) must be set to Cash, *LegSecurityID* (602) is filled with the *SecurityID* (48) - Symbol Index - of the Cash instrument, the Leg Price is populated with the Cash underlying price and the *LegRatioQty* (623) specifies the Delta.

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

#### 5.3.24.2 Message Structure

| Tag | Field                               | Short Description                              | Format | Len | Values   | Presence  |
|-----|-------------------------------------|--|--------|-----|--|-----------|
|     | Header                              |  |        |     |  |           |
| 320 | <a href="#">SecurityReqID</a>       | ID of a strategy security definition request   | String | 30  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory |
| 321 | <a href="#">SecurityRequestType</a> | Gives the type of Security Definition Request. | Int    | 2   | (See field description)                        | Mandatory |
| 48  | <a href="#">SecurityID</a>          | Exchange identification code of the Contract.  | String | 10  | From 0 to 2 <sup>32</sup> -2                   | Optional  |
| 22  | <a href="#">SecurityIDSource</a>    | Gives the type of SecurityID.                  | String | 1   | (See field description)                        | Optional  |
| 167 | <a href="#">SecurityType</a>        | Indicates type of security.                    | String | 4   | (See field description)                        | Mandatory |
| 762 | <a href="#">SecuritySubType</a>     | Exchange-recognized strategy code              | String | 1   | From 0 to 2 <sup>32</sup> -2                   | Mandatory |

| Tag   | Field               | Short Description   | Format       | Len | Values   | Presence  |
|-------|---------------------|---|--------------|-----|--|-----------|
| 555   | NoLegs              | Number of legs entries for the requested strategy.  | NumInGroup   | 2   | From 1 to 32   | Mandatory |
| 600   | LegSymbol           | Identifies the contract of this instrument by its Symbol Index.   | String       | 10  | From 0 to 2 <sup>32</sup> -2                           | Mandatory |
| 602   | LegSecurityID       | MDG proprietary identification code of the instrument leg for the strategy.   | String       | 10  | From 0 to 2 <sup>32</sup> -2                           | Mandatory |
| 603   | LegSecurityIDSource | Gives the type of LegSecurityID (602).  | String       | 1   | (See field description)                                | Mandatory |
| 609   | LegSecurityType     | Defines the type of instrument of the Leg   | String       | 11  | (See field description)                                | Mandatory |
| 21092 | LegLastTradingDate  | Last Trading Date of the leg of the strategy (text formatted as YYYYMMDD).  | LocalMktDate | 8   | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31 | Optional  |
| 612   | LegStrikePrice      | 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        | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1         | Optional  |
| 21091 | LegRatio            | Ratio of lots for the leg. For contingent trades, the delta.<br>■ 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).<br>■ 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. | Int          | 7   | From 0 to 2 <sup>32</sup> -2                           | Mandatory |
| 624   | LegSide             | Indicates the side of the trade leg.  | Char         | 1   | (See field description)                                | Mandatory |
| 1358  | LegPutOrCall        | Type of the option as leg.  | Int          | 1   | (See field description)                                | Optional  |
| 566   | LegPrice            | Price of corresponding strategy leg (to be calculated with the Price/Index Level Decimals).   | Price        | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1         | Optional  |
|       | Trailer             |   |              |     |  |           |

### 5.3.25 SecurityDefinition (d)

Client ◀ OEG

Available for: EQD IDD CMO

#### 5.3.25.1 Message Description

This message is used to respond to the client's inbound **SecurityDefinitionRequest** (c) message. It can be either a rejection of the request with an error code providing the reason of the rejection, or an acknowledgement of strategy creation (in the latter case, the error code is equal to 0).

If a client submits a creation for an already existing strategy, then the system acknowledges the request and returns the symbol 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).

#### 5.3.25.2 Message Structure

| Tag   | Field                    | Short Description   | Format       | Len | Values   | Presence    |
|-------|--------------------------|---|--------------|-----|--|-------------|
|       | Header                   |   |              |     |  |             |
| 21005 | ClientMessageSendingTime | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | OEGINFromMember          | 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).               | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTtoME               | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                                | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | BookINTime               | 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)    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                       | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |

| Tag  | Field            | Short Description  | Format       | Len | Values   | Presence    |
|------|------------------|--|--------------|-----|--|-------------|
| 7765 | OEGINFromME      | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC). | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 320  | SecurityReqID    | ID of a strategy security definition request   | String       | 30  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Optional    |
| 48   | SecurityID       | Exchange identification code of the instrument/contract.   | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Optional    |
| 22   | SecurityIDSource | Gives the type of SecurityID.  | String       | 1   | (See field description)  | Mandatory   |
| 9955 | ErrorCode        | Error code in case of rejection.   | Int          | 5   | From 0 to 2 <sup>16</sup> -2   | Conditional |
|      | Trailer          |  |              |     |  |             |

### 5.3.26 NewWholesaleOrder (U64)

Client ► OEG

Available for:   

#### 5.3.26.1 Message Description

This message enables 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* (21083) field. Optiq supports the following wholesale trade types:

- Large In Scale (LIS)
- Against Actuals (AA) – always entered as Cross
- Exchange For Swaps (EFS) – always entered as Cross.

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 initiator of a wholesale trade does not provide a *LISTransactionID* (21085) information. Optiq provides a *LISTransactionID* (21085) upon validation of this first intention through the **WholesaleOrderAck** (U65) message. The initiator then transmits the LIS Transaction ID to the (potentially multiple) counterpart(s). When counterparts (i.e. reactors) submit their intention, they must populate the *LISTransactionID* (21085) with the LIS Transaction ID provided by the initiator. Counterparts can submit their intentions either on one single leg or on the whole strategy.

Upon complete matching of wholesales, trades are communicated via **Execution Report** (8) messages.

Submissions are acknowledged via the **WholesaleOrderAck** (U65) message with *AckStatus* (5711) set to ‘0’ (Accept).

If a submission is to be rejected, an error code is provided, either through a **Reject** (3) message or through a **WholesaleOrderAck** (U65) message with *AckStatus* (5711) set to ‘1’ (Reject), depending on whether the error is technical (poorly formatted) or functional respectively.

A wholesale transaction relies on a predefined scheme provided by the client through the *SecuritySubType* (762) field - not provided for a single instrument, or exchange-recognized strategy code.

- For a wholesale transaction on a single instrument, the initiator provides either the buy or sell side, or both. In this case, no *SecuritySubType* (762) nor overall *Price* (44) or *OrderQty* (38) 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 (formerly strategy package or block), the initiator must provide the *SecuritySubType* (762) the overall *Price* (44) and *OrderQty* (38). 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 apply from the buy side perspective and the number and sequence of legs' *SymbolIndexes* as in the strategy must be respected.

The strategy structure must respect the strategy definition corresponding to its code specified with the *SecuritySubType* (762) field. It must also be defined from the buy side perspective.

| Wholesale Side (21082) | Leg Side (624) | Effective Order Side |
|------------------------|----------------|----------------------|
| Buy                    | Buy            | Bid                  |
| Buy                    | Sell           | Offer                |
| Sell                   | Buy            | Offer                |
| Sell                   | Sell           | Bid                  |

*Effective Order Side* reflects which field *BidSize* (134) or *OfferSize* (135) is used.

For LIS transactions 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 *WholesaleSide* (21082) in 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, in this case no reactor can submit messages to complete such wholesale order. If any information or quantity does not correspond between the submitted sides – the message will be fully rejected.
- If submitted as Buy or Sell with the field *WholesaleTradeType* (21083) 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 **ExecutionReport** (8) 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.

**Delta-Neutral Strategies:**

When submitting a Wholesale LIS transaction for Delta-Neutral (DN) strategies, this strategy must be created before submission of the NewWholesOrder, using the **SecurityDefinitionRequest (c)** message. In case of a Delta Neutral Strategy, Symbol Index of the Delta Neutral Strategy is to be provided in field *SecurityID* (48).

For creation of DN trades with a Future leg, using the SecurityDefinitionRequest (c) message, the field *SecurityID* (48) is populated with the symbol index of the Option contract. For creation of Stock contingent DN trades at least one leg of the created strategy the field *LegSecurityType* (609) must be set to 'Cash', *LegSecurityID* (602) is filled with the Symbol Index of the Cash instrument, *LegPrice* (566) is populated with the Cash underlying price and the *LegRatio* (21091) specifies the Delta.

For more details on creation of delta-neutral strategies please see the **SecurityDefinitionRequest (c)** message description.

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

- The Ratio and Price of the DN hedging leg (provided via field *Leg Price* (566) and *LegRatio* (21091) 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 for the reactor.
- 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.

**Use of the groups and values within them:**

- ExecutionwithinFirmShortCode should be provided via the **Parties** repeating group and applies to the whole message
- The additional MIFID II short code related identifiers for the reduction of risk for a commodity derivative are specified using the **OrderAttributeGrp** group and applies for the whole message
- The wholesale order for a strategies, may have different clearing and short code data provided per Side of the transaction for each individual leg of the strategy. To allow this the repeating group used to provide the MIFID II short codes, and clearing data are nested with the **NoLegs** group to allow to tie this information to the individual legs
- With noted exceptions ClientidentificationShortCodes should be provided via the **NestedParties** repeating group
- The NonExecutingBrokerShortCodes should be provided via the **NestedParties** repeating groups
- The repeating group **NestedParties** is also used to specify the Clearing Firm
- The repeating group **SideCrossOrdModGrp** is used to identify the leg side
- The repeating group **NoNestedOrderAttributeGrp** is used to specify ClientIdentificationShortCode for an Aggregated order ("AGGR") or short code still pending allocation ("PNAL") for each individual side of each leg

**MIFID II short code related data fields**

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

**ExecutionwithinFirmShortCode**

Presence Condition: Mandatory

- **Case 1:** Specifying ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier (2376)* = **24** (Natural person)
- **Case 2:** Specifying ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing trader)
  - ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)
- **Case 3:** Specifying ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **3** (Client ID)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

### ClientIdentificationShortCode

Presence Condition: Conditional Group. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO.

For cases 4 and 5, explained below, values 1 and 2 available for NestedPartyID (524) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** Specifying ClientIdentificationShortCode where the client is a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **23** (Firm or legal entity)
- **Case 5:** Specifying ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **24** (Natural person)
- **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)  
In this case the NestedParties group is not used. In its place client should provide data using the **NoNestedOrderAttributeGrp** as following:
  - ◆ *NestedOrderAttributeType (21087)* = **0** (Aggregated order)
  - ◆ *NestedOrderAttributeValue (21088)* = “Y”
- **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)  
In this case the Parties group is not used. In its place client should provide data using the **NoNestedOrderAttributeGrp** as following:



- ◆ *NestedOrderAttributeType* (21087) = **1** (Pending allocation)
- ◆ *NestedOrderAttributeValue* (21088) = “Y”

- **Case 8:** In case the message originates from a **DEA** (Direct Electronic Access) client, information should be provided as following:

- ◆ *OrderOrigination* (1724) = **5** (Order received from a direct access or sponsored access customer)

**AND**

- ◆ *ClientIdentificationShortCode* should be provided using one of the combinations provided in cases 4 through 7 above, as required

### InvestmentDecisionwithinFirmShortCode

Presence Condition: Conditional Group. Mandatory if (1) AccountCode is Liquidity Provider, Related Party or House, OR in case investment decision maker is an Algorithm (2) AND the message did not originate from DEA client.

- **Case 9:** Specifying InvestmentDecisionwithinShortCode where a natural person is responsible for the investment decision

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
- ◆ *NestedPartyRoleQualifier* (2384) = **24** (Natural person)

**AND**

- ◆ *OrderOrigination* (1724) is **NOT** set

- **Case 10:** Specifying InvestmentDecisionwithinShortCode where an algorithm was responsible for the investment decision

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
- ◆ *NestedPartyRoleQualifier* (2384) = **22** (Algorithm)

**AND**

- ◆ *OrderOrigination* (1724) is **NOT** set

### NonExecutionBrokerShortCode

Presence Condition: Optional

- **Case 11:** Specifying NonExecutionBrokerShortCode

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **26** (Correspondent broker)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity)

**Note:** For the Short Codes provided back to the client in the NoNestedPartyIDs repeating group, the side of the short codes provided can be identified as following:

1. When short codes are provided for both buy and sell side, then the buy side is provided as the first set of short codes, followed by the sell side.
2. If only one side is provided, then the side for which short codes are provided can be identified by the data populated for the field “BidQuoteID” (1747) or “OfferQuoteID” (1748). If only “OfferQuoteID” (1748) is provided, the the short codes are for the sell side, and if “BidQuoteID” (1747) is populated, then the short codes are provided for the buy side.



**Other Identifiers**

- For identification of an wholesale submitted for a commodity derivative or a warrant with a commodity underlying, if the potential trade would reduce the risk clients should also use **OrderAttributeGrp** repeating group, and identify the values as following:
  - ◆ *OrderAttributeType* (2594) = **3** (Risk Reduction Code)
  - ◆ *OrderAttributeValue* (2595) = “Y”

**Trading & Clearing related data fields**

- The component **SideCrossOrdModGrp** is a mandatory repeating group that must be repeated **once for Buy and Sell orders and twice for Cross orders**.
- The clearing Firm related fields should be specified as following:
  - **Clearing Firm ID:**
    - ◆ *NestedPartyID* (524) = field in which the **ID** is provided
    - ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
    - ◆ *NestedPartyRole* (538) = **4** (Clearing Firm)
    - ◆ *NestedPartyRoleQualifier* (2384) = **3** (General clearing member) OR **4** (Individual clearing member)
- When used in the inbound messages for specifying the Clearing Firm ID and the Client ID, the maximum length for the *NestedPartyID* (524) field is 8 characters long, and value may be alphanumeric.

**5.3.26.2 Message Structure**

| Tag   | Field              | Short Description   | Format     | Len | Values   | Presence    |
|-------|--------------------|---|------------|-----|--|-------------|
|       | Header             |   |            |     |  |             |
| 11    | ClOrdID            | An identifier of a message assigned by the Client when submitting an order to the Exchange. | String     | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 48    | SecurityID         | Exchange identification code of the instrument/contract.                                    | String     | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory   |
| 22    | SecurityIDSource   | Gives the type of SecurityID.   | String     | 1   | (See field description)                        | Mandatory   |
| 21083 | WholesaleTradeType | Type of the Wholesale trade.  | Char       | 1   | (See field description)                        | Mandatory   |
| 21085 | LISTransactionID   | ID that can be used to associated Executions belonging to the same LIS Transaction.         | String     | 10  | From 0 to 2 <sup>32</sup> -2                   | Conditional |
| 167   | SecurityType       | Indicates type of security.   | String     | 4   | (See field description)                        | Conditional |
| 762   | SecuritySubType    | Exchange-recognized strategy code   | String     | 1   | From 0 to 2 <sup>32</sup> -2                   | Conditional |
| 44    | Price              | Price per unit of quantity (to be calculated with the Price/Index Level Decimals).          | Price      | 8   | From -2 <sup>63</sup> -1 to 2 <sup>63</sup> -1 | Mandatory   |
| 53    | Quantity           | Number of traded or ordered units (to be calculated with Quantity Decimals).                | Qty        | 20  | From 0 to 2 <sup>64</sup> -2                   | Mandatory   |
| 453   | NoPartyIDs         | Number of PartyID entries.  | NumInGroup | 1   | Always set to 1                                | Mandatory   |
| 448   | PartyID            | Party identifier/code. See PartyIDSource (447) and PartyRole (452).                         | String     | 11  | Alphanumeric                                   | Mandatory   |
| 447   | PartyIDSource      | Source of PartyID value.  | Char       | 1   | (See field description)                        | Mandatory   |
| 452   | PartyRole          | Identifies the type or role of the PartyID (448) specified.                                 | Int        | 3   | (See field description)                        | Mandatory   |

| Tag   | Field                | Short Description  | Format       | Len | Values   | Presence    |
|-------|----------------------|--|--------------|-----|--|-------------|
| 2376  | PartyRoleQualifier   | Used to further qualify the value of PartyRole(452).   | Int          | 2   | (See field description)                                | Mandatory   |
| 1724  | OrderOrigination     | Identifies the origin of the order.  | Int          | 1   | (See field description)                                | Conditional |
| 2593  | NoOrderAttributes    | Number of order attribute entries.   | NumInGroup   | 1   | If provided, Always set to 1                           | Optional    |
| 2594  | OrderAttributeType   | The type of order attribute.   | Int          | 1   | (See field description)                                | Optional    |
| 2595  | OrderAttributeValue  | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String       | 1   | (See field description)                                | Optional    |
| 21082 | WholesaleSide        | Indicates the side of the Wholesale order.   | Char         | 1   | (See field description)                                | Mandatory   |
| 21096 | 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.   | Int          | 1   | 0 = False<br>1 = True                                  | Optional    |
| 21803 | MessagePriceNotation | 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. | Int          | 2   | 1 = Price<br>2 = Spread in basis points<br>3 = Spread  | Conditional |
| 555   | NoLegs               | Number of legs entries for the requested strategy.   | NumInGroup   | 2   | From 1 to 32   | Mandatory   |
| 600   | LegSymbol            | Identifies the contract of this instrument by its Symbol Index.  | String       | 10  | From 0 to 2^32-2                                       | Mandatory   |
| 602   | LegSecurityID        | MDG proprietary identification code of the instrument leg for the strategy.  | String       | 10  | From 0 to 2^32-2                                       | Mandatory   |
| 603   | LegSecurityIDSource  | Gives the type of LegSecurityID (602).   | String       | 1   | (See field description)                                | Conditional |
| 609   | LegSecurityType      | Defines the type of instrument of the Leg  | String       | 11  | (See field description)                                | Mandatory   |
| 21092 | LegLastTradingDate   | Last Trading Date of the leg of the strategy (text formatted as YYYYMMDD).   | LocalMktDate | 8   | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31 | Conditional |
| 1358  | LegPutOrCall         | Type of the option as leg.   | Int          | 1   | (See field description)                                | Conditional |
| 566   | LegPrice             | Price of corresponding strategy leg (to be calculated with the Price/Index Level Decimals).  | Price        | 20  | From -2^63+1 to 2^63-1                                 | Mandatory   |
| 624   | LegSide              | Indicates the side of the trade leg.   | Char         | 1   | (See field description)                                | Conditional |
| 134   | BidSize              | Quote bid quantity, (To be calculated with Quantity Decimals).   | Qty          | 20  | From 0 to 2^64-1                                       | Conditional |
| 135   | OfferSize            | Quote offer quantity, (To be calculated with Quantity Decimals).   | Qty          | 20  | From 0 to 2^64-1                                       | Conditional |
| 21089 | BidNonExecClID       | This field will be used as unique client Key for the Bid side. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc.  | Int          | 5   | From 0 to 2^16-1                                       | Optional    |

| Tag   | Field               | Short Description   | Format     | Len | Values   | Presence    |
|-------|---------------------|---|------------|-----|--|-------------|
| 21090 | OfferNonExecClID    | This field will be used as unique client Key for the offer side. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc.   | Int        | 5   | From 0 to 2 <sup>16</sup> -1                   | Optional    |
| 612   | LegStrikePrice      | 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      | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Conditional |
| 21091 | LegRatio            | Ratio of lots for the leg. For contingent trades, the delta.<br>■ 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).<br>■ 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. | Int        | 7   | From 0 to 2 <sup>32</sup> -2                   | Conditional |
| 552   | NoSides             | Number of sides.  | NumInGroup | 1   | From 1 to 2                                    | Conditional |
| 54    | Side                | Indicates the side of the order.  | Char       | 1   | (See field description)                        | Mandatory   |
| 577   | ClearingInstruction | Clearing Instruction.   | Int        | 4   | (See field description)                        | Optional    |
| 58    | Text                | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.  | String     | 18  | Alphanumeric                                   | Optional    |
| 1     | Account             | Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.   | String     | 12  | Alphanumeric                                   | Optional    |
| 6399  | AccountCode         | 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.  | Int        | 2   | (See field description)                        | Mandatory   |
| 9941  | TechnicalOrdType    | 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.   | Char       | 1   | (See field description)                        | Optional    |

| Tag   | Field                     | Short Description  | Format            | Len | Values                       | Presence    |
|-------|---------------------------|--|-------------------|-----|------------------------------|-------------|
| 7443  | PostingAction             | Open Close Indicator, Posting action. This field is part of the clearing aggregate.  | MultipleCharValue | 19  | (See field description)      | Optional    |
| 29    | LastCapacity              | Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.   | Char              | 1   | (See field description)      | Mandatory   |
| 21804 | LongClientID              | 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. | String            | 16  | (See field description)      | Optional    |
| 539   | NoNestedPartyIDs          | Number of NestedPartyID entries.   | NumInGroup        | 1   | From 1 to 4                  | Conditional |
| 524   | NestedPartyID             | Party identifier/code within a repeating group. See NestedPartyIDSource (525) and NestedPartyRole (538).   | String            | 11  | Alphanumeric                 | Conditional |
| 525   | NestedPartyIDSource       | Source of NestedPartyID (524) value.   | Char              | 1   | (See field description)      | Conditional |
| 538   | NestedPartyRole           | Identifies the type or role of the NestedPartyID (524) specified.  | Int               | 3   | (See field description)      | Conditional |
| 2384  | NestedPartyRoleQualifier  | Used to further qualify the value of NestedPartyRole(538).   | Int               | 2   | (See field description)      | Conditional |
| 21086 | NoNestedOrderAttributes   | Number of NoNestedOrderAttributes entries.   | NumInGroup        | 1   | If provided, Always set to 1 | Optional    |
| 21087 | NestedOrderAttributeType  | Represents the type of order attribute.  | Int               | 1   | (See field description)      | Optional    |
| 21088 | NestedOrderAttributeValue | The value associated with the order attribute type specified in NestedOrderAttributeType (21087).  | String            | 1   | (See field description)      | Optional    |
|       | Trailer                   |  |                   |     |                              |             |

### 5.3.27 WholesaleOrderAck (U65)

Client ◀ OEG

Available for:   

#### 5.3.27.1 Message Description

This message is used to acknowledge or indicate rejection of a client's inbound **NewWholesaleOrder** (U64) 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 **ExecutionReport** (8) message.

If that wholesale order is sent by the initiator of the trade (i.e. without *LISTransactionID* (21085)), the system provides a *LISTransactionID* (21085) upon validation of this first intention through this message. It is up to the initiator to provide that *LISTransactionID* (21085) to the counterparts for them to complete the trade (by providing the *LISTransactionID* (21085)), either by sending an order against a single leg, or by sending an order against the whole strategy.

The field *AckStatus* (5711) indicates if the message is sent as an acknowledgement or rejection, and in case of a rejection the *ErrorCode* (9955) 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.

Use of the groups and values within them:

- ExecutionwithinFirmShortCode should be provided via the **Parties** repeating group
- With noted exceptions ClientidentificationShortCodes should be provided via the **NestedParties** repeating group
- The NonExecutingBrokerShortCodes should be provided via the **NestedParties** repeating groups
- The repeating group **NestedParties** is also used to specify the Clearing Firm
- The additional MIFID II short code related identifiers are specified using the **OrderAttributeGrp** group – used to provide the identification of an wholesale submitted for a commodity derivative or a warrant with a commodity underlying
- The repeating group **SideCrossOrdModGrp** is used to identify the leg side
- The repeating group **NoNestedOrderAttributeGrp** is used to specify ClientidentificationShortCode for an Aggregated leg (“AGGR”) or for a leg for which the short code is still pending allocation (“PNAL”)

**MIFID II short code related data fields**

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

**ExecutionwithinFirmShortCode**

Presence Condition: Mandatory

- **Case 1:** Specifying ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction

- ◆ *PartyID (448)* = field in which the **short code** is provided
- ◆ *PartyIDSource (447)* = **P** (Short code identifier)
- ◆ *PartyRole (452)* = **12** (Executing Trader)
- ◆ *PartyRoleQualifier (2376)* = **24** (Natural person)

- Case 2:** Specifying ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction

- ◆ *PartyID(448)* = field in which the **short code** is provided
- ◆ *PartyIDSource (447)* = **P** (Short code identifier)
- ◆ *PartyRole (452)* = **12** (Executing trader)
- ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)

- **Case 3:** Specifying ExecutionwithinFirmShortCode for a Client

- ◆ *PartyID (448)* = field in which the **short code** is provided
- ◆ *PartyIDSource (447)* = **P** (Short code identifier)
- ◆ *PartyRole (452)* = **3** (Client ID)
- ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

**ClientIdentificationShortCode**

Presence Condition: Conditional Group. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO.

- **Case 4:** Specifying ClientIdentificationShortCode where the client is a legal entity

- ◆ *NestedPartyID (524)* = field in which the **short code** is provided
- ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
- ◆ *NestedPartyRole (538)* = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier (2384)* = **23** (Firm or legal entity)

- **Case 5:** Specifying ClientIdentificationShortCode where the client is not a legal entity

- ◆ *NestedPartyID (524)* = field in which the **short code** is provided
- ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
- ◆ *NestedPartyRole (538)* = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier (2384)* = **24** (Natural person)

- **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated leg or order ("AGGR" value)

In this case the NestedParties group is not used. In its place client should provide data using the **NoNestedOrderAttributeGrp** as following:

- ◆ *NestedOrderAttributeType (21087)* = **0** (Aggregated order)
- ◆ *OrderAttributeValue (21088)* = "Y"

- **Case 7:** Specifying ClientIdentificationShortCode for an leg or order for which short code is still pending allocation ("PNAL" value)

In this case the Parties group is not used. In its place client should provide data using the **NoNestedOrderAttributeGrp** as following:

- ◆ *OrderAttributeType* (21087) = **1** (Pending allocation)
- ◆ *OrderAttributeValue* (21088) = “Y”

- **Case 8:** In case the message originates from a **DEA** (Direct Electronic Access) client, information should be provided as following:

- ◆ *OrderOrigination* (1724) = **5** (Order received from a direct access or sponsored access customer)

**AND**

- ◆ *ClientIdentificationShortCode* should be provided using one of the combinations provided in cases 4 through 7 above, as required

### InvestmentDecisionwithinFirmShortCode

Presence Condition: Conditional Group. Mandatory if (1) AccountCode is Liquidity Provider, Related Party or House, OR in case investment decision maker is an Algorithm (2) AND the message did not originate from DEA client.

- **Case 9:** Specifying InvestmentDecisionwithinShortCode where a natural person is responsible for the investment decision

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
- ◆ *NestedPartyRoleQualifier* (2384) = **24** (Natural person)

**AND**

- ◆ *OrderOrigination* (1724) is **NOT** set

- **Case 10:** Specifying InvestmentDecisionwithinShortCode where an algorithm was responsible for the investment decision

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
- ◆ *NestedPartyRoleQualifier* (2384) = **22** (Algorithm)

**AND**

- ◆ *OrderOrigination* (1724) is **NOT** set

### NonExecutionBrokerShortCode

Presence Condition: Optional

- **Case 11:** Specifying NonExecutionBrokerShortCode

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **26** (Correspondent broker)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity)

### Other Identifiers

- For identification of an wholesale submitted for a commodity derivative or a warrant with a commodity underlying, if the potential trade would reduce the risk clients should also use **OrderAttributeGrp** repeating group, and identify the values as following:

- ◆ *OrderAttributeType* (2594) = **3** (Risk Reduction Code)
- ◆ *OrderAttributeValue* (2595) = “Y”

For the short codes provided back to the client in the NoNestedPartyIDs repeating group, the side of the short codes provided can be identified as following:

- When short codes are provided for both buy and sell side, then the buy side is provided as the first set of short codes, followed by the sell side.
- 2) If only one side is provided, then the side for which short codes are provided can be identified by the data populated for the field BidQuoteID (1747) or OfferQuoteID (1748). If only OfferQuoteID (1748) is provided, then the short codes are for the sell side, and if BidQuoteID (1747) is populated, then the short codes are provided for the buy side.

### 5.3.27.2 Message Structure

| Tag   | Field                    | Short Description   | Format       | Len | Values   | Presence    |
|-------|--------------------------|---|--------------|-----|--|-------------|
|       | Header                   |   |              |     |  |             |
| 21005 | ClientMessageSendingTime | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | OEGINFromMember          | 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).               | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | BookINTime               | 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)    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                       | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                              | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |



| Tag   | Field               | Short Description  | Format       | Len | Values   | Presence    |
|-------|---------------------|--|--------------|-----|--|-------------|
| 7764  | OEOUTToME           | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                                     | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 11    | ClOrdID             | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String       | 20  | From -2^63+1 to 2^63-1   | Conditional |
| 48    | SecurityID          | Exchange identification code of the instrument/contract.   | String       | 10  | From 0 to 2^32-2   | Mandatory   |
| 22    | SecurityIDSource    | Gives the type of SecurityID.  | String       | 1   | (See field description)  | Mandatory   |
| 21083 | WholesaleTradeType  | Type of the Wholesale trade.   | Char         | 1   | (See field description)  | Mandatory   |
| 21085 | LISTransactionID    | ID that can be used to associated Executions belonging to the same LIS Transaction.  | String       | 10  | From 0 to 2^32-2   | Conditional |
| 167   | SecurityType        | Indicates type of security.  | String       | 4   | (See field description)  | Conditional |
| 762   | SecuritySubType     | Exchange-recognized strategy code  | String       | 1   | From 0 to 2^32-2   | Conditional |
| 44    | 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 |
| 53    | Quantity            | Number of traded or ordered units (to be calculated with Quantity Decimals).   | Qty          | 20  | From 0 to 2^64-2   | Conditional |
| 453   | NoPartyIDs          | Number of PartyID entries.   | NumInGroup   | 1   | Always set to 1  | Mandatory   |
| 448   | PartyID             | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String       | 11  | Alphanumeric   | Mandatory   |
| 447   | PartyIDSource       | Source of PartyID value.   | Char         | 1   | (See field description)  | Mandatory   |
| 452   | PartyRole           | Identifies the type or role of the PartyID (448) specified.  | Int          | 3   | (See field description)  | Mandatory   |
| 2376  | PartyRoleQualifier  | Used to further qualify the value of PartyRole(452).   | Int          | 2   | (See field description)  | Mandatory   |
| 1724  | OrderOrigination    | Identifies the origin of the order.  | Int          | 1   | (See field description)  | Conditional |
| 2593  | NoOrderAttributes   | Number of order attribute entries.   | NumInGroup   | 1   | If provided, Always set to 1   | Optional    |
| 2594  | OrderAttributeType  | The type of order attribute.   | Int          | 1   | (See field description)  | Optional    |
| 2595  | OrderAttributeValue | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String       | 1   | (See field description)  | Optional    |
| 21082 | WholesaleSide       | Indicates the side of the Wholesale order.   | Char         | 1   | (See field description)  | Mandatory   |
| 21096 | 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. | Int          | 1   | 0 = False<br>1 = True  | Optional    |
| 5711  | AckStatus           | Indicates if incoming message is accepted or rejected.   | Char         | 1   | (See field description)  | Mandatory   |

| Tag   | Field                     | Short Description   | Format            | Len | Values                   | Presence    |
|-------|---------------------------|---|-------------------|-----|--------------------------|-------------|
| 21014 | AckQualifiers             | Field used to provide additional information on the corresponding order. A single field can contain up to 8 values, space delimited, provided in different positions. | MultipleCharValue | 15  | (See field description)  | Mandatory   |
| 9955  | ErrorCode                 | Error code in case of rejection.  | Int               | 5   | From 0 to 2^16-2         | Conditional |
| 555   | NoLegs                    | Number of legs entries for the requested strategy.  | NumInGroup        | 2   | From 1 to 7              | Mandatory   |
| 600   | LegSymbol                 | Identifies the contract of this instrument by its Symbol Index.   | String            | 10  | From 0 to 2^32-2         | Mandatory   |
| 602   | LegSecurityID             | MDG proprietary identification code of the instrument leg for the strategy.   | String            | 10  | From 0 to 2^32-2         | Mandatory   |
| 603   | LegSecurityIDSource       | Gives the type of LegSecurityID (602).  | String            | 1   | (See field description)  | Mandatory   |
| 1747  | BidQuoteID                | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.  | String            | 20  | From 0 to 2^64-2         | Conditional |
| 1748  | OfferQuoteID              | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.  | String            | 20  | From 0 to 2^64-2         | Conditional |
| 21089 | BidNonExecClID            | This field will be used as unique client Key for the Bid side. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc.     | Int               | 5   | From 0 to 2^16-1         | Optional    |
| 21090 | OfferNonExecClID          | This field will be used as unique client Key for the offer side. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc.   | Int               | 5   | From 0 to 2^16-1         | Optional    |
| 624   | LegSide                   | Indicates the side of the trade leg.  | Char              | 1   | (See field description)  | Conditional |
| 21084 | LegErrorCode              | Error code of the Leg in case of rejection.   | Int               | 5   | From 0 to 2^16-2         | Conditional |
| 539   | NoNestedPartyIDs          | Number of NestedPartyID entries.  | NumInGroup        | 1   | From 1 to 10             | Conditional |
| 524   | NestedPartyID             | Party identifier/code within a repeating group. See NestedPartyIDSource (525) and NestedPartyRole (538).  | String            | 11  | Alphanumeric             | Conditional |
| 525   | NestedPartyIDSource       | Source of NestedPartyID (524) value.  | Char              | 1   | (See field description)  | Conditional |
| 538   | NestedPartyRole           | Identifies the type or role of the NestedPartyID (524) specified.   | Int               | 3   | (See field description)  | Conditional |
| 2384  | NestedPartyRoleQualifier  | Used to further qualify the value of NestedPartyRole(538).  | Int               | 2   | (See field description)  | Conditional |
| 21086 | NoNestedOrderAttributes   | Number of NoNestedOrderAttributes entries.  | NumInGroup        | 1   | If provided, From 1 to 2 | Optional    |
| 21087 | NestedOrderAttributeType  | Represents the type of order attribute.   | Int               | 1   | (See field description)  | Optional    |
| 21088 | NestedOrderAttributeValue | The value associated with the order attribute type specified in NestedOrderAttributeType (21087).   | String            | 1   | (See field description)  | Optional    |
|       | Trailer                   |   |                   |     |                          |             |

### 5.3.28 RequestForImpliedExecution (U66)

Client ► OEG

Available for:   

#### 5.3.28.1 Message Description

The **RequestForImpliedExecution** (U66) message may be used by clients to trigger the generation of Strategy Implieds in a strategy book to increase matching opportunities of 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 *OrderID* (37) field should be populated with the ID of this already existing order in the strategy order book.

Upon reception of the query, Optiq will trigger generation of Strategy 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 have Implieds enabled, which allows generation of Implieds in the Strategy book.

The RFIE message is acknowledged and rejected by a **RequestAckMessage** (Uy) message.

#### Use of the groups and values within them:

- ExecutionwithinFirmShortCode should be provided via the **Parties** repeating group and applies to the whole message
- The additional MIFID II short code related identifiers for the reduction of risk for a commodity derivative are specified using the **OrderAttributeGrp** group and applies for the whole message
- With noted exceptions ClientidentificationShortCodes should be provided via the **NestedParties** repeating group
- The repeating group **NestedParties** is also used to specify the Clearing Firm

#### MIFID II short code related data fields

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

##### ExecutionwithinFirmShortCode

Presence Condition: Mandatory

- **Case 1:** Specifying ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing Trader)
  - ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)

- **Case 2:** Specifying ExecutionwithinFirmShortCode where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **12** (Executing trader)
  - ◆ *PartyRoleQualifier (2376)* = **22** (Algorithm)
- **Case 3:** Specifying ExecutionwithinFirmShortCode for a Client
  - ◆ *PartyID (448)* = field in which the **short code** is provided
  - ◆ *PartyIDSource (447)* = **P** (Short code identifier)
  - ◆ *PartyRole (452)* = **3** (Client ID)
  - ◆ *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

### **ClientIdentificationShortCode**

Presence Condition: Conditional Group. This field is required for DEA User in every inbound message, or when AccountCode (6399) = Client or RO.

For cases 4 and 5, explained below, values 1 and 2 available for NestedPartyID (524) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** Specifying ClientIdentificationShortCode where the client is a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **23** (Firm or legal entity)
- **Case 5:** Specifying ClientIdentificationShortCode where the client is not a legal entity
  - ◆ *NestedPartyID (524)* = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource (525)* = **P** (Short code identifier)
  - ◆ *NestedPartyRole (538)* = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier (2384)* = **24** (Natural person)
- **Case 6:** Specifying ClientIdentificationShortCode for an Aggregated order (“AGGR” value)  
In this case the NestedParties group is not used. In its place client should provide data using the **NoNestedOrderAttributeGrp** as following:
  - ◆ *NestedOrderAttributeType (21087)* = **0** (Aggregated order)
  - ◆ *NestedOrderAttributeValue (21088)* = “Y”
- **Case 7:** Specifying ClientIdentificationShortCode for an order for which short code is still pending allocation (“PNAL” value)  
In this case the Parties group is not used. In its place client should provide data using the **NoNestedOrderAttributeGrp** as following:
  - ◆ *NestedOrderAttributeType (21087)* = **1** (Pending allocation)
  - ◆ *NestedOrderAttributeValue (21088)* = “Y”
- **Case 8:** In case the message originates from a **DEA** (Direct Electronic Access) client, information should be provided as following:
  - ◆ *OrderOrigination (1724)* = **5** (Order received from a direct access or sponsored access customer)

**AND**

- ◆ *ClientIdentificationShortCode* should be provided using one of the combinations provided in cases 4 through 7 above, as required

### Other Identifiers

- For identification of an wholesale submitted for a commodity derivative or a warrant with a commodity underlying, if the potential trade would reduce the risk clients should also use **OrderAttributeGrp** repeating group, and identify the values as following:
  - ◆ *OrderAttributeType* (2594) = **3** (Risk Reduction Code)
  - ◆ *OrderAttributeValue* (2595) = **"Y"**

### 5.3.28.2 Message Structure

| Tag   | Field                    | Short Description  | Format     | Len | Values   | Presence    |
|-------|--------------------------|--|------------|-----|--|-------------|
|       | Header                   |  |            |     |  |             |
| 11    | ClOrdID                  | An identifier of a message assigned by the Client when submitting an order to the Exchange.              | String     | 30  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 48    | SecurityID               | Exchange identification code of the instrument/contract.   | String     | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory   |
| 22    | SecurityIDSource         | Gives the type of SecurityID.  | String     | 1   | (See field description)                        | Mandatory   |
| 20020 | EMM                      | Defines the Exchange Market Mechanism applied on each platform.  | Int        | 2   | (See field description)                        | Mandatory   |
| 37    | OrderID                  | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.               | String     | 20  | From 0 to 2 <sup>64</sup> -2                   | Mandatory   |
| 453   | NoPartyIDs               | Number of PartyID entries.   | NumInGroup | 1   | Always set to 1                                | Mandatory   |
| 448   | PartyID                  | Party identifier/code. See PartyIDSource (447) and PartyRole (452).                                      | String     | 11  | Alphanumeric                                   | Mandatory   |
| 447   | PartyIDSource            | Source of PartyID value.   | Char       | 1   | (See field description)                        | Mandatory   |
| 452   | PartyRole                | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description)                        | Mandatory   |
| 2376  | PartyRoleQualifier       | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description)                        | Mandatory   |
| 1724  | OrderOrigination         | Identifies the origin of the order.  | Int        | 1   | (See field description)                        | Conditional |
| 2593  | NoOrderAttributes        | Number of order attribute entries.   | NumInGroup | 1   | If provided, From 1 to 2                       | Optional    |
| 2594  | OrderAttributeType       | The type of order attribute.   | Int        | 1   | (See field description)                        | Optional    |
| 2595  | OrderAttributeValue      | The value associated with the order attribute type specified in OrderAttributeType (2594).               | String     | 1   | (See field description)                        | Optional    |
| 539   | NoNestedPartyIDs         | Number of NestedPartyID entries.   | NumInGroup | 1   | If provided, always 1                          | Conditional |
| 524   | NestedPartyID            | Party identifier/code within a repeating group. See NestedPartyIDSource (525) and NestedPartyRole (538). | String     | 11  | Alphanumeric                                   | Conditional |
| 525   | NestedPartyIDSource      | Source of NestedPartyID (524) value.   | Char       | 1   | (See field description)                        | Conditional |
| 538   | NestedPartyRole          | Identifies the type or role of the NestedPartyID (524) specified.  | Int        | 3   | (See field description)                        | Conditional |
| 2384  | NestedPartyRoleQualifier | Used to further qualify the value of NestedPartyRole(538).   | Int        | 2   | (See field description)                        | Conditional |
|       | Trailer                  |  |            |     |  |             |

### 5.3.29 CrossOrder (U67)

Client ► OEG

Available for:   

#### 5.3.29.1 Message Description

The **CrossOrder** (U67) message is used to submit orders within the "Request for Cross" (RFC) trading facility, and available for designated products.

The 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 code information is always provided within the **SideCrossOrdModGrp** group in the field *AccountCode* (6399).

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* (20020). This EMM provides the timetable and tick table used for wholesales on a per contract basis.

Cross Order messages may be submitted only during Continuous.

The CrossOrder (U67) message is acknowledged or rejected by an **ExecutionReport** (08).

#### Use of the groups and values within them:

- ExecutionwithinFirmShortCode should be provided via the **Parties** repeating group and applies to the whole message
- The additional MIFID II short code related identifiers for the reduction of risk for a commodity derivative are specified using the **OrderAttributeGrp** group and applies for the whole message
- The wholesale order for a strategies, may have different clearing and short code data provided per Side of the transaction for each individual leg of the strategy. To allow this the repeating group used to provide the MIFID II short codes, and clearing data are nested with the **NoLegs** group to allow to tie this information to the individual legs
- With noted exceptions ClientidentificationShortCodes should be provided via the **NestedParties** repeating group
- The NonExecutingBrokerShortCodes should be provided via the **NestedParties** repeating groups
- The repeating group **NestedParties** is also used to specify the Clearing Firm
- The repeating group **SideCrossOrdModGrp** is used to identify the leg side
- The repeating group **NoNestedOrderAttributeGrp** is used to specify ClientidentificationShortCode for an Aggreagted order ("AGGR") or short code still pending allocation ("PNAL") for each individual side of each leg

#### MIFID II short code related data fields

Examples of individual cases and some exceptions for the use of these groups are provided below. For the full list of possible values for each field clients should review the individual field descriptions.

#### ExecutionwithinFirmShortCode

Presence Condition: Mandatory

- **Case 1:** Specifying ExecutionwithinFirmShortCode where a natural person is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)

- ◆ *PartyRole* (452) = **12** (Executing Trader)
- ◆ *PartyRoleQualifier* (2376) = **24** (Natural person)
- **Case 2:** Specifying *ExecutionwithinFirmShortCode* where an algorithm is responsible for the execution of the transaction
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **12** (Executing trader)
  - ◆ *PartyRoleQualifier* (2376) = **22** (Algorithm)
- **Case 3:** Specifying *ExecutionwithinFirmShortCode* for a Client
  - ◆ *PartyID* (448) = field in which the **short code** is provided
  - ◆ *PartyIDSource* (447) = **P** (Short code identifier)
  - ◆ *PartyRole* (452) = **3** (Client ID)
  - ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity) OR **24** (Natural person)

### ClientIdentificationShortCode

Presence Condition: Conditional Group. This field is required for DEA User in every inbound message, or when *AccountCode* (6399) = Client or RO.

For cases 4 and 5, explained below, values 1 and 2 available for *NestedPartyID* (524) are reserved for internally by the Exchange, and must not be provided in the inbound message. If submitted the associated inbound message will be rejected.

- **Case 4:** Specifying *ClientIdentificationShortCode* where the client is a legal entity
  - ◆ *NestedPartyID* (524) = field in which the **short code** is provided
  - ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
  - ◆ *NestedPartyRole* (538) = **3** (Client ID)
  - ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity)

**Case 5:** Specifying *ClientIdentificationShortCode* where the client is not a legal entity

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **3** (Client ID)
- ◆ *NestedPartyRoleQualifier* (2384) = **24** (Natural person)
- **Case 6:** Specifying *ClientIdentificationShortCode* for an Aggregated order (“AGGR” value)
 

In this case the *NestedParties* group is not used. In its place client should provide data using the **NoNestedOrderAttributeGrp** as following:

  - ◆ *NestedOrderAttributeType* (21087) = **0** (Aggregated order)
  - ◆ *NestedOrderAttributeValue* (21088) = “Y”
- **Case 7:** Specifying *ClientIdentificationShortCode* for an order for which short code is still pending allocation (“PNAL” value)
 

In this case the *Parties* group is not used. In its place client should provide data using the **NoNestedOrderAttributeGrp** as following:

  - ◆ *NestedOrderAttributeType* (21087) = **1** (Pending allocation)
  - ◆ *NestedOrderAttributeValue* (21088) = “Y”
- **Case 8:** In case the message originates from a **DEA** (Direct Electronic Access) client, information should be provided as following:



- ◆ *OrderOrigination* (1724) = **5** (Order received from a direct access or sponsored access customer)

**AND**

- ◆ *ClientIdentificationShortCode* should be provided using one of the combinations provided in cases 4 through 7 above, as required

**InvestmentDecisionwithinFirmShortCode**

Presence Condition: Conditional Group. Mandatory if (1) *AccountCode* is Liquidity Provider, Related Party or House, OR in case investment decision maker is an Algorithm (2) AND the message did not originate from DEA client.

- **Case 9**: Specifying *InvestmentDecisionwithinShortCode* where a natural person is responsible for the investment decision

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
- ◆ *NestedPartyRoleQualifier* (2384) = **24** (Natural person)

**AND**

- ◆ *OrderOrigination* (1724) is **NOT** set

- **Case 10**: Specifying *InvestmentDecisionwithinShortCode* where an algorithm was responsible for the investment decision

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **122** (Investment decision maker)
- ◆ *NestedPartyRoleQualifier* (2384) = **22** (Algorithm)

**AND**

- ◆ *OrderOrigination* (1724) is **NOT** set

**NonExecutionBrokerShortCode**

Presence Condition: Optional

- **Case 11**: Specifying *NonExecutionBrokerShortCode*

- ◆ *NestedPartyID* (524) = field in which the **short code** is provided
- ◆ *NestedPartyIDSource* (525) = **P** (Short code identifier)
- ◆ *NestedPartyRole* (538) = **26** (Correspondent broker)
- ◆ *NestedPartyRoleQualifier* (2384) = **23** (Firm or legal entity)

**Other Identifiers**

- For identification of an wholesale submitted for a commodity derivative or a warrant with a commodity underlying, if the potential trade would reduce the risk clients should also use ***OrderAttributeGrp*** repeating group, and identify the values as following:

- ◆ *OrderAttributeType* (2594) = **3** (Risk Reduction Code)
- ◆ *OrderAttributeValue* (2595) = "Y"

**Trading & Clearing related data fields**

- The component ***SideCrossOrdModGrp*** is a mandatory repeating group that must be repeated **once for Buy and Sell orders and twice for Cross orders**.
- The clearing Firm related fields should be specified as following:



– **Clearing Firm ID:**

- ◆ *NestedPartyID* (524) = field in which the **ID** is provided
  - ◆ *NestedPartyIDSource* (525) = **D** (Proprietary / Custom Code)
  - ◆ *NestedPartyRole* (538) = **4** (Clearing Firm)
  - ◆ *NestedPartyRoleQualifier* (2384) = **3** (General clearing member) OR **4** (Individual clearing member)
- When used in the inbound messages for specifying the Clearing Firm ID and the Client ID, the maximum length for the *NestedPartyID* (524) field is 8 characters long, and value may be alphanumeric.

**5.3.29.2 Message Structure**

| Tag   | Field               | Short Description  | Format     | Len | Values   | Presence    |
|-------|---------------------|--|------------|-----|--|-------------|
|       | Header              |  |            |     |  |             |
| 11    | ClOrdID             | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String     | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 48    | SecurityID          | Exchange identification code of the instrument/contract.   | String     | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory   |
| 22    | SecurityIDSource    | Gives the type of SecurityID.  | String     | 1   | (See field description)                        | Mandatory   |
| 20020 | EMM                 | Defines the Exchange Market Mechanism applied on each platform.  | Int        | 2   | (See field description)                        | Mandatory   |
| 44    | Price               | Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).   | Price      | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 38    | OrderQty            | Total order quantity, per quantity unit.(To be calculated with Quantity Decimals).   | Qty        | 20  | From 0 to 2 <sup>64</sup> -2                   | Mandatory   |
| 40    | OrdType             | Type of Order.   | Char       | 1   | (See field description)                        | Mandatory   |
| 21081 | NonExecClID         | This field will be used as unique client Key. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc. | Int        | 5   | From 0 to 2 <sup>16</sup> -1                   | Optional    |
| 21109 | OrderActorType      | Member role for RFC.   | Int        | 1   | 1 = Initiator<br>2 = Reactor                   | Mandatory   |
| 453   | NoPartyIDs          | Number of PartyID entries.   | NumInGroup | 1   | Always set to 1                                | Mandatory   |
| 448   | PartyID             | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String     | 11  | Alphanumeric                                   | Mandatory   |
| 447   | PartyIDSource       | Source of PartyID value.   | Char       | 1   | (See field description)                        | Mandatory   |
| 452   | PartyRole           | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | (See field description)                        | Mandatory   |
| 2376  | PartyRoleQualifier  | Used to further qualify the value of PartyRole(452).   | Int        | 2   | (See field description)                        | Mandatory   |
| 1724  | OrderOrigination    | Identifies the origin of the order.  | Int        | 1   | (See field description)                        | Conditional |
| 2593  | NoOrderAttributes   | Number of order attribute entries.   | NumInGroup | 1   | If provided, From 1 to 2                       | Optional    |
| 2594  | OrderAttributeType  | The type of order attribute.   | Int        | 1   | (See field description)                        | Optional    |
| 2595  | OrderAttributeValue | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String     | 1   | (See field description)                        | Optional    |

| Tag   | Field                | Short Description  | Format            | Len | Values  | Presence    |
|-------|----------------------|--|-------------------|-----|---|-------------|
| 21803 | MessagePriceNotation | 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.     | Int               | 2   | 1 = Price<br>2 = Spread in basis points<br>3 = Spread | Optional    |
| 552   | NoSides              | Number of sides.   | NumInGroup        | 1   | From 1 to 2   | Mandatory   |
| 54    | Side                 | Indicates the side of the order.   | Char              | 1   | (See field description)                               | Mandatory   |
| 577   | ClearingInstruction  | Clearing Instruction.  | Int               | 4   | (See field description)                               | Optional    |
| 58    | Text                 | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.   | String            | 18  | Alphanumeric  | Optional    |
| 1     | Account              | Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.  | String            | 12  | Alphanumeric  | Optional    |
| 6399  | AccountCode          | 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.   | Int               | 1   | (See field description)                               | Mandatory   |
| 9941  | TechnicalOrdType     | 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.  | Char              | 1   | (See field description)                               | Optional    |
| 7443  | PostingAction        | Open Close Indicator, Posting action. This field is part of the clearing aggregate.  | MultipleCharValue | 19  | (See field description)                               | Optional    |
| 29    | LastCapacity         | Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.   | Char              | 1   | (See field description)                               | Mandatory   |
| 21804 | LongClientID         | 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. | String            | 16  | (See field description)                               | Optional    |
| 555   | NoLegs               | Number of legs entries for the requested strategy.   | NumInGroup        | 2   | From 1 to 32  | Conditional |
| 600   | LegSymbol            | Identifies the contract of this instrument by its Symbol Index.  | String            | 10  | From 0 to 2^32-2                                      | Conditional |
| 602   | LegSecurityID        | MDG proprietary identification code of the instrument leg for the strategy.  | String            | 10  | From 0 to 2^32-2                                      | Conditional |
| 603   | LegSecurityIDSource  | Gives the type of LegSecurityID (602).   | String            | 1   | (See field description)                               | Conditional |
| 637   | LegLastPx            | Execution price assigned to a leg (to be calculated with Price/Index Level Decimals).  | Price             | 20  | From -2^63+1 to 2^63-1                                | Conditional |
| 1418  | LegLastQty           | Leg Last Traded Quantity   | Qty               | 20  | From 0 to 2^64-2                                      | Conditional |
| 539   | NoNestedPartyIDs     | Number of NestedPartyID entries.   | NumInGroup        | 1   | If provided, From 1 to 4                              | Conditional |

| Tag  | Field                                    | Short Description  | Format | Len | Values                  | Presence    |
|------|--|--|--------|-----|-------------------------|-------------|
| 524  | <a href="#">NestedPartyID</a>            | Party identifier/code within a repeating group. See <a href="#">NestedPartyIDSource</a> (525) and <a href="#">NestedPartyRole</a> (538). | String | 11  | Alphanumeric            | Conditional |
| 525  | <a href="#">NestedPartyIDSource</a>      | Source of <a href="#">NestedPartyID</a> (524) value.   | Char   | 1   | (See field description) | Conditional |
| 538  | <a href="#">NestedPartyRole</a>          | Identifies the type or role of the <a href="#">NestedPartyID</a> (524) specified.  | Int    | 3   | (See field description) | Conditional |
| 2384 | <a href="#">NestedPartyRoleQualifier</a> | Used to further qualify the value of <a href="#">NestedPartyRole</a> (538).  | Int    | 2   | (See field description) | Conditional |
|      | <a href="#">Trailer</a>                  |  |        |     |                         |             |

### 5.3.30 ERGCommand (U68)

Client ► OEG

Available for: EQD IDD CMO

#### 5.3.30.1 Message Description

The **ERGCommand (U68)** is used by a Risk Manager to submit pre-trade risk management commands associated access to the market (suspend / unsuspend / block / unblock) and controls on order size submissions for market participants they are monitoring. This command can be submitted with different possible granularities of Firm, Logical Access, or Short codes [ExecutionWithinFirmShortCode - provided through *PartyID* (448)) or ClientIdentificationShortCode (provided through *NestedPartyID* (524)].

In order to be able to submit any of the Euronext RiskGuard service commands, Risk Managers must have a Logical Access for each Optiq Segment where they need to perform their monitoring, which is configured with a Functional Access Role of RiskGuard.

RiskGuard messages of any specified granularity have maximum scope of a single Optiq segment. This means that the RiskGuard messages are always submitted and processed on a per Optiq Segment basis. In order to suspend all activity of a firm or a short code on all segments, risk manager must connect and submit the RiskGuard commands on each segment individually.

**Note:** ID of a logical access is specific to each Optiq segment, (i.e. the same ID may belong to different Firms on different segments). In order to be able to act upon a given Logical Access the Risk Manager must submit the command to the segment to which the *LogicalAccessID* (21021) is connected to, and this logical access must have the appropriate Firm ID associated to it, otherwise the command will be rejected.

The **ERGCommand (U68)** message is responded to as following:

- Acknowledged by the **ERGCommandAck** (U69) message with *AckStatus* (5711) set to '0' (Accept); and is
- Rejected by the **ERGCommandAck** (U69) message with *AckStatus* (5711) set to '1' (Reject) in case of functional or technical rejections. For session level rejections a **Reject** (3) message with an error code is provided.

The table below contains all available actions as well as the different levels and granularity's that can be submitted as a command using this message:

| Risk Control Type | Granularity | Referential Scope | Description | Identifier Field Provided   |
|-------------------|-------------|-------------------|-------------|-----------------------------|
| Suspend           | Firm        | N/A               |             | <i>TargetFirmID</i> (21098) |

| Risk Control Type | Granularity                   | Referential Scope | Description  | Identifier Field Provided            |
|-------------------|-------------------------------|-------------------|--|--------------------------------------|
|                   | Logical Access                | N/A               | Authorizations for trading of a given Firm, Logical Access, Trader or Algorithm (identified via the short codes) has been suspended.<br><br>Cancellation of the remaining open orders may be triggered depending on the setting specified in field <i>Purge</i> (21100).                               | <i>TargetLogicalAccessID</i> (21099) |
|                   | ExecutionWithinFirm ShortCode | N/A               |  | <i>TargetPartyID</i> (21095)         |
|                   | ClientIdentificationShortCode | N/A               |  | <i>TargetClientShortCode</i> (21108) |
| Unsuspend         | Firm                          | N/A               | The authorizations for trading, of a given Firm, Logical Access, Trader or Algorithm (identified via the short codes), have been restored.   | <i>TargetFirmID</i> (21098)          |
|                   | Logical Access                | N/A               |  | <i>TargetLogicalAccessID</i> (21099) |
|                   | ExecutionWithinFirm ShortCode | N/A               |  | <i>TargetPartyID</i> (21095)         |
|                   | ClientIdentificationShortCode | N/A               |  | <i>TargetClientShortCode</i> (21108) |
| Block             | Firm                          | Contract          | Access of a given Firm, Logical Access, Trader or Algorithm (identified via the short codes) to a given Contract has been blocked.<br><br>Cancellation of the remaining open orders in the identified Contract may be triggered depending on the setting specified in field <i>Purge</i> (21100).      | <i>TargetFirmID</i> (21098)          |
|                   | Logical Access                | Contract          |  | <i>TargetLogicalAccessID</i> (21099) |
|                   | ExecutionWithinFirm ShortCode | Contract          |  | <i>TargetPartyID</i> (21095)         |
|                   | ClientIdentificationShortCode | Contract          |  | <i>TargetClientShortCode</i> (21108) |
| Unblock           | Firm                          | Contract          | The authorizations for trading, of a given Firm, Logical Access, Trader or Algorithm (identified via the short codes), on a given Contract has been unblocked (or restored).   | <i>TargetFirmID</i> (21098)          |
|                   | Logical Access                | Contract          |  | <i>TargetLogicalAccessID</i> (21099) |
|                   | ExecutionWithinFirm ShortCode | Contract          |  | <i>TargetPartyID</i> (21095)         |
|                   | ClientIdentificationShortCode | Contract          |  | <i>TargetClientShortCode</i> (21108) |
| Order Size Limit  | Firm                          | Contract          | Order Size Limit control has been Activated or Deactivated for a given Firm on a given Contract. When activated, this limit is verified for each individual order message and not as cumulative value for all submitted orders. Activation or Deactivation is specified in the <i>OSLFlag</i> (21101). | <i>TargetFirmID</i> (21098)          |

**Notes:**

- In case several Risk Managers send the same command for the same granularity and referential scope, the system takes into account the most restrictive setting. This means that all restrictions (suspension / block) from all Risk Managers need to be lifted in order to restore access.
- In case both Market Operations, through the Kill Switch mechanism, and Risk Managers, through RiskGuard service, act upon the same market participant, the system takes into account the most restrictive setting. This means that both restrictions (suspension / block) from Market Operations and the Risk Manager need to be lifted in order to restore access.
- All actions submitted by the Risk Manager for a broader granularity (e.g. Firm or Logical Access) are automatically applied to the available narrower granularity (e.g. Logical Access or Short code), e.g., Order Size Limit configured at Firm level is applicable to the orders submitted by the firm in any of the Logical Access on which it is authorized to submit orders:
  - Command submitted for a Firm will apply to both all associated logical accesses and short codes will be subject to the command. If the Firm ID that owns a logical access is suspended or blocked, any other Firm IDs that may be setup as executing for that logical access will also be suspended or blocked.

- Command submitted to a specific Logical access will apply only to that logical access on that Optiq segment. If a Logical Access is suspended or blocked, all Firm IDs that may be identified as entering or executing on that logical access will be subject to the suspension or block
- A firm may have multiple logical accesses and a single short code may be present on multiple logical accesses of the same firm. Command submitted on an Optiq Segment to the Firm ID + Short code will apply to all orders, on all logical accesses where this firm has submitted orders with the identified short code
- In case *TargetFirmID* (21098) and *TargetLogicalAccessID* (21099) are both filled and *TargetPartyID* (21095) or *TargetClientShortCode* (21108) are not provided, command will apply only for the Logical Access (i.e. only combination of *TargetFirmID* and *TargetLogicalAccessID* (21099) is taken into account for the message processing).
- All fields that are ignored when not needed in the inbound message will not be sent in the outbound messages (e.g. if *ActionType* (21097) is set to Suspend, and *OrderSizeLimit* (21102) is also specified, the OSL limit will be ignored, and will not be populated in outbound messages).

### 5.3.30.2 Message Structure

| Tag   | Field                 | Short Description  | Format  | Len | Values   | Presence    |
|-------|-----------------------|--|---------|-----|--|-------------|
|       | Header                |  |         |     |  |             |
| 21060 | RequestID             | An identifier of a message assigned by the Client when submitting an order to the Exchange.  | String  | 20  | From -2^63+1 to 2^63-1   | Mandatory   |
| 48    | SecurityID            | Exchange identification code of the instrument/contract.   | String  | 10  | From 0 to 2^32-2   | Conditional |
| 22    | SecurityIDSource      | Gives the type of SecurityID.  | String  | 1   | (See field description)  | Conditional |
| 20020 | EMM                   | Defines the Exchange Market Mechanism applied on each platform.  | Int     | 2   | (See field description)  | Conditional |
| 21097 | ERGActionType         | Specifies the scope of the message.  | Int     | 1   | 1 = Suspend<br>2 = Unsuspend<br>3 = Block<br>4 = Unblock<br>5 = Order Size Limit | Mandatory   |
| 21098 | TargetFirmID          | Identifier of the member firm to which the specified action is to be applied.  | String  | 8   | Alphanumeric   | Mandatory   |
| 21095 | TargetPartyID         | Identifier of the ShortCode used as a filter to reduce the scope of the OrderMassCancelRequest (q) or an identifier of the shortcode to which the Risk Guard command is to be applied. | String  | 11  | Alphanumeric   | Optional    |
| 21108 | TargetClientShortCode | Identifier of the ClientIdentificationShortCode (provided through <i>Parties</i> or <i>NestedParties</i> ) to which the action will be applied.  | String  | 11  | Alphanumeric   | Optional    |
| 21099 | TargetLogicalAccessID | Identifier of the Logical Access to which the specified action is to be applied.   | Int     | 10  | From 0 to 2^32-2   | Optional    |
| 21100 | Purge                 | Identifies the action to be applied to the active orders/quotes.   | Boolean | 1   | Y = True<br>N = False  | Conditional |
| 21101 | OSLFlag               | Indicates if the Order Size Limit functionality is to be activated or deactivated.   | Boolean | 1   | Y = True<br>N = False  | Conditional |
| 21102 | OrderSizeLimit        | Indicates the Maximum Order Size above which all orders will be rejected by the Matching Engine (applied per order level).   | Qty     | 20  | From 0 to 2^64-2   | Conditional |
|       | Trailer               |  |         |     |  |             |

### 5.3.31 ERGCommandAck (U69)

Client ◀OEG

Available for: EQD IDD CMO

#### 5.3.31.1 Message Description

This message is used to acknowledge or indicate rejection of a Risk Manager inbound **ERGCommand** (U69) message:

- In case the message is sent as an acknowledgement the field *AckStatus* (5711) set to '0' (Accept).
- In case the messages is sent to indicated functional rejection the field *AckStatus* (5711) set to '1' (Reject) and *ErrorCode* (9955) is filled with the reason for the rejection.

#### 5.3.31.2 Message Structure

| Tag   | Field                    | Short Description   | Format       | Len | Values   | Presence    |
|-------|--------------------------|---|--------------|-----|--|-------------|
|       | Header                   |   |              |     |  |             |
| 21005 | ClientMessageSendingTime | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | OEGINFromMember          | 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).               | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | BookINTime               | 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)    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                       | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |

| Tag   | Field                 | Short Description   | Format       | Len | Values   | Presence    |
|-------|-----------------------|---|--------------|-----|--|-------------|
| 7765  | OEGINFromME           | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).  | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTToME            | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).  | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21060 | RequestID             | An identifier of a message assigned by the Client when submitting an order to the Exchange.   | String       | 20  | From -2^63+1 to 2^63-1   | Mandatory   |
| 21098 | TargetFirmID          | Identifier of the member firm to which the specified action is to be applied.   | String       | 8   | Alphanumeric   | Mandatory   |
| 21095 | TargetPartyID         | Identifier of the ShortCode used as a filter to reduce the scope of the OrderMassCancelRequest (q) or an identifier of the shortcode to which the Risk Guard command is to be applied | String       | 11  | Alphanumeric   | Optional    |
| 21108 | TargetClientShortCode | Identifier of the ClientIdentificationShortCode (provided through <i>Parties</i> or <i>NestedParties</i> ) to which the action will be applied.                                       | String       | 11  | Alphanumeric   | Optional    |
| 21099 | TargetLogicalAccessID | Identifier of the Logical Access to which the specified action is to be applied.  | Int          | 10  | From 0 to 2^32-2   | Optional    |
| 48    | SecurityID            | Exchange identification code of the instrument/contract.  | String       | 10  | From 0 to 2^32-2   | Optional    |
| 22    | SecurityIDSource      | Gives the type of SecurityID.   | String       | 1   | (See field description)  | Optional    |
| 20020 | EMM                   | Defines the Exchange Market Mechanism applied on each platform.   | Int          | 2   | (See field description)  | Optional    |
| 21100 | Purge                 | Identifies the action to be applied to the active orders/quotes.  | Boolean      | 1   | Y = True<br>N = False  | Conditional |
| 21101 | OSLFlag               | Indicates if the Order Size Limit functionality is to be activated or deactivated.  | Boolean      | 1   | Y = True<br>N = False  | Optional    |
| 21102 | OrderSizeLimit        | Indicates the Maximum Order Size above which all orders will be rejected by the Matching Engine.  | Qty          | 20  | From 0 to 2^64-2   | Optional    |
| 5711  | AckStatus             | Indicates if incoming message is accepted or rejected.  | Char         | 1   | 0 = Accept<br>1 = Reject   | Mandatory   |
| 9955  | ErrorCode             | Error code in case of rejection.  | Int          | 5   | From 0 to 2^16-2   | Conditional |
|       | Trailer               |   |              |     |  |             |



### 5.3.32 GetRiskControls (U70)

Client ► OEG

Available for:   

#### 5.3.32.1 Message Description

This message allows Risk Managers to request the latest RiskGuard settings submitted. The message can be submitted to request setting for each individual Risk Control Type or globally for all submitted settings of the Risk Manager. The granularity of the request can be:

- Firm, by populating only the *TargetFirmID* (21098);
- Trader or Algorithm (identified by the Short code), by populating the *TargetFirmID* (21098) and either *TargetPartyID* (21095) with *ExecutionWithinFirmShortCode* or *TargetClientShortCode* (21095) with *ClientIdentificationShortCode*;
- Logical Access, by populating entering *TargetFirmID* (21098) and the *TargetLogicalAccessID* (21099);

In order to be able to submit any of the Euronext RiskGuard service commands, Risk Managers must have a Logical Access for each Optiq Segment where they need to perform their monitoring, which is configured with a Functional Access Role of RiskGuard.

The **GetRiskControls (U70)** message receives the following response messages:

- For acknowledgement - the **RiskControlDetails** (U71) message containing available details of the controls currently setup by that risk manager,
- For rejection:
  - In case of a session level rejection: the Reject (3) message with *SessionRejectReason* (373) is provided;
  - In case of a functional or technical rejection: the **RiskControlDetails** (U71) message containing *AckStatus* (5711) set to '1' (Reject) and *ErrorCode* (9955);

Table below identifies the field that need to be provided to obtain the risk control details for each identified granularity:

| Granularity at which the details are requested | Identifier Field Provided  |
|--|--|
| Firm   | <i>TargetFirmID</i> (21098)  |
| Logical Access                                 | <i>TargetFirmID</i> (21098) and <i>TargetLogicalAccessID</i> (21099) |
| <i>ExecutionWithinFirmShortCode</i>            | <i>TargetFirmID</i> (21098) and <i>TargetPartyID</i> (21095)         |
| <i>ClientIdentificationShortCode</i>           | <i>TargetFirmID</i> (21098) and <i>TargetClientShortCode</i> (21108) |

All requests submitted to the system not respecting the combinations present in the table above are rejected.

**Note:** In case a **GetRiskControls (U70)** is submitted to request details for a granularity on which no **ERGCommand (U68)** has been submitted, the message will be rejected with a **RiskControlDetails (U71)** and an appropriated error code.

#### 5.3.32.2 Message Structure

| Tag   | Field     | Short Description   | Format | Len | Values                         | Presence  |
|-------|-----------|---|--------|-----|--------------------------------|-----------|
|       | Header    |   |        |     |                                |           |
| 21060 | RequestID | An identifier of a message assigned by the Client when submitting an order to the Exchange. | String | 20  | From $-2^{63}+1$ to $2^{63}-1$ | Mandatory |



| Tag   | Field                 | Short Description  | Format | Len | Values   | Presence  |
|-------|-----------------------|--|--------|-----|--|-----------|
| 21098 | TargetFirmID          | Identifier of the member firm to which the specified action is to be applied.  | String | 8   | Alphanumeric   | Mandatory |
| 21095 | TargetPartyID         | Identifier of the ShortCode used as a filter to reduce the scope of the OrderMassCancelRequest (q) or an identifier of the shortcode to which the Risk Guard command is to be applied. | String | 11  | Alphanumeric   | Optional  |
| 21108 | TargetClientShortCode | Identifier of the ClientIdentificationShortCode (provided through <i>Parties</i> or <i>NestedParties</i> ) to which the action will be applied.  | String | 11  | Alphanumeric   | Optional  |
| 21099 | TargetLogicalAccessID | Identifier of the Logical Access to which the specified action is to be applied.   | Int    | 10  | From 0 to 2 <sup>32</sup> -2   | Optional  |
| 21103 | RiskControlType       | Identifies the type of Risk Guard Control on which the details are requested.  | Int    | 1   | 1 = All Parameters<br>2 = Order Size Limit<br>3 = Suspend<br>4 = Block | Mandatory |
|       | Trailer               |  |        |     |  |           |

### 5.3.33 RiskControlDetails (U71)

Client ◀OEG

Available for: EQD IDD CMO

#### 5.3.33.1 Message Description

This message is used to acknowledge or indicate a functional rejection of an inbound **GetRiskControls** (U70) message to a Risk Manager that submitted the request. The details of the configured risk controls are provided within the repeating group *NoParameters* and reflect information selected in the field *RiskControlType* (21103).

This message is populated as following for the different cases:

- For acknowledgement, *AckStatus* (5711) set to '0' (Accept),
- For rejection, *AckStatus* (5711) set to '1' (Reject) and *ErrorCode* (9955) is filled with the reason for the rejection.

#### Please note that:

- Each Risk Manager (whether representing a Global Clearing Member or Non Clearing Member) gets only the details of the actions that were triggered by that risk manager.
- In case the request is to receive all parameters, the details provided within the *NoParameters* are sent in the order of broader granularity first followed by the narrower granularity if it exists / applies.  
*Example:* in case Firm B is suspended and Firm B + Trader Algo 123 are blocked on contract AEX, with both actions being triggered by the Risk Manager requesting the risk control details, the *NoParameters* group will contain first information on suspension of Firm B, followed by the more granular setting that Firm B + Trader Algo 123 is blocked on contract AEX;
- The details provided will always concern the latest status at a given level, meaning, if a given Firm was Suspended and then Unsuspended by a given Risk Manager, the status that will be provided within **RiskControlDetails** (U71) is "Unsuspended".

## 5.3.33.2 Message Structure

| Tag   | Field                    | Short Description   | Format       | Len | Values   | Presence    |
|-------|--------------------------|---|--------------|-----|--|-------------|
|       | Header                   |   |              |     |  |             |
| 21005 | ClientMessageSendingTime | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | OEGINFromMember          | 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).               | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | BookINTime               | 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)    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | BookOUTTime              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                       | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                              | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTToME               | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).                                | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21060 | RequestID                | An identifier of a message assigned by the Client when submitting an order to the Exchange.   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Mandatory   |

| Tag   | Field                 | Short Description   | Format     | Len | Values   | Presence    |
|-------|-----------------------|---|------------|-----|--|-------------|
| 5711  | AckStatus             | Indicates if incoming message is accepted or rejected.  | Char       | 1   | 0 = Accept<br>1 = Reject   | Mandatory   |
| 9955  | ErrorCode             | Error code in case of rejection.  | Int        | 5   | From 0 to 2 <sup>16</sup> -2   | Conditional |
| 21103 | RiskControlType       | Identifies the type of Risk Guard Control on which the details are requested.   | Int        | 1   | 1 = All Parameters<br>2 = Order Size Limit<br>3 = Suspend<br>4 = Block | Mandatory   |
| 21107 | NoParameters          | Indicates the number of control parameters provided after a request of the risk controls.   | NumInGroup | 3   | From 1 to 254  | Conditional |
| 21098 | TargetFirmID          | Identifier of the member firm to which the specified action is to be applied.   | String     | 8   | Alphanumeric   | Conditional |
| 21095 | TargetPartyID         | Identifier of the ShortCode used as a filter to reduce the scope of the OrderMassCancelRequest (q) or an identifier of the shortcode to which the Risk Guard command is to be applied | String     | 11  | Alphanumeric   | Optional    |
| 21108 | TargetClientShortCode | Identifier of the ClientIdentificationShortCode (provided through Parties or NestedParties) to which the action will be applied.  | String     | 11  | Alphanumeric   | Optional    |
| 21099 | TargetLogicalAccessID | Identifier of the Logical Access to which the specified action is to be applied.  | Int        | 10  | From 0 to 2 <sup>32</sup> -2   | Optional    |
| 48    | SecurityID            | Exchange identification code of the instrument/contract.  | String     | 10  | From 0 to 2 <sup>32</sup> -2   | Conditional |
| 22    | SecurityIDSource      | Gives the type of SecurityID.   | String     | 1   | (See field description)  | Conditional |
| 20020 | EMM                   | Defines the Exchange Market Mechanism applied on each platform.   | Int        | 2   | (See field description)  | Conditional |
| 21105 | ERGStatus             | Indicates the Status of the Broker, Logical Access, Trader or ClientIdentificationShortCode.  | Int        | 1   | 1 = Suspended<br>2 = Unsuspended<br>3 = Blocked<br>4 = Unblocked       | Optional    |
| 21101 | OSLFlag               | Indicates if the Order Size Limit functionality is to be activated or deactivated.  | Boolean    | 1   | Y = True<br>N = False  | Conditional |
| 21102 | OrderSizeLimit        | Indicates the Maximum Order Size above which all orders will be rejected by Matching Engine.  | Qty        | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
|       | Trailer               |   |            |     |  |             |

### 5.3.34 InstrumentSynchronizationList (U50)

Client ◀OEG

Available for: EQ FND FXI SP EQD IDD CMO BLK

#### 5.3.34.1 Message Description

The **InstrumentSynchronizationList** (U50) message is sent in order to associate each instrument with a *ResynchronizationID* (20030). This ID is used only in case of failover of the matching engine.

Please refer to message **SynchronizationTime** (U51) for further details.

#### 5.3.34.2 Message Structure

| Tag   | Field               | Short Description   | Format     | Len | Values                       | Presence  |
|-------|---------------------|---|------------|-----|------------------------------|-----------|
|       | Header              |   |            |     |                              |           |
| 20030 | ResynchronizationID | Each instrument is assigned to a Resynchronization ID, that is use in case of failover. | Int        | 5   | From 0 to 2 <sup>16</sup> -2 | Mandatory |
| 146   | NoRelatedSym        | Number of related symbols (instruments) in a message.                                   | NumInGroup | 3   | From 1 to 254                | Mandatory |
| 48    | SecurityID          | Exchange identification code of the instrument/contract.                                | String     | 10  | From 0 to 2 <sup>32</sup> -2 | Mandatory |
| 22    | SecurityIDSource    | Gives the type of SecurityID.   | String     | 1   | (See field description)      | Mandatory |
| 20020 | EMM                 | Defines the Exchange Market Mechanism applied on each platform.                         | Int        | 2   | (See field description)      | Mandatory |
|       | Trailer             |   |            |     |                              |           |

### 5.3.35 SynchronizationTime (U51)

Client ◀OEG

Available for: EQ FND FXI FXI SP EQD IDD CMO BLK

#### 5.3.35.1 Message Description

The **SynchronizationTime** (U51) 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 in valid and stored state or if they must be discarded.

This message provides a timestamp (*LastBookInTime* (20031)) of the last known valid and stored message, and is sent by the system for the associated resynchronization ID (*ResynchronizationID* (20030)).

Upon the reception of the message, clients must check the list of all the instruments associated to the field *ResynchronizationID* (20030) and analyze all received messages related to these instruments. Messages having *BookInTime* (21002) or *TransactTime* (60) higher than the associated *LastBookInTime* (20031) must be discarded.

For example, upon the reception of a **SynchronizationTime** (U51) message, if a client previously received an **ExecutionReport** (8) message as a notification of a Fill with the *BookInTime* (21002) higher than the *LastBookInTime* (20031), then this **ExecutionReport** (8) notification must be ignored and the order fill must be reversed in the 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 an **ExecutionReport** (8) as a Kill notification with the *TransactTime* (60) higher than the *LastBookInTime* (20031), 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 a **SynchronizationTime** (U51) message must be processed normally.

### 5.3.35.2 Message Structure

| Tag   | Field               | Short Description   | Format       | Len | Values   | Presence  |
|-------|---------------------|---|--------------|-----|--|-----------|
|       | Header              |   |              |     |  |           |
| 20030 | ResynchronizationID | Each instrument is assigned to a Resynchronization ID, that is use in case of failover. | Int          | 5   | From 0 to 2^16-2   | Mandatory |
| 20031 | LastBookInTime      | Last Matching Engine IN time (in ns) processed on the associated Resynchronization ID.  | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory |
|       | Trailer             |   |              |     |  |           |

### 5.3.36 RFQAudit (U72)

Client ◀OEG

Available for: 

#### 5.3.36.1 Message Description

The **RFQAudit** (U72) 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 message reception.

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

The RFQAudit 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.


#### 5.3.36.2 Message Structure

| Tag   | Field       | Short Description  | Format       | Len | Values   | Presence    |
|-------|-------------|--|--------------|-----|--|-------------|
|       | Header      |  |              |     |  |             |
| 21002 | BookINTime  | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Mandatory   |
| 21003 | BookOUTTime | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |

| Tag   | Field                    | Short Description   | Format            | Len | Values   | Presence    |
|-------|--------------------------|---|-------------------|-----|--|-------------|
| 7765  | OEGINFromME              | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).    | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 7764  | OEGOUTToME               | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).      | UTCTimestamp      | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 131   | QuoteReqID               | Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.  | String            | 20  | From 0 to 2 <sup>64</sup> -2   | Mandatory   |
| 48    | SecurityID               | Exchange identification code of the instrument/contract.  | String            | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory   |
| 22    | SecurityIDSource         | Gives the type of SecurityID.   | String            | 1   | (See field description)  | Mandatory   |
| 20020 | EMM                      | Defines the Exchange Market Mechanism applied on each platform.   | Int               | 2   | (See field description)  | Mandatory   |
| 21110 | NoRFQCounterparts        | Indicates the number of counterpart having participated to the RFQ  | NumInGroup        | 1   | From 1 to 50   | Conditional |
| 1724  | OrderOrigination         | Identifies the origin of the order.   | Int               | 1   | (See field description)  | Optional    |
| 44    | Price                    | Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).  | Price             | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Optional    |
| 32    | LastQty                  | The Last Traded Quantity indicates the quantity of last fill on an instrument (to be calculated with the Quantity Decimals).                | Qty               | 20  | From 0 to 2 <sup>64</sup> -2   | Optional    |
| 20052 | DarkExecutionInstruction | Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions. | MultipleCharValue | 9   | (See field description)  | Optional    |
| 110   | MinQty                   | Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).                   | Qty               | 20  | Value '0' by default and depending to a minimum value for the given instrument and/or market type  | Optional    |
|       | Trailer                  |   |                   |     |  |             |

### 5.3.37 IOI (6)

Client ► OEG

Available for: 

#### 5.3.37.1 Message Description

**IOI (6)** is used by the 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 **IOINotification (U73)**.

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

- an indication of interest – *IOITransType (28)* set to “New”;
  - All Mandatory tags should be provided as well as the conditional that became mandatory depending on what’s provided in other tags;
- cancellation of a previous indication of interest - *IOITransType (28)* set to “Cancel”;
  - All Mandatory tags should be provided as well as the conditional that became mandatory depending on what’s provided in other tags **plus** the *IOIRefID (26)* – please note this message should be a reflection of the original request that was submitted (apart from the *IOIID (23)* and *IOITransType (28)*) and is now being targeted to be cancelled;
  - Please note that the system identifies uniquely the indication of interest based on Member ID, *IOIRefID (26)*, *SecurityID (48)* and *EMM (20020)*. 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 - *IOITransType (28)* set to “Replace”;
  - All Mandatory tags should be provided as well as the conditional that became mandatory depending on what’s provided in other tags **plus** the *IOIRefID (26)* – please note this message should be a reflection of the original request that was submitted (apart from the *IOIID (23)*, *IOITransType (28)* and the tags being targeted for modification) and is now being targeted to be replaced;
  - Please note that it’s possible to modify the content of several tags at the same time, if they are part of the list of tags available for modification - below the list:
    - ◆ *Side (54)*;
    - ◆ *OrderQty (38)*;
    - ◆ *IOIQty (27)*;
    - ◆ *IOIQltyInd (25)*;
    - ◆ Any attempt to modify any of the other parameters leads to the rejection of the modification and the original indication of interest remains active;
- **IOIID Management**
  - Clients must provide an indication of interest id in every inbound application message (*IOI (6)*), 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 *IOIID (23)* 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 *IOIRefID (26)* 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 *ExchangeIOIID (21114)* – 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 *IOIRefID (26)* must be populated with the value provided within the *IOIID (23)* of the *IOI (6)* message – if the *IOIRefID (26)* 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 *IOI (6)* 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 modify any order they might have previously submitted as a response to that same indication of interest;
- *IOIID (23)*: unique ID of the *IOI (6)* message, returned by the Exchange in the *IOINotification (U73)* message – unicity of it is not checked by Optiq;
- *IOIRefID (26)* ignored by the system in all cases where *IOITransType (28)* is different than “Cancel” or “Replace” - must be filled with the *IOIID (23)* provided in the *IOI (6)* message previously sent with *IOITransType (28)* set to New. Please note that even if ignored, meaning, not use during the functional processing of the indication of interest, the value received will still be provided back in the *IOINotification (U73)* message.
- *RoutingGrp*: used to provide the list of target counterparties being targeted by the indication of interest – meaning, **will receive** an *IOINotification (U73)* - because of the *IOI (6)*;
  - This repeating group is composed of the following tags:
    - *NoRoutingIDs (215)*: indicates the number of occurrences of the repeating group;
    - *RoutingType (216)*: indicates the list of counterparties that should be notified because of the *IOI (6)*. It’s composed of a list of values that allow member to specify if a given counterpart **should be notified** and, in that case, the value to be provided must be “2 = TargetList” – depending on the *RoutingID (217)*.
    - **Equivalence** between Counterparties and *RoutingID (217)* values:

| Counterparties                          | RoutingID (217)     |
|---|---------------------|
| Buy Side                                | BUYSIDE             |
| Sell Side                               | Sell Side           |
| Local Community of Specialist Paris     | LOCALSPECIALISTSPAR |
| Local Community of Specialist Lisbon    | LOCALSPECIALISTSLIS |
| Local Community of Specialist Brussels  | LOCALSPECIALISTSBRU |
| Local Community of Specialist Amsterdam | LOCALSPECIALISTSAMS |
| Interest Lists                          | INTERESTLIST        |
| Holdings                                | HOLDINGS            |
| Quality of Sell Side Counterparty       | SELLSIDEQUALITY     |
| Euronext Data Driven                    | EURONEXTDRIVEN      |

◆ **Example:**

◆ How to populate the *RoutingGrp* to notify Buy and Sell Side:

- NoRoutingIDs (215) = 2
- RoutingType (216) = **2**
- RoutingID (217) = BUYSIDE
- RoutingType (216) = **2**
- RoutingID (217) = SELLSIDE

- *Side (54)*: used to indicate if the *IOI (6)* message submitter intends to Buy or Sell – in case the intention is not to disclose this information, the field must be set to “Undisclosed”;
- *IOIQty (27)*: used by the *IOI (6)* message submitter to give a qualitative indication of the “size” of the indication of interest – in case it’s set to “Undisclosed Qty” then *OrderQty (38)* must not be provided – it will be ignored if provided;
- *OrderQty (38)*: used to specify the volume of the indication of interest – required only when *IOIQty (27)* different than “Undisclosed Qty” – ignored in all other cases. Please note that even if ignored, meaning, not use during the functional processing of the indication of interest, the value received will still be provided back in the *IOINotification (U73)* message.
- *IOIQtyInd (25)*: 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”.

### 5.3.37.2 Message Structure

| Tag | Field                  | Short Description | Format | Len | Values | Presence |
|-----|------------------------|-------------------|--------|-----|--------|----------|
|     | <a href="#">Header</a> |                   |        |     |        |          |

| Tag   | Field            | Short Description  | Format     | Len | Values   | Presence    |
|-------|------------------|--|------------|-----|--|-------------|
| 23    | IOIID            | Unique identifier of IOI message.  | String     | 20  | From -2^63+1 to 2^63-1   | Mandatory   |
| 28    | IOITransType     | Identifies IOI message transaction type  | Char       | 1   | N = New<br>C = Cancel<br>R = Replace   | Mandatory   |
| 26    | IOIRefID         | Reference identifier used with CANCEL and REPLACE, transaction types.                                      | String     | 20  | From -2^63+1 to 2^63-1   | Conditional |
| 48    | SecurityID       | Exchange identification code of the instrument/contract.   | String     | 10  | From 0 to 2^32-2   | Mandatory   |
| 22    | SecurityIDSource | Gives the type of SecurityID.  | String     | 1   | (See field description)  | Mandatory   |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform.  | Int        | 2   | (See field description)  | Mandatory   |
| 54    | Side             | Indicates the side of the Indication of interest.  | Char       | 1   | 1 = Buy<br>2 = Sell<br>7 = Undisclosed   | Mandatory   |
| 38    | OrderQty         | Total quantity of the indication of interest, per quantity unit.(To be calculated with Quantity Decimals). | Qty        | 20  | From 0 to 2^64-2   | Conditional |
| 27    | IOIQty           | Indication of the size of the indication of interest.  | Char       | 1   | S = Small<br>M = Medium<br>L = Large<br>U = Undisclosed Qty  | Mandatory   |
| 25    | IOIQtyInd        | Relative Quality of the indication of interest.  | Char       | 1   | H = High<br>L = Low<br>M = Medium  | Optional    |
| 215   | NoRoutingIDS     | Required if any RoutingType and RoutingIDs are specified.  | NumInGroup | 2   | From 1 to 10   | Mandatory   |
| 216   | RoutingTypes     | Indicates type of RoutingID.   | Int        | 2   | 2 = Target List  | Mandatory   |
| 217   | RoutingID        | Identifies routing destination.  | String     | 30  | BUYSIDE<br>SELLSIDE<br>LOCALSPECIALISTSAMS<br>LOCALSPECIALISTSLIS<br>LOCALSPECIALISTSBRU<br>LOCALSPECIALISTSPAR<br>INTERESTLIST<br>HOLDINGS<br>SELLSIDEQUALITY<br>EURONEXTDRIVEN | Mandatory   |
|       | Trailer          |  |            |     |  |             |

### 5.3.38 IOINotification (U73)

Client ◀OEG

Available for:

#### 5.3.38.1 Message Description

**IOINotification (U73)** it's issued by OEG to:

- **Acknowledge** an incoming *IOI (6)* message;
  - ◆ Please note that, in this case, all tags are provided except for the *ErrorCode (9955)*;
- **Reject** an incoming *IOI (6)* message;
  - ◆ Please note that, in this case, all tags are provided – 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 *IOI (6)* 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 tags will be provided except for the *ErrorCode (9955)*;
  - Counterparties that a given *IOI (6)* 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 tags will be provided:
      - OEG Timestamps;
      - *IOIID (23)*;
      - *IOIRefID (26)*;
      - *IOIType (21113)*;
      - *SecurityID (48) and SecurityIDSource (22)*;
      - *EMM (20020)*;
      - Tags representing the fields that were modified. Any of the parameters available for modification but not impacted will not be provided;
  - Counterparties that a given *IOI (6)* 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 tags will be provided:
      - OEG Timestamps;
      - *IOIID (23)*;
      - *IOIRefID (26)*: *in case the indication of interest being cancelled had been modified*;
      - *IOIType (21113)*;
      - *SecurityID (48) and SecurityIDSource (22)*;
      - *EMM (20020)*;
      - *Side (54)*;
      - *OrderQty (38)*: *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 *IOI (6)* message;
    - ◆ Please note that, in this case, all tags will be provided except for the *ErrorCode (9955)*;
- In case the message is sent as an acknowledgement the field *IOIType (21113)* is set to '1' (New);

- In case the message is sent to indicate functional rejection the field *IOIType (21113)* is set to '2' (Reject) and *ErrorCode (9955)* is filled with the reason for the rejection;
- In case the message is sent to notify counterparties that an *IOI (6)* message was just submitted onto the Euronext Block MTF, *IOIType (21113)* is set to '3' (New IOI Notification);
- In case the message is sent to notify the member who submitted the indication of interest that a *NewOrderSingle (D)*, sent as an answer to an *IOI (6)*, was just successfully accepted by the Euronext Block MTF, *IOIType (21113)* set to '4' (IOI Reply Notification) ;
- In case the message is sent to notify counterparties that an *IOI (6)* message, previously submitted, was just cancelled, *IOIType (21113)* set to '5' (IOI Cancellation Notification);
- In case the message is sent to notify counterparties that an *IOI (6)* message, previously submitted, was just modified, *IOIType (21113)* set to '6' (IOI Replacement Notification);

### 5.3.38.2 Message Structure

| Tag   | Field                                    | Short Description   | Format       | Len | Values  | Presence    |
|-------|--|---|--------------|-----|---|-------------|
|       | <a href="#">Header</a>                   |   |              |     |   |             |
| 21005 | <a href="#">ClientMessageSendingTime</a> | 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) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21002 | <a href="#">BookInTime</a>               | 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)    | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 21003 | <a href="#">BookOutTime</a>              | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).                                       | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |
| 5979  | <a href="#">OEGINFromMember</a>          | 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).               | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds) | Conditional |

| Tag   | Field            | Short Description   | Format       | Len | Values   | Presence    |
|-------|------------------|---|--------------|-----|--|-------------|
| 7765  | OEGINFromME      | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC) | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)                 | Conditional |
| 7764  | OEGOUTTOME       | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).  | UTCTimestamp | 27  | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)                 | Conditional |
| 23    | IOIID            | Unique identifier of IOI message.   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 21114 | ExchangeIOIID    | Unique identifier of IOI message, assigned by the Exchange.   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 21113 | IOIType          | Identifies the reason why the IOINotification (U73) is being sent.  | Int          | 1   | 1 = Ack<br>2 = Reject<br>3 = New IOI Notification<br>4 = IOI Reply Notification<br>5 = IOI Cancellation Notification<br>6 = IOI Replacement Notification | Mandatory   |
| 26    | IOIRefID         | Reference identifier used with CANCEL and REPLACE, transaction types.   | String       | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 48    | SecurityID       | Exchange identification code of the instrument/contract.  | String       | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory   |
| 22    | SecurityIDSource | Gives the type of SecurityID.   | String       | 1   | (See field description)  | Mandatory   |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform.   | Int          | 2   | (See field description)  | Conditional |
| 54    | Side             | Indicates the side of the order.  | Char         | 1   | 1 = Buy<br>2 = Sell<br>7 = Undisclosed   | Conditional |
| 38    | OrderQty         | Total order quantity, per quantity unit.(To be calculated with Quantity Decimals).  | Qty          | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
| 27    | IOIQty           | Indication of the size of the indication of interest.   | String       | 1   | S = Small<br>M = Medium<br>L = Large<br>U = Undisclosed Qty  | Conditional |
| 25    | IOIQltyInd       | Relative Quality of the indication of interest.   | Char         | 1   | H = High<br>L = Low<br>M = Medium  | Optional    |
| 9955  | ErrorCode        | Error code in case of rejection.  | Int          | 5   | From 0 to 2 <sup>16</sup> -2   | Conditional |
|       | Trailer          |   |              |     |  |             |

### 5.3.39 TradeCaptureReport (AE)

Client ► OEG

Available for: TCS

#### 5.3.39.1 Message Description

The **TradeCaptureReport** (AE) message is used for:

- sending of TCS Declarations (i.e. Declaration Entry)
- requesting cancellation of a previously matched declaration, or
- to refuse a declaration submitted by the counterparty

#### Components Usage within the Message:

TCS messages use repeating groups for provision of information for the clearing information and the following short code cases: ExecutionwithinFirmShortCode, ClientIdentificationShortCode and InvestmentDecisionwithinFirmShortCode repeating groups, fields and settings for identification of the Clearing data and the MIFID II short codes, as well as the associated rules and presence conditions in TradeCaptureReport (AE) message are identical to the ones identified for NewOrderSingle (D) provided in overall Optiq message specifications – FIX interface.

For TCS messages the additional repeating group combination is required to identify the Counterparty IDs, which should be provided with the following values:

- ◆ *PartyID* (448) = field in which the ID is provided
- ◆ *PartyIDSource* (447) = **D** (Proprietary / Custom Code)
- ◆ *PartyRole* (452) = **17** (Contra Firm)
- ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity)

For Cross declaration, if submitted to cover orders of two different clients, the combination used to provide the ClientIdentificationShortCode in repeating group NestedParties may be provided twice. As elsewhere the first instance of the field represents information provided for the buy side and the second represents information provided for the sell side.

#### 5.3.39.2 Message Structure

| Tag  | Field                | Short Description  | Format | Len | Values  | Presence    |
|------|----------------------|--|--------|-----|---|-------------|
|      | Header               |  |        |     |   |             |
| 571  | TradeReportID        | Unique identifier of trade capture report.   | String | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1        | Mandatory   |
| 1003 | TradeID              | The unique ID assigned by the matching engine to the trade entity, once it is received or matched. | String | 20  | From 0 to 2 <sup>64</sup> -2                          | Conditional |
| 487  | TradeReportTransType | Trade Report Transaction Type.   | Int    | 1   | 0 = New<br>1 = Cancel                                 | Mandatory   |
| 856  | TradeReportType      | Trade Report Type.   | Int    | 1   | 1 = Alleged<br>3 = Decline<br>6 = Trade Report Cancel | Conditional |

| Tag   | Field            | Short Description  | Format     | Len | Values   | Presence    |
|-------|------------------|--|------------|-----|--|-------------|
| 828   | TrdType          | Type of Operation.   | Int        | 4   | (See field description)  | Conditional |
| 48    | SecurityID       | Exchange identification code of the instrument, represented by SecurityID. This identifier is unique per triplet: MIC, ISIN and currency. The correspondence between the SecurityID and the instrument characteristics is provided in the standing data messages and associated files. | String     | 10  | From 0 to 2 <sup>32</sup> -2   | Mandatory   |
| 22    | SecurityIDSource | Gives the type of SecurityID.  | String     | 1   | 8 = Symbol Index   | Mandatory   |
| 20020 | EMM              | Defines the Exchange Market Mechanism applied on each platform.  | String     | 2   | (See field description)  | Mandatory   |
| 552   | NoSides          | Number of sides.   | NumInGroup | 1   | If provided, from 1 to 2   | Conditional |
| 54    | Side             | Indicates the side of the order.   | Char       | 1   | 1 = Buy<br>2 = Sell  | Conditional |
| 1     | Account          | Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.  | String     | 12  | Alphanumeric   | Conditional |
| 6399  | AccountCode      | 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.   | Int        | 1   | (See field description)  | Conditional |
| 29    | LastCapacity     | MiFID II field that indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.   | Char       | 1   | 7 = Dealing on own account (DEAL)<br>8 = Matched principal (MTCH)<br>9 = Any other capacity (AOTC) | Conditional |
| 58    | Text             | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.   | String     | 18  | Alphanumeric   | Optional    |
| 20155 | PrincipalCode    | Identifies the beneficiary of the transaction when trading on behalf of another establishment.   | String     | 20  | Alphanumeric   | Optional    |
| 53    | Quantity         | Number of traded or ordered units (to be calculated with Quantity Decimals).   | Qty        | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
| 44    | Price            | Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).   | Price      | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 453   | NoPartyIDs       | Number of PartyID entries.   | NumInGroup | 1   | If provided, from 1 to 2   | Conditional |
| 448   | PartyID          | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String     | 11  | Alphanumeric   | Conditional |



| Tag   | Field                    | Short Description  | Format     | Len | Values  | Presence    |
|-------|--------------------------|--|------------|-----|---|-------------|
| 447   | PartyIDSource            | Source of PartyID value.   | Char       | 1   | D = Proprietary / Custom code<br>P = Short code identifier  | Conditional |
| 452   | PartyRole                | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | 1 = Executing Firm<br>3 = Client ID<br>12 = Executing Trader<br>17 = Contra Firm  | Conditional |
| 2376  | PartyRoleQualifier       | Used to further qualify the value of PartyRole(452).   | Int        | 2   | 22 = Algorithm<br>23 = Firm or legal entity<br>24 = Natural person  | Conditional |
| 21065 | MICofSecondaryListing    | Identifies the secondary listing place to which an instrument belongs by its MIC (Market Identification Code), segment MIC according to ISO 10383. | String     | 10  | (See field description)   | Conditional |
| 2593  | NoOrderAttributes        | Number of order attribute entries.   | NumInGroup | 1   | If provided, from 1 to 2  | Optional    |
| 2594  | OrderAttributeType       | The type of order attribute.   | Int        | 1   | 0 = Aggregated order<br>1 = Pending allocation<br>3 = Risk reduction order  | Optional    |
| 2595  | OrderAttributeValue      | The value associated with the order attribute type specified in OrderAttributeType (2594).   | String     | 1   | Y = Yes   | Optional    |
| 539   | NoNestedPartyIDs         | Number of NestedPartyID entries.   | NumInGroup | 1   | If provided, from 1 to 3  | Conditional |
| 524   | NestedPartyID            | Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).  | String     | 11  | Alphanumeric  | Conditional |
| 525   | NestedPartyIDSource      | Source of NestedPartyID value.   | Char       | 1   | D = Proprietary / Custom code<br>P = Short code identifier  | Conditional |
| 538   | NestedPartyRole          | Identifies the type or role of the NestedPartyID (524) specified.  | Int        | 3   | 3 = Client ID<br>4 = Clearing Firm<br>17 = Contra Firm<br>122 = Investment decision maker   | Conditional |
| 2384  | NestedPartyRoleQualifier | Used to further qualify the value of NestedPartyRole(538).   | Int        | 2   | 3 = General clearing member<br>4 = Individual clearing member<br>22 = Algorithm<br>23 = Firm or legal entity<br>24 = Natural person | Conditional |
| 1724  | OrderOrigination         | Identifies the origin of the order.  | Int        | 1   | 5 = Order received from a direct access or sponsored access customer  | Conditional |
| 21063 | DeferralIndicator        | Trade publication type indicator. Indicates whether the publication is immediate or not (differed). (1: Immediate ; 0: Differed)                   | Char       | 1   | 0 = False<br>1 = True   | Conditional |
| 10055 | SettlPeriod              | Indicates the settlement delay in trading days, from 0 to 30 days.   | Int        | 2   | From 0 to 30  | Conditional |

| Tag   | Field               | Short Description   | Format           | Len | Values   | Presence    |
|-------|---------------------|---|------------------|-----|--|-------------|
| 9970  | SettlementFlag      | Indicates whether the trade must be settled or not. (0: Not Settled ; 1: Settled) | Char             | 1   | 0 = False<br>1 = True  | Conditional |
| 9971  | GuaranteeFlag       | Indicates if the trade is guaranteed or not (for clearing purposes).              | Char             | 1   | 1 = Cleared but not Guaranteed<br>2 = Cleared and Guaranteed   | Conditional |
| 1839  | TradePriceCondition | Contribution to price formation or the price discovery process.                   | Int              | 3   | 15 = Non-price forming trade (NPFT)<br>101 = Plain Vanilla Trade<br>102 = Trade Not Contributing to Price Discovery Process<br>103 = Dark Trade (For Future Use) | Optional    |
| 10026 | VWAPBegTime         | Start time for the Volume Weight Average price computation period.                | UTCTimesta<br>mp | 27  | YYYYMMDD-<br>HH:MM:SS.sss.nnn  | Optional    |
| 10027 | VWAPEndTime         | End time for the Volume Weight Average price computation period.                  | UTCTimesta<br>mp | 27  | YYYYMMDD-<br>HH:MM:SS.sss.nnn  | Optional    |
| 381   | GrossTradeAmt       | Total amount of a Declaration.  | Amt              | 9   | Amount   | Conditional |
| 21068 | CentralisationDate  | Cut-off for the trading cycle / session on the Euronext Funds Service             | String           | 10  | Valid values:<br>YYYY = 0000-9999, MM = 01-12, DD = 01-31  | Optional    |
|       | Header              |   |                  |     |  |             |

### 5.3.40 TradeCaptureReportAck (AR)

Client ◀OEG

Available for: TCS

#### 5.3.40.1 Message Description

The **TradeCaptureReportAck** (AR) message is sent in response to the **TradeCaptureReport** (AE) and **FundPriceInput** (U44) messages. It is also sent as an unsolicited message to provide the status of a previously submitted declaration to counterparties.

The message is sent as:

- Declaration notification to the counterparty;
- Declaration refusal notice;
- Matching Notice;
- Expiration Notice;
- Trade Cancellation Notice
- Rejection

Please note that the following fields are provided only in case the notice is issued for a Fill or a Pre-Match (*TrdRptStatus* = '18' or '19') and only to the concerned member if the corresponding necessary values were submitted in the original declaration: *TransactTime*, *NestedParties* (Clearing Firm ID), *PrincipalCode*, *AccountCode*, *Account*, *Text*, *TrdRegPublicationReason*.

## Components Usage within the Message:

Use of the groups and values within them:

- The repeating group **SideCrossOrdModGrp** is used to identify the order side
- The repeating group **Parties** is also used to specify the Entering Counterparty for the order
- The repeating group **NestedParties** is used to specify the Clearing Firm for the order

For identification of the clearing firm or entering counterparty the fields in the repeating groups should be specified in the NestedParties repeating group, in the same manner as described in the *Euronext Cash Markets – OEG Client Specifications – FIX 5.0* Interface document.

For TCS messages the additional repeating group combination is required to identify the Counterparty IDs, which should be provided with the following values:

- ◆ *PartyID* (448) = field in which the ID is provided
- ◆ *PartyIDSource* (447) = **D** (Proprietary / Custom Code)
- ◆ *PartyRole* (452) = **17** (Contra Firm)
- ◆ *PartyRoleQualifier* (2376) = **23** (Firm or legal entity)

## 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 TVTIC is the concatenation of:

- The TradeID (20 characters);
- The instrument ISIN code (12 characters).

The different ways to get a TCS trade TVTIC are:

- Using the public Market Data feed, extracting the TradeID from the *MiFID Execution ID* field in the **Full Trade Information** (1004) message and getting the ISIN code from the **Standing Data** (1007) message;
- Using the private Order Entry feed, getting the TradeID from the FIX **TradeCaptureReportAck** (AR) message and using the public Market Data feed getting the ISIN code from the **Standing Data** (1007) message.

## 5.3.40.2 Message Structure

| Tag  | Field         | Short Description  | Format | Len | Values   | Presence    |
|------|---------------|--|--------|-----|--|-------------|
|      | Header        |  |        |     |  |             |
| 571  | TradeReportID | Unique identifier of trade capture report.   | String | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 1003 | TradeID       | The unique ID assigned by the matching engine to the trade entity, once it is received or matched. | String | 20  | From 0 to 2 <sup>64</sup> -2                   | Conditional |
| 939  | TrdRptStatus  | Trade Report Type.   | Int    | 2   | (See field description)                        | Conditional |
| 828  | TrdType       | Type of Operation.   | Int    | 4   | (See field description)                        | Conditional |

| Tag   | Field                   | Short Description  | Format           | Len | Values  | Presence    |
|-------|-------------------------|--|------------------|-----|---|-------------|
| 48    | SecurityID              | Exchange identification code of the instrument, represented by SecurityID. This identifier is unique per triplet: MIC, ISIN and currency. The correspondence between the SecurityID and the instrument characteristics is provided in the standing data messages and associated files. | String           | 10  | From 0 to 2^32-2  | Mandatory   |
| 22    | SecurityIDSource        | Gives the type of SecurityID.  | String           | 1   | 8 = Symbol Index  | Mandatory   |
| 20020 | EMM                     | Defines the Exchange Market Mechanism applied on each platform.  | String           | 2   | (See field description)   | Conditional |
| 21065 | MICofSecondaryListing   | Identifies the secondary listing place to which an instrument belongs by its MIC (Market Identification Code), segment MIC according to ISO 10383.   | String           | 10  | (See field description)   | Conditional |
| 10042 | PreMatchingIndicator    | Pre-matching delay indicator for a TCS Declaration.  | Int              | 1   | (See field description)   | Conditional |
| 60    | TransactTime            | Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).   | UTCTimesta<br>mp | 27  | Valid values:<br>YYYY = 0000-9999,<br>MM = 01-12, DD =<br>01-31, HH = 00-23,<br>MM = 00-59, SS =<br>00-59, ssssssss =<br>000000000-<br>999999999<br>(nanoseconds) | Conditional |
| 2670  | TrdRegPublicationReason | Waiver Indicator. 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.   | Int              | 2   | (See field description)   | Conditional |
| 552   | NoSides                 | Number of sides.   | NumInGrou<br>p   | 1   | If provided, always set to 1  | Conditional |
| 54    | Side                    | Indicates the side of the order.   | Char             | 1   | 1 = Buy<br>2 = Sell   | Conditional |
| 1     | Account                 | Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.  | String           | 12  | Alphanumeric  | Conditional |
| 6399  | AccountCode             | 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.   | Int              | 1   | (See field description)   | Conditional |
| 29    | LastCapacity            | MiFID II field that indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.   | Char             | 1   | 7 = Dealing on own account (DEAL)<br>8 = Matched principal (MTCH)<br>9 = Any other capacity (AOTC)  | Conditional |

| Tag   | Field                    | Short Description  | Format     | Len | Values   | Presence    |
|-------|--------------------------|--|------------|-----|--|-------------|
| 58    | Text                     | Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate. | String     | 18  | Alphanumeric   | Optional    |
| 20155 | PrincipalCode            | Identifies the beneficiary of the transaction when trading on behalf of another establishment.               | String     | 20  | Alphanumeric   | Optional    |
| 53    | Quantity                 | Number of traded or ordered units (to be calculated with Quantity Decimals).                                 | Qty        | 20  | From 0 to 2 <sup>64</sup> -2   | Conditional |
| 44    | Price                    | Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).                       | Price      | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   | Conditional |
| 453   | NoPartyIDs               | Number of PartyID entries.   | NumInGroup | 1   | If provided, from 1 to 2   | Conditional |
| 448   | PartyID                  | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  | String     | 11  | Alphanumeric   | Conditional |
| 447   | PartyIDSource            | Source of PartyID value.   | Char       | 1   | D = Proprietary / Custom code  | Conditional |
| 452   | PartyRole                | Identifies the type or role of the PartyID (448) specified.  | Int        | 3   | 1 = Executing Firm<br>17 = Contra Firm   | Conditional |
| 2376  | PartyRoleQualifier       | Used to further qualify the value of PartyRole(452).   | Int        | 2   | 23 = Firm or legal entity  | Conditional |
| 539   | NoNestedPartyIDs         | Number of NestedPartyID entries.   | NumInGroup | 1   | If provided, from 1 to 2   | Conditional |
| 524   | NestedPartyID            | Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).                              | String     | 11  | Alphanumeric   | Conditional |
| 525   | NestedPartyIDSource      | Source of NestedPartyID value.   | Char       | 1   | D = Proprietary / Custom code<br>P = Short code identifier   | Conditional |
| 538   | NestedPartyRole          | Identifies the type or role of the NestedPartyID (524) specified.  | Int        | 3   | 4 = Clearing Firm<br>17 = Contra Firm<br>122 = Investment decision maker                               | Conditional |
| 2384  | NestedPartyRoleQualifier | Used to further qualify the value of NestedPartyRole(538).   | Int        | 2   | 3 = General clearing member<br>4 = Individual clearing member<br>22 = Algorithm<br>24 = Natural person | Conditional |
| 10055 | SettlPeriod              | Indicates the settlement delay in trading days, from 0 to 30 days.   | Int        | 2   | From 0 to 30   | Conditional |
| 9970  | SettlementFlag           | Indicates whether the trade must be settled or not. (0: Not Settled ; 1: Settled)                            | Char       | 1   | 0 = False<br>1 = True  | Conditional |
| 9971  | GuaranteeFlag            | Indicates if the trade is guaranteed or not (for clearing purposes).   | Char       | 1   | 1 = Cleared but not Guaranteed<br>2 = Cleared and Guaranteed   | Conditional |

| Tag   | Field               | Short Description  | Format           | Len | Values   | Presence     |
|-------|---------------------|--|------------------|-----|--|--------------|
| 1839  | TradePriceCondition | Contribution to price formation or the price discovery process.  | Int              | 3   | 15 = Non-price forming trade (NPFT)<br>101 = Plain Vanilla Trade<br>102 = Trade Not Contributing to Price Discovery Process<br>103 = Dark Trade (For Future Use) | Conditional  |
| 10026 | VWAPBegTime         | Start time for the Volume Weight Average price computation period.   | UTCTimesta<br>mp | 27  | YYYYMMDD-<br>HH:MM:SS.sss.nnn  | Optional     |
| 10027 | VWAPEndTime         | End time for the Volume Weight Average price computation period.   | UTCTimesta<br>mp | 27  | YYYYMMDD-<br>HH:MM:SS.sss.nnn  | Optional     |
| 381   | GrossTradeAmt       | Total amount of a Declaration.   | Amt              | 9   | Amount   | Conditional  |
| 9952  | PreviousDayFlag     | 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<br>1 = True  | Conditional  |
| 137   | MiscFeeAmt          | Miscellaneous Fee Value. Total order fees related to the funds share creation or redemption applied by the Asset Manager per order.                    | Amt              | 20  | From -2^63+1 to 2^63-1   | Conditional  |
| 9955  | ErrorCode           | Error code in case of rejection.   | Int              | 5   | From 0 to 2^16-2   | Conditional  |
| 372   | RefMsgType          | The MsgType (35) of the FIX message being referenced.  | String           | 3   | Value received in the rejected inbound message, if any   | Conditional  |
| 21068 | CentralisationDate  | Cut-off for the trading cycle / session on the Euronext Funds Service  | String           | 10  | Valid values:<br>YYYY = 0000-9999,<br>MM = 01-12, DD = 01-31   | Optional     |
| 21040 | CCPID               | Clearing House code attached to a firm. (For Future Use)   | Char             | 1   | 0= No CCP<br>1 = LCH SA<br>2= Bilateral Settlement<br>3= LCH Limited<br>5= SIX x-clear<br>6 = EuroCCP  | Conditionnal |
|       | Header              |  |                  |     |  |              |

### 5.3.41 FundPriceInput (U44)

Client ► OEG

Available for: TCS

#### 5.3.41.1 Message Description

The **FundPriceInput** (U44) message is used by the Dutch Fund Manager to send a price to TCS matching engine used for Fixing and in order to match declaration, when *TrdType* = '1002' or '1003'.

### 5.3.41.2 Message Structure

| Tag   | Field             | Short Description  | Format | Len | Values   | Presence    |
|-------|-------------------|--|--------|-----|--|-------------|
|       | Message Header    |  |        |     |  | Mandatory   |
| 11    | ClOrdID           | An identifier of an Order assigned by the Client when submitting an order to the Exchange.   | String | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 22    | SecurityIDSource  | Gives the type of SecurityID.  | String | 1   | 8 = Symbol Index                               | Mandatory   |
| 48    | SecurityID        | Exchange identification code of the instrument, represented by SecurityID. This identifier is unique per triplet: MIC, ISIN and currency. The correspondence between the SecurityID and the instrument characteristics is provided in the standing data messages and associated files. | String | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory   |
| 20020 | EMM               | Defines the Exchange Market Mechanism applied on each platform.  | String | 2   | (See field description)                        | Mandatory   |
| 44    | Price             | Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).   | Price  | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 10053 | ByPassControlFlag | Control indicator of the price and quantity. Indicates whether a trade should bypass the price and quantity controls or not. (0: Control ; 1: No Control)  | Char   | 1   | 0 = False<br>1 = True                          | Conditional |
|       | Trailer           |  |        |     |  | Mandatory   |

### 5.3.42 FundPriceInputAck (U45)

Client ◀OEG

Available for: TCS

#### 5.3.42.1 Message Description

The **FundPriceInputAck** (U45) message is sent to provide the positive acknowledgement of a previously submitted **FundPriceInput** (U44) message.

#### 5.3.42.2 Message Structure

| Tag | Field            | Short Description  | Format | Len | Values   | Presence  |
|-----|------------------|--|--------|-----|--|-----------|
|     | Header           |  |        |     |  | Mandatory |
| 11  | ClOrdID          | An identifier of an Order assigned by the Client when submitting an order to the Exchange. | String | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory |
| 22  | SecurityIDSource | Gives the type of SecurityID.  | String | 1   | 8 = Symbol Index                               | Mandatory |

| Tag   | Field             | Short Description  | Format | Len | Values   | Presence    |
|-------|-------------------|--|--------|-----|--|-------------|
| 48    | SecurityID        | Exchange identification code of the instrument, represented by SecurityID. This identifier is unique per triplet: MIC, ISIN and currency. The correspondence between the SecurityID and the instrument characteristics is provided in the standing data messages and associated files. | String | 10  | From 0 to 2 <sup>32</sup> -2                   | Mandatory   |
| 20020 | EMM               | Defines the Exchange Market Mechanism applied on each platform.  | String | 2   | (See field description)                        | Conditional |
| 44    | Price             | Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).   | Price  | 20  | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1 | Mandatory   |
| 10053 | ByPassControlFlag | Control indicator of the price and quantity. Indicates whether a trade should bypass the price and quantity controls or not. (0: Control ; 1: No Control)  | Char   | 1   | 0 = False<br>1 = True                          | Conditional |
|       | Trailer           |  |        |     |  | Mandatory   |



## 6. FIELD DESCRIPTION

### A

#### Account

| Field Name      | Account   |
|-----------------|---|
| Tag             | 1   |
| Description     | Account Number. Client's position account ID, identifying the investor's account. This field is part of the clearing aggregate.   |
| Format          | String  |
| Length          | 12  |
| Possible Values | Alphanumeric  |
| Conditions      | In ExecutionReport (8) message, this field is provided only for Drop Copy. Conditions for Drop Copy will be provided at a later date.   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives  |

#### AccountCode

| Field Name      | AccountCode  |
|-----------------|--|
| Tag             | 6399   |
| Description     | <p>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.</p> <p>For Cross orders it specifies the account type for which the buy side of a cross order is entered.</p> <ul style="list-style-type: none"> <li>- Non-LP clients are not allowed to use the type '6' (Liquidity Provider).</li> <li>- Only members acting as Retail Member Organizations (RMO) can send '4' (RO) orders on behalf of their retail clients.</li> </ul> |
| Format          | Int  |
| Length          | 2  |
| Possible Values | 1 = Client<br>2 = House<br>4 = RO<br>6 = Liquidity Provider<br>7 = Related Party<br>8 = Structured Product Market Maker<br>14 = Omega Client<br>15 = Ceres Client  |
| Conditions      | <p>It is mandatory for every NewOrderSingle (D).</p> <p>For ETF Access platform, the field is mandatory in QuoteRequest (R)</p> <p>In OrderCancelReplaceRequest (G) message, if provided the field is ignored.</p> <p>In NewWholesaleOrder (U64) message, required if NoSides (552) &gt;= 1.</p>   |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a>  |

| Field Name | AccountCode   |
|------------|---|
|            | <a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For   | Cash and Derivatives  |

## AckPhase

| Field Name      | AckPhase  |
|-----------------|---|
| Tag             | 21013   |
| Description     | Indicates the trading phase during which the Matching Engine has processed the event that has triggered this ExecutionReport (8) message.   |
| Format          | Char  |
| Length          | 1   |
| Possible Values | 1 = Continuous Trading Phase<br>2 = Call Phase<br>3 = Halt Phase<br>4 = Closed Phase<br>5 = Trading At Last Phase<br>6 = Reserved<br>7 = Suspended<br>8 = Random Uncrossing Phase |
| Conditions      | It is provided only as response to NewOrderSingle (D) and OrderCancelReplaceRequest (G) message.  |
| Used In         | <a href="#">ExecutionReport (8)</a>   |
| Used For        | Cash and Derivatives  |

## AckQualifiers

| Field Name      | AckQualifiers  |
|-----------------|--|
| Tag             | 21014  |
| Description     | <p>Field used to provide additional information on the corresponding order. A single field can contain up to 8 values, space delimited, provided in different positions.</p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- Queue Indicator: indicates whether the corresponding inbound message was queued because of throttling or not. (0: No ; 1: Yes).</li> <li>- Request with Client Order ID: Indicates whether the order entry is applied with Client Order ID or not. (0: No; 1: Yes)</li> <li>- Use of Cross Partition: Indicates whether the corresponding message routing is applied in different partition or not. (0: No ; 1: Yes)</li> <li>- 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)</li> </ul> |
| Format          | MultipleCharValue  |
| Length          | 15   |
| Possible Values | 0 = Dark Indicator<br>1 = Queue Indicator<br>2 = Request with Client Order ID  |

| Field Name | AckQualifiers  |
|------------|--|
|            | 3 = Use of Cross Partition<br>4 = Internal1<br>5 = Internal2<br>6 = Execution Upon Entry flag Enabled<br>7 = Executed Upon Entry flag  |
| Conditions | Provided only as a response to a NewOrderSingle (D) and to OrderCancelReplaceRequest (G).  |
| Used In    | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">WholesaleOrderAck (U65)</a> |
| Used For   | Cash and Derivatives   |

## AckStatus

| Field Name      | Ack Status   |
|-----------------|--|
| Tag             | 5711   |
| Description     | Indicates if incoming message is accepted or rejected.   |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = Accept<br>1 = Reject   |
| Used In         | <a href="#">WholesaleOrderAck (U65)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">RiskControlDetails (U71)</a> |
| Used For        | Derivatives  |

## AFQReason

| Field Name      | AFQReason  |
|-----------------|--|
| Tag             | 9939   |
| Description     | Indicates the reason why the AskForQuote (UL) message has been sent to the Liquidity Provider.   |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 1 = Quote cancelled by the Liquidity Provider<br>2 = Quote cancelled by Market Control<br>3 = No quote M minutes before an uncrossing<br>4 = No quote S seconds before an uncrossing<br>5 = Quote completely matched |
| Conditions      | Always provided.   |
| Used In         | <a href="#">AskForQuote (UL)</a>   |
| Used For        | Cash   |

## B

## BeginSeqNo

| Field Name      | BeginSeqNo                                 |
|-----------------|--|
| Tag             | 7  |
| Description     | Message sequence number for first message. |
| Format          | SeqNum                                     |
| Length          | 10   |
| Possible Values | From 1 to 2 <sup>32</sup> -2               |
| Used In         | <a href="#">ResendRequest (2)</a>          |
| Used For        | Cash and Derivatives                       |

## BeginString

| Field Name      | BeginString  |
|-----------------|--|
| Tag             | 8  |
| Description     | Beginning of message identifier.<br>Identifies the beginning of message and the protocol version. Must be the first field in message.<br>Always unencrypted. |
| Format          | String   |
| Length          | 9  |
| Possible Values | FIXT.1.1 (Always unencrypted, must be first field in message)  |
| Conditions      | Inbound messages: Mandatory.<br>Outbound messages: Always Provided.  |
| Used In         | <a href="#">Header</a>   |
| Used For        | Cash and Derivatives   |

## BidErrorCode

| Field Name      | BidErrorCode   |
|-----------------|--|
| Tag             | 9934   |
| Description     | Error code returned when quote contains an invalid bid.<br>See Euronext Markets - Optiq & TCS Error List file (.csv) for details of error codes. |
| Format          | Int  |
| Length          | 6  |
| Possible Values | From 0 to 2 <sup>16</sup> -2   |
| Conditions      | If an error is detected in the field BidSize (134) or in the field BidPx (132), the error code is provided in the BidErrorCode (9934) field.     |
| Used In         | <a href="#">MassQuoteAck (b)</a>   |
| Used For        | Cash and Derivatives   |

## BidNonExecClID

| Field Name  | BidNonExecClID  |
|-------------|---|
| Tag         | 21089   |
| Description | This field will be used as unique client Key for the Bid side. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc. |

| Field Name      | BidNonExecClID   |
|-----------------|--|
| Format          | Int  |
| Length          | 5  |
| Possible Values | From 0 to 2 <sup>16</sup> -1   |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a> |
| Used For        | Derivatives  |

## BidPx

| Field Name      | BidPx   |
|-----------------|---|
| Tag             | 132   |
| Description     | Quote bid price (to be calculated with Price/Index Level Decimals).                           |
| Format          | Price   |
| Length          | 20  |
| Possible Values | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1  |
| Conditions      | In MassQuote (i) either this BidPx (132) field, or OfferPx (133), or both, must be populated. |
| Used In         | <a href="#">MassQuote (i)</a>   |
| Used For        | Cash and Derivatives  |

## BidQuoteID

| Field Name      | BidQuoteID   |
|-----------------|--|
| Tag             | 1747   |
| Description     | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.   |
| Format          | String   |
| Length          | 20   |
| Possible Values | From 0 to 2 <sup>64</sup> -2   |
| Conditions      | Provided only if the MassQuote (i) message contains a bid quote. The field OrderID (37) in ExecutionReport (8) message sent in case of trade resulting from a matching against a (bulk) Quote is filled with value in BidQuoteID (1747) field corresponding to the Bid quote that participated in the trade. |
| Used In         | <a href="#">MassQuoteAck (b)</a><br><a href="#">WholesaleOrderAck (U65)</a>  |
| Used For        | Cash and Derivatives   |

## BidSize

| Field Name      | BidSize  |
|-----------------|--|
| Tag             | 134  |
| Description     | Quote bid quantity (to be calculated with Quantity Decimals).<br>Cancels a quote if set to zero '0'.   |
| Format          | Qty  |
| Length          | 20   |
| Possible Values | From 0 to 2 <sup>64</sup> -2   |
| Conditions      | Cancels the quote if set to '0'. In the NewWholesaleOrder (U64) messages submitted by the Initiator the BidSize (134) must be the maximum volume to match in the transaction when the leading side is Buy. |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">NewWholesaleOrder (U64)</a>   |
| Used For        | Cash and Derivatives   |

## BodyLength

| Field Name      | BodyLength  |
|-----------------|---|
| Tag             | 9   |
| Description     | Message length including header, body and trailer.<br>Message length, in bytes, forward to checksum field. Must be second field in message. Always unencrypted. |
| Format          | Length  |
| Length          | 6   |
| Possible Values | Integer   |
| Conditions      | Inbound messages: Mandatory.<br>Outbound messages: Always Provided.   |
| Used In         | <a href="#">Header</a>  |
| Used For        | Cash and Derivatives  |

## BookINTime

| Field Name      | BookINTime   |
|-----------------|--|
| Tag             | 21002  |
| Description     | Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).   |
| Format          | UTCTimestamp   |
| Length          | 27   |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 00000000-99999999 (nanoseconds)   |
| Conditions      | In ExecutionReport (8) message and depending on the values populating the fields ExecType (150) and OrdStatus (39): <ul style="list-style-type: none"> <li>- it corresponds to the order creation/modification time or to the cancellation time.</li> <li>- in case of an acknowledgement notification, it corresponds to the time at which the event generating the ExecutionReport (8) entered the matching engine.</li> <li>- in case of a kill notification, it corresponds to the time at which the corresponding order has been killed.</li> <li>- in case of trade cancellation notification, it corresponds to the trade cancellation time.</li> </ul> |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">SecurityDefinition (d)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RFQAudit (U72)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">RiskControlDetails (U71)</a><br><a href="#">IOINotification (U73)</a>                         |
| Used For        | Cash and Derivatives   |

## BookOUTTime

| Field Name | BookOUTTime |
|------------|-------------|
| Tag        | 21003       |

| Field Name      | BookOUTTime  |
|-----------------|--|
| Description     | Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).  |
| Format          | UTCTimestamp   |
| Length          | 27   |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">SecurityDefinition (d)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RFQAudit (U72)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">RiskControlDetails (U71)</a><br><a href="#">IOINotification (U73)</a> |
| Used For        | Cash and Derivatives   |

## BreachedCollarPrice

| Field Name      | BreachedCollarPrice   |
|-----------------|---|
| Tag             | 21001   |
| Description     | Breached collar price in case of collar rejection (to be calculated with Price/Index Level Decimals).   |
| Format          | Price   |
| Length          | 20  |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$  |
| Conditions      | Provided only in case of a rejection due to a collar breach. This field is not populated when ExecutionReport (8) message is sent in cases of rejection that do not involve collars (e.g. for rejection of creation of strategies). |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">OrderCancelReject (9)</a>  |
| Used For        | Cash  |

## BuyRevisionIndicator

| Field Name      | BuyRevisionIndicator   |
|-----------------|--|
| Tag             | 21008  |
| Description     | Indicates whether the bid quote is a new quote, a replacement of a previous quote or a cancellation. |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 0 = New<br>1 = Replacement<br>2 = Cancellation   |
| Conditions      | Provided only if the MassQuote (i) message contains a bid quote.                                     |
| Used In         | <a href="#">MassQuoteAck (b)</a>   |
| Used For        | Cash and Derivatives   |

## ByPassControlFlag

| Field Name      | ByPassControlFlag   |
|-----------------|---|
| Tag             | 10053   |
| Description     | Control indicator of the price and quantity. Indicates whether a trade should bypass the price and quantity controls or not. (0: Control ; 1: No Control) |
| Format          | Char  |
| Length          | 1   |
| Possible Values | 0 = False<br>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         | <a href="#">FundPriceInput (U44)</a><br><a href="#">FundPriceInputAck (U45)</a>   |
| Used For        | TCS ( Cash and Derivatives)   |

## C

## CancelOnDisconnectionIndicator

| Field Name      | CancelOnDisconnectionIndicator  |
|-----------------|---|
| Tag             | 21018   |
| Description     | Indicates whether the order is not in scope of the Cancel On Disconnect mechanism (order is persisted) or if order should be handled as defined by default. (0: Default Configuration ; 1: Order not in the scope of Cancel On Disconnect - Order is to be persisted) |
| Format          | Int   |
| Length          | 1   |
| Possible Values | 0 = Per Default Configuration<br>1 = Order not in the scope of Cancel On Disconnect   |
| Conditions      | If the OrderCancelReplaceRequest (G) is used to confirm a new order that can be executed upon entry, but whose matching price hits a collar, this field can't be populated.   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>  |
| Used For        | Cash and Derivatives  |

## CCPID

| Field Name      | CCPID  |
|-----------------|--|
| Tag             | 21040  |
| Description     | Clearing House code  |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = No CCP<br>1 = LCH SA<br>2 = Bilateral Settlement<br>3 = LCH Limited<br>5 = SIX x-clear |



|            |   |
|------------|---|
|            | 6 = EuroCCP   |
| Conditions | This field is mandatory when a transaction is cleared by a CCP. |
| Used In    | <a href="#">TradeCaptureReportAck (AR)</a>                      |
| Used For   | TCS (Cash)  |

## CentralisationDate

| Field Name      | CentralisationDate   |
|-----------------|--|
| Tag             | 21068  |
| Description     | <p>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.</p> <p>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.</p> <p>When used, the declaration should be automatically accepted for the following order collection cycle / session if:</p> <ul style="list-style-type: none"> <li>- centralisation date is not specified by the client AND the session has passed its cut-off, OR</li> <li>- 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.</li> </ul> <p>Should be provided in binary equivalent of YYYY-MM-DD, where YYYY = 0000-9999, MM = 01-12, DD = 01-31</p> <p>Should be provided for Euronext Funds Service: Paris instruments only.</p> |
| Format          | String   |
| Length          | 10   |
| Possible Values | Valid values:<br>YYYY = 0000-9999, MM = 01-12, DD = 01-31  |
| Conditions      | For TradeCaptureReport (AE) message, it is mandatory for declarations when TrdType = '1002' or '1003'.   |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS (Cash and Derivatives)   |

## Checksum

| Field Name      | Checksum   |
|-----------------|--|
| Tag             | 10   |
| Description     | <p>Simple checksum.</p> <p>Always 3 bytes, always unencrypted, always last field in message.</p> |
| Format          | String   |
| Length          | 3  |
| Possible Values | Numerical  |
| Conditions      | <p>Inbound messages: Mandatory.</p> <p>Outbound messages: Always Provided.</p>                   |
| Used In         | <a href="#">Trailer</a>  |
| Used For        | Cash and Derivatives   |

## ClassID

| Field Name  | ClassID                                      |
|-------------|--|
| Tag         | 9945   |
| Description | Instrument Trading Group / Class Identifier. |
| Format      | String                                       |

| Field Name      | ClassID   |
|-----------------|---|
| Length          | 2   |
| Possible Values | Alphanumeric  |
| Conditions      | In OrderMassCancelRequest (q): mutually exclusive with SecurityID (48). In OrderMassCancelRequestReport (r), provided with the value submitted in the OrderMassCancelRequest (q). |
| Used In         | <a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (q)</a>   |
| Used For        | Cash  |

## ClearingInstruction

| Field Name      | ClearingInstruction  |
|-----------------|--|
| Tag             | 577  |
| Description     | Clearing Instruction.<br>Indicates the pre-posting and give-up action to be taken by the clearing system when a trade has occurred. <ul style="list-style-type: none"> <li>■ Process normally</li> <li>■ Manual mode (pre-posting and/or pre-giveup)</li> <li>■ Automatic posting mode (trade posting to the position account number specified)</li> <li>■ Automatic give-up mode (trade give-up to the give-up destination number specified)</li> </ul> |
| Format          | Int  |
| Length          | 4  |
| Possible Values | 0 = Process normally (formerly Systematic posting)<br>8 = Manual mode<br>9 = Automatic posting mode<br>10 = Automatic give-up mode   |
| Conditions      | In ExecutionReport (8) message, this field is provided only for Drop Copy. Conditions for Drop Copy will be provided at a later date.  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">CrossOrder (U67)</a>   |
| Used For        | Cash and Derivatives   |

## ClientMessageSendingTime

| Field Name      | ClientMessageSendingTime  |
|-----------------|---|
| Tag             | 21005   |
| Description     | Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).  |
| Format          | UTCTimestamp  |
| Length          | 27  |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)  |
| Conditions      | This field is provided only if the ExecutionReport (8) is a response to a requested inbound message.  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">RequestAckMessage (Uy)</a> |

| Field Name | ClientMessageSendingTime  |
|------------|---|
|            | <a href="#">SecurityDefinition (d)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">RiskControlDetails (U71)</a><br><a href="#">IOINotification (U73)</a> |
| Used For   | Cash and Derivatives  |

## ClOrdID

| Field Name      | ClOrdID   |
|-----------------|---|
| Tag             | 11  |
| Description     | <p>An identifier of an Order assigned by the Client when submitting an order to the Exchange.</p> <p>Clients must provide a ClOrdID (11) in every inbound application message, otherwise the message will be immediately rejected by the OEG.</p> <p>Clients may provide any value that respects the ClOrdID (11) format, which is a string of 20 characters, and the ranges as defined according to their access. The Exchange recommends setting a unique ID per order, SenderCompID (49)/OnBehalfOfCompID (115) and SecurityID (48).</p> <p>For order entry, the ClOrdID (11) 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.</p> <p>For modification and cancellation using the OrigClOrdID (41) as unique identifier, the value is checked by the Exchange for possible duplicates, i.e. different orders submitted with the same ClOrdID (11). In case of duplication, the inbound request is rejected with the according error code.</p> |
| Format          | String  |
| Length          | 20  |
| Possible Values | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1  |
| Conditions      | <p>In inbound application messages, this field is always mandatory.</p> <p>In outbound application messages, this field is provided for solicited messages and not provided for unsolicited messages.</p> <p>In outbound ExecutionReport (8) messages if MassStatusReqID (584) is filled ClOrdID (11) is not provided.</p> <p>If message is sent due to breach of collars, as in that case there is an order acknowledgement ExecutionReport (8) before (the exchange "OrderID (37)" is provided), the ClOrdID (11) is not sent for the rejection message.</p>  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">OwnershipRequestAck (U29)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">FundPriceInput (U44)</a><br><a href="#">FundPriceInputAck (U45)</a>   |
| Used For        | Cash and Derivatives  |

## CollarRejType

| Field Name      | CollarRejType   |
|-----------------|---|
| Tag             | 9962  |
| Description     | Hit collar type (high or low) in case of order rejection due to collar breach.  |
| Format          | Char  |
| Length          | 1   |
| Possible Values | 1 = Low dynamic collar<br>2 = High dynamic collar   |
| Conditions      | Provided only in case of a rejection due to a collar breach. This field is not populated when ExecutionReport (8) message is sent in cases of rejection that do not involve collars (e.g. for rejection of creation of strategies). |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">OrderCancelReject (9)</a>  |
| Used For        | Cash and Derivatives  |

## ConditionalOrderFlag

| Field Name      | ConditionalOrderFlag   |
|-----------------|--|
| Tag             | 21800  |
| Description     | Field used to specify if the order is a conditional or a firm order.   |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = Firm (default)<br>1 = Conditional  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a> |
| Used For        | Cash   |

## ConfirmFlag

| Field Name      | ConfirmFlag  |
|-----------------|--|
| Tag             | 9930   |
| Description     | Indicates if the order entry or modification is confirmed by the broker issuing the order or not.<br>If the order is not confirmed by the issuing broker, additional checks on price and quantity are performed by the Trading Engine. On the other hand, a confirmed order is not subject to this additional checks.<br>Field also used in cancel/replace request to confirm a collar pass-through in case of rejection due to collar breach. |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = Not confirmed (default)<br>1 = Confirmed   |
| Conditions      | ConfirmFlag (9930) set to 1 is not applicable for Dark orders.   |
| Used In         | <a href="#">OrderCancelReplaceRequest (G)</a>  |
| Used For        | Cash and Derivatives   |

## ContraBroker

| Field Name | ContraBroker |
|------------|--------------|
| Tag        | 375          |

| Field Name      | ContraBroker  |
|-----------------|---|
| Description     | <p>ID of the clearing house in case of a CCP clearable transaction – also in the specific case of Internal Matching Service (IMS) with clearing:</p> <p>‘1’: LCH SA<br/> ‘3’: LCH Limited<br/> ‘5’: SIX x-clear<br/> ‘6’: EuroCCP</p> <p>ID of the Counterpart Firm in specific cases described below.</p> <p>The counterpart identifier is provided in the ExecutionReport (8) message in case the notified trade is the result of:</p> <ul style="list-style-type: none"> <li>- the Internal Matching Service (IMS) without clearing,</li> <li>- a transaction performed on the Public Auctions Market (VPU),</li> <li>- a transaction performed on a non-clearable instrument,</li> <li>- a transaction performed under a Bilateral Settlement agreement.</li> </ul> |
| Format          | String  |
| Length          | 20  |
| Possible Values | From 0 to 2 <sup>64</sup> -2  |
| Conditions      | Provided in the ExecutionReport (8) message in case the trade is the result of one of the cases listed above. Else not provided.  |
| Used In         | <a href="#">ExecutionReport (8)</a>   |
| Used For        | Cash  |

## CumQty

| Field Name      | CumQty   |
|-----------------|--|
| Tag             | 14   |
| Description     | <p>Cumulated quantity (to be calculated with Quantity Decimals).</p> <p>Total number of shares filled or Lots of a Derivative instrument. If an order is partially filled for a quantity q1, then partially filled for a quantity q2, in the first execution report, CumQty (14) = q1 and in the second execution report, CumQty (14) = q1 + q2.</p> |
| Format          | Qty  |
| Length          | 20   |
| Possible Values | From -1 to 2 <sup>64</sup> -2  |
| Conditions      | CumQty (14) is set to "-1" in case of Kill, Reject and Trade cancellation (i.e. If the OrdStatus(39) equal to '4' (Canceled), '3' (Done For Day), 'C' (Expired), '8' (Rejected) or H (Cancel Trade)) or ExecType (150) is set to 'j' (RFQ Ack)].   |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Cash and Derivatives   |

## CxlRejResponseTo

| Field Name      | CxlRejResponseTo  |
|-----------------|---|
| Tag             | 434   |
| Description     | Identifies the type of request that the OrderCancelReject (9) is in response to.  |
| Format          | Char  |
| Length          | 1   |
| Possible Values | <p>1 = OrderCancelRequest (F)</p> <p>2 = OrderCancelReplaceRequest (G)</p> <p>3 = MassQuote (i)</p> <p>4 = OrderMassCancelRequest (q)</p> |
| Used In         | <a href="#">OrderCancelReject (9)</a>   |
| Used For        | Cash and Derivatives  |

## D

## DarkExecutionInstruction

| Field Name      | DarkExecutionInstruction   |
|-----------------|--|
| Tag             | 20052  |
| Description     | <p>Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions.</p> <ul style="list-style-type: none"> <li>- Dark Indicator: indicates whether the client requests its order to benefit from LiS Pre-Transparency waiver to match the order in the Dark. (0: No ; 1: Yes)</li> <li>- Deferred Trade Indicator: <b>[Deprecated]</b> indicates whether the client requests a deferred publication for a Hidden Order. (0: No ; 1: Yes)</li> <li>- Display Order Interaction: <b>[Deprecated]</b> indicates whether the client requests its hidden order to match also with LIT orders. (0: No ; 1: Yes)</li> <li>- 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)</li> <li>- Minimum Quantity Type: indicates whether the Minimum Quantity for a dark order is MES or MAQ. (0: MAQ ; 1: MES)</li> </ul> |
| Format          | MultipleCharValue  |
| Length          | 9  |
| Possible Values | <p>0 = Dark Indicator</p> <p>1 = Deferred Trade Indicator - <b>Deprecated</b></p> <p>2 = Displayed Order Interaction - <b>Deprecated</b></p> <p>3 = Sweep Order Indicator</p> <p>4 = Minimum Quantity Type</p>   |
| Conditions      | <p>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.</p> <p>In OrderCancelReplaceRequest (G) message:</p> <ul style="list-style-type: none"> <li>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration</li> <li>- (ii) when sent to modify an order, value will be modified to the one provided</li> </ul> <p>Values flagged as deprecated should always be populated with value zero (0). If not provided, the message will be rejected.</p>   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">RFQAudit (U72)</a>  |
| Used For        | Cash   |

## DefaultAppVerID

| Field Name      | DefaultAppVerID   |
|-----------------|---|
| Tag             | 1137  |
| Description     | Specifies the service pack release being applied, by default, to the message at the session level |
| Format          | String  |
| Length          | 1   |
| Possible Values | 9 = FIX50SP2  |
| Used In         | <a href="#">Logon (A)</a>   |
| Used For        | Cash and Derivatives  |

## DeferralIndicator

| Field Name      | DeferralIndicator  |
|-----------------|--|
| Tag             | 21063  |
| Description     | Trade publication type indicator. Indicates whether the publication is immediate or not (differed). (1: Immediate ; 0: Differed) |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = False<br>1 = True  |
| Conditions      | For TradeCaptureReport (AE) message, it is mandatory when TrdType = '51', '1001' or '1004'.                                      |
| Used In         | <a href="#">TradeCaptureReport (AE)</a>  |
| Used For        | TCS ( Cash and Derivatives)  |

## DeliverToCompID

| Field Name      | DeliverToCompID   |
|-----------------|---|
| Tag             | 128   |
| Description     | ID of the receiving firm when the message is sent through a third party.<br>This field holds the same information as the one held by OnBehalfOfCompID in inbound messages.  |
| Format          | String  |
| Length          | 8   |
| Possible Values | Inbound: Not used / Outbound: Firm ID   |
| Conditions      | In case a firm's Logical access is configured with Additional allowed member code(s) [ACL] on top of the mandatory Member Code [Owner] that owns / requests the connection:<br>If these member codes (between Owner and ACL) are not the same, in a selected list of Outbound application messages (provided below) the field DeliverToCompID (128) is populated with the value specified in the field OnBehalfOfCompID (115). Otherwise, the field is not provided in Outbound messages.<br>List of selected outbound messages: ExecutionReport (8), OrderCancelReject (9), MassQuoteAck (b), QuoteRequestReject (AG), OrderMassCancelReport (r), RequestAckMessage (Uy), OwnershipRequestAck (U29), SecurityDefinition (d). |
| Used In         | <a href="#">Header</a>  |
| Used For        | Cash and Derivatives  |

## DisplayQty

| Field Name      | DisplayQty  |
|-----------------|---|
| Tag             | 1138  |
| Description     | Maximum number of quantity units to be shown to market participants (Iceberg Order).<br>DisplayQty (1138) is to be calculated with Quantity Decimals.   |
| Format          | Qty   |
| Length          | 20  |
| Possible Values | From 0 to 2 <sup>64</sup> -2  |
| Conditions      | The DisplayQty (1138) is provided only if OrdType (40) = X (Iceberg) and ExecType (150) is '0' (New) or 'e' (Refilled Iceberg Ack).<br>DisplayQty (1138) should be multiple of the instrument's lot size, otherwise the order will be rejected.<br>If upon entry an Iceberg order immediately matches, its acknowledgement message will contain the DisplayQty (1138) that is adjusted for the amount that has matched. |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>  |
| Used For        | Cash  |

## DisclosedQtyRandIndicator

| Field Name      | DisclosedQtyRandIndicator  |
|-----------------|--|
| Tag             | 21016  |
| Description     | Indicates whether the client requests or not a randomization for the DisplayQty (1138) of his iceberg order.               |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 0 = No<br>1 = Yes  |
| Conditions      | Mandatory if OrdType (40) = X (Iceberg).   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a> |
| Used For        | Cash and Derivatives   |

## E

### EMM

| Field Name      | EMM  |
|-----------------|--|
| Tag             | 20020  |
| Description     | Defines the Exchange Market Mechanism applied on each platform.  |
| Format          | Int  |
| Length          | 2  |
| Possible Values | 1 = Cash and Derivative Central Order Book (COB)<br>2 = NAV Trading Facility<br>3 = SATURN On-Exchange Off-Book<br>4 = Derivative Wholesales<br>5 = Cash On Exchange Off book<br>6 = Euronext off-exchange trade reports<br>7 = Derivative On Exchange Off book<br>8 = ETF MTF - NAV Central Order Book<br>9 = Listed-not traded<br>15 = Delta Neutral Contingency Leg<br>99 = Not Applicable (For indices and iNAV)   |
| Conditions      | <p>If the EMM (20020) present in the inbound message is not relevant (i.e. the value is one of the authorized values but not relevant in this case), it is sent back as it is in the outbound message used for the rejection.</p> <p>In TCS messages, the only possible values is '5' = Cash On Exchange Off book.</p> <p>In message RequestAckMessage (Uy) field populated when sent to provide positive acknowledgement of message PriceInput (UI) or LiquidityProviderCommand (UZ) with value provided by the client.</p> <p>In case of rejection of PriceInput (UI), LiquidityProviderCommand (UZ), OwnershipRequest (U18), OrderMassStatusRequest (AF) messages – field may not be provided in case of technical rejection, or if the data wasn't provided by the client in the Inbound message.</p> <p>In the MassQuotes (i) message the only possible value is '1' = Cash and Derivative Central Order Book (COB).</p> <p>In the message ERGCommand (U68):</p> <ul style="list-style-type: none"> <li>- required when ActionType (21097) is set to 5 = Order Size Limit and must always be set to '1' = Cash and Derivative Central Order Book (COB) – otherwise the message is rejected;</li> <li>- will be ignored if field ActionType (21097) is set with any known values other than '5' = Order Size Limit.</li> <li>- if filled with a value that's not known by the Exchange the message is rejected;</li> </ul> |
| Used In         | <a href="#">AskForQuote (UL)</a>   |



| Field Name | EMM   |
|------------|---|
|            | <a href="#">ExecutionReport (8)</a><br><a href="#">InstrumentSynchronizationList (U50)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (g)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">RequestForExecution (UM)</a><br><a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a><br><a href="#">FundPriceInput (U44)</a><br><a href="#">FundPriceInputAck (U45)</a><br><a href="#">RFQAudit (U72)</a><br><a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a> |
| Used For   | Cash and Derivatives  |

## EncryptMethod

| Field Name      | EncryptMethod                                |
|-----------------|--|
| Tag             | 98   |
| Description     | Method of encryption for the new FIX session |
| Format          | Int  |
| Length          | 1  |
| Possible Values | Always set to 0 (No encryption)              |
| Used In         | <a href="#">Logon (A)</a>                    |
| Used For        | Cash and Derivatives                         |

## EndSeqNo

| Field Name  | EndSeqNo                                 |
|-------------|--|
| Tag         | 16                                       |
| Description | Message sequence number for last message |
| Format      | SeqNum                                   |
| Length      | 10                                       |

| Field Name      | EndSeqNo                          |
|-----------------|-----------------------------------|
| Possible Values | From 1 to 2 <sup>32</sup> -2      |
| Used In         | <a href="#">ResendRequest (2)</a> |
| Used For        | Cash and Derivatives              |

## ERGActionType

| Field Name      | ERGActionType  |
|-----------------|--|
| Tag             | 21097  |
| Description     | Specifies the scope of the message.  |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 1 = Suspend<br>2 = Unsuspend<br>3 = Block<br>4 = Unblock<br>5 = Order Size Limit |
| Used In         | <a href="#">ERGCommand (U68)</a>   |
| Used For        | Derivatives  |

## ERGStatus

| Field Name      | ERGStatus  |
|-----------------|--|
| Tag             | 21105  |
| Description     | Indicates the Status of the Broker, Logical Access, Trader or ClientIdentificationShortCode. |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 1 = Suspended<br>2 = Unsuspended<br>3 = Blocked<br>4 = Unblocked                             |
| Used In         | <a href="#">RiskControlDetails (U71)</a>   |
| Used For        | Derivatives  |

## ErrorCode

| Field Name      | ErrorCode  |
|-----------------|--|
| Tag             | 9955   |
| Description     | Error code in case of rejection.<br>Provides the return error code when a request is rejected for a functional or a technical reason.  |
| Format          | Int  |
| Length          | 5  |
| Possible Values | From 0 to 2 <sup>16</sup> -2   |
| Conditions      | In ExecutionReport (8) message this field is provided when OrdStatus = 8 (Rejected).   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">SecurityDefinition (d)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">RiskControlDetails (U71)</a> |

| Field Name | ErrorCode   |
|------------|---|
|            | <a href="#">TradeCaptureReportAck (AR)</a><br><a href="#">IOINotification (U73)</a> |
| Used For   | Cash and Derivatives  |

## ESCBMembership

| Field Name      | ESCBMembership   |
|-----------------|--|
| Tag             | 21096  |
| 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          | Int  |
| Length          | 1  |
| Possible Values | 0 = False<br>1 = True  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a>  |
| Used For        | Derivatives  |

## EvaluatedPrice

| Field Name      | EvaluatedPrice   |
|-----------------|--|
| Tag             | 21802  |
| 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  |
| Length          | 20   |
| 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         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Derivatives  |

## ExchangeIOID

| Field Name      | ExchangeIOID   |
|-----------------|--|
| Tag             | 21114  |
| Description     | Unique identifier of IOI message, assigned by the Exchange.  |
| Format          | String   |
| Length          | 20   |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$   |
| Conditions      | Populated when <i>IOINotification (U73)</i> is sent: <ul style="list-style-type: none"> <li>- to acknowledge the IOI (6);</li> <li>- to reject, due to functional reasons, the IOI (6);</li> <li>- to notify counterparties that a new indication of interest was submitted;</li> <li>- to notify the submitter of the indication of interest that an order was placed as an answer to his indication of interest;</li> <li>- to notify counterparties that an existing indication of interest was cancelled;</li> <li>- to notify counterparties that an existing indication of interest was modified;</li> </ul> |
| Used In         | <a href="#">IOINotification (U73)</a>  |

| Field Name | ExchangeIOID |
|------------|--------------|
| Used For   | Cash         |

## ExecRefID

| Field Name      | ExecRefID   |
|-----------------|---|
| Tag             | 19  |
| Description     | The ExecRefID (19) is an unique identifier of a trade per instrument. This field is provided in case of trade cancellation. |
| Format          | String  |
| Length          | 10  |
| Possible Values | Sequential number. From 0 to 2 <sup>32</sup> -2   |
| Conditions      | Provided only in case of Trade Cancellation - filled with the ExecID (17) of the Trade being cancelled.                     |
| Used In         | <a href="#">ExecutionReport (8)</a>   |
| Used For        | Cash and Derivatives  |

## ExecRestatementReason

| Field Name      | ExecRestatementReason  |
|-----------------|--|
| Tag             | 378  |
| Description     | The reason for restatement when ExecutionReport (8) message is sent with ExecType (150) = 'D' (Restated) or used when communicating an unsolicited cancel. |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 0 = GT corporate action<br>1 = GT renewal / restatement (no corporate action)  |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Cash and Derivatives   |

## ExecType

| Field Name      | ExecType   |
|-----------------|--|
| Tag             | 150  |
| Description     | Describes the specific ExecutionReport (8) while OrdStatus (39) will always identify the current order status (e.g. Partially Filled).   |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = New<br>1 = Order Cancelled due to an incorrect Reactor Response<br>2 = Cross Order Ack<br>3 = Done for Day<br>4 = Cancelled<br>5 = Replaced<br>8 = Rejected<br>a = Cancelled by STP<br>b = Order Cancelled due to Cancel On Disconnect Mechanism<br>c = Conditional Order cancelled due to Potential Matching<br>d = Collar Confirmation Ack<br>e = Refilled Iceberg Ack<br>f = LP Order cancelled due to RFQ cancellation<br>g = Quote cancelled due to Knock-Out<br>h = Iceberg Transformed to Limit due to Minimum size |

| Field Name | ExecType  |
|------------|---|
|            | i = Order Creation By Market Operations<br>j = RFQ Ack<br>k = OwnershipRequest Ack<br>m = OrderMassStatusRequest Ack<br>n = Order Cancelled due to a potential trade outside FSP limits<br>q = RFQ Remaining quantity killed<br>r = LP Order cancelled due to RFQ expiration<br>s = LP Order cancelled due to RFQ confirmation<br>v = Order Cancelled by Clearing Risk Manager<br>w = Order Cancelled due to Trade Price Validation<br>C = Expired<br>D = Restated<br>F = Trade (Partial Fill or Fill)<br>G = Trade Creation by Market Operation<br>H = Cancel Trade<br>I = Order Status<br>L = Triggered or Activated by System<br>O = Eliminated by corporate event<br>P = Cancelled by Member Risk Manager (For Future Use)<br>Q = RFQ expired<br>R = RFQ partially or fully matched with other counterparts<br>S = RFQ cancelled by the issuer<br>T = RFQ Not matched due to issuer order's features<br>U = Order Cancelled by Market Operations<br>V = Cancelled due to a Kill command<br>W = Cancelled MTL in an empty Order Book<br>X = Remaining quantity killed (IOC)<br>Y = Beginning of PAKO Period<br>Z = Too many collar breach attempts<br>! = Remaining RFC quantity cancelled |
| Conditions | Values Q; R; S; T will be used only on ETF Access platform.<br>Value Q is used when an order is cancelled due to RFQ expiration. It happens when the RFQ issuer does not validate the RFQ after a predefined period of time.  |
| Used In    | <a href="#">ExecutionReport (8)</a>   |
| Used For   | Cash and Derivatives  |

## ExecID

| Field Name      | ExecID  |
|-----------------|---|
| Tag             | 17  |
| Description     | <p>The ExecID (17) 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.</p> <p>For example, let x be the reference identifier of a given trade, x is reported in the two ExecutionReport (8) messages generated for the both sides of the trade. x will also be used as reference for this trade in the Drop Copy feed.</p> <p>And if this trade is cancelled, x is again reported in the ExecutionReport (8) messages sent for the 2 sides of the trade.</p> |
| Format          | String  |
| Length          | 10  |
| Possible Values | Sequential number. From 0 to 2 <sup>32</sup> -2   |
| Conditions      | <p>In Order Information reports and Market Operations Trade Cancellation reports, provided with the reference ID of the current execution, during the current day and for the concerned instrument.</p> <p>For trades on a strategy, in ExecutionReport (8) messages, the ExecID (17) field contains the execution for the Strategy, and the LegExecID (1893) contains the ExecID (17) of the individual strategy leg (i.e. the outright).</p>  |

| Field Name | ExecID   |
|------------|--|
|            | This field is populated with 'NA' for all events concerning order creation, modification and triggering (such as, New orders, Refilled and Transformation of Iceberg order, Modification of an order, Triggering of MTL, Stop, VFU / VFC, Order Status and Ownership request), cancellations and rejections. |
| Used In    | <a href="#">ExecutionReport (8)</a>  |
| Used For   | Cash and Derivatives   |

## ExecPhase

| Field Name      | ExecPhase   |
|-----------------|---|
| Tag             | 21023   |
| Description     | Indicates the trading phase during which the trade has occurred.  |
| Format          | Char  |
| Length          | 1   |
| Possible Values | 1 = Continuous Trading Phase<br>2 = Uncrossing Phase<br>3 = Trading At Last Phase<br>4 = Continuous Uncrossing Phase<br>5 = IPO |
| Conditions      | Provided only in case of Full or Partial executions.  |
| Used In         | <a href="#">ExecutionReport (8)</a>   |
| Used For        | Cash and Derivatives  |

## ExpireDate

| Field Name      | ExpireDate   |
|-----------------|--|
| Tag             | 432  |
| Description     | Field used as date of order expiration (last day the order can trade) for GTD orders(Format: YYYYMMDD).  |
| Format          | LocalMktDate   |
| Length          | 8  |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31   |
| Conditions      | ExpireDate (432) is mandatory in the inbound NewOrderSingle (D) messages for GTD orders.<br>This field is not provided in the Outbound messages in trading OEG.<br>This field is populated in order related messages in Drop Copy.<br>If the field contains the day before the current trading day, it will assume that the year is current year+1<br>If the date provided is equal to the current trading date, it will be accepted<br>In OrderCancelReplaceRequest (G) message:<br>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration<br>- (ii) when sent to modify an order, value will be modified to the one provided |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>   |
| Used For        | Cash and Derivatives   |

## ExpireTime

| Field Name  | ExpireTime  |
|-------------|---|
| Tag         | 126   |
| Description | Field used as time of order expiration for GTT orders (Format: YYYYMMDD-HH:MM:SS.ssssssss). |

| Field Name      | ExpireTime   |
|-----------------|--|
| Format          | UTCTimestamp   |
| Length          | 27   |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)   |
| Conditions      | <p><i>ExpireTime (126) is mandatory in the Inbound NewOrderSingle (D) messages for GTT orders. Valid timestamps must have the current trade date and a time specified at a second level. The last 9 characters (nanoseconds) are ignored for this field.</i></p> <p><i>This field is not provided in the Outbound messages in trading OEG.</i></p> <p><i>This field is populated in order related messages in Drop Copy.</i></p> <p><i>In OrderCancelReplaceRequest (G) message:</i></p> <ul style="list-style-type: none"> <li>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration</li> <li>- (ii) when sent to modify an order, value will be modified to the one provided</li> </ul> |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>   |
| Used For        | Cash   |

## F

## FRMARAMPLP

| Field Name      | FRMARAMPLP   |
|-----------------|--|
| Tag             | 21801  |
| Description     | Indicates whether the order is subject to French Market Abuse Regulation Accepted Market Practice Liquidity provision (FR MAR AMP LP) or not.<br>French Market Abuse Regulation Accepted Market Practice Liquidity provision is related to the AMAFI (Association française des marchés financiers) market abuse prevention. |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = Not subject to FR MAR AMP LP (AMAFI) (default)<br>1 = Subject to FR MAR AMP LP (AMAFI)   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a>   |
| Used For        | Cash   |

## FinalExecID

| Field Name      | FinalExecID  |
|-----------------|--|
| Tag             | 21806  |
| 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          | String   |
| Length          | 10   |
| Possible Values | Sequential number. From 0 to 2 <sup>32</sup> -2  |
| Conditions      | Used only for trades of Market On Close Future   |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Derivatives  |

## FinalSecurityID

| Field Name      | FinalSecurityID  |
|-----------------|--|
| Tag             | 21805  |
| Description     | This field is used for the Market On Close (MOC) contracts to provide the symbol index of the final future instrument. |
| Format          | String   |
| Length          | 10   |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |
| Conditions      | Used only for trades of Market On Close Future   |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Derivatives  |

## G

## GapFillFlag

| Field Name      | GapFillFlag                                |
|-----------------|--|
| Tag             | 123  |
| Description     | Purpose of sequence reset.                 |
| Format          | Boolean                                    |
| Length          | 1  |
| Possible Values | Y = Gap fill message<br>N = Sequence reset |
| Used In         | <a href="#">SequenceReset (4)</a>          |
| Used For        | Cash and Derivatives                       |

## GrossTradeAmt

| Field Name      | GrossTradeAmt  |
|-----------------|--|
| Tag             | 381  |
| Description     | Total amount of a Declaration.<br>Indicates the global amount of a declaration when it is expressed as an amount.  |
| Format          | Amt  |
| Length          | 9  |
| Possible Values | Amount   |
| Conditions      | For inbound TradeCaptureReport (AE) message (TCS), it is applicable only when TrdType = '1003' for a trade/declaration on Dutch Funds if expressed as an amount. If expressed as a quantity, this field should not be provided.<br><br>In outbound TradeCaptureReportAck (AR) messages (from TCS) field GrossTradeAmt (381) is provided only for messages with TrdType = '1003' AND TrdRptStatus (939) set to 19 = Filled, 18 = Pre-Matched OR 2 = Cancelled |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS ( Cash and Derivatives)  |



## GuaranteeFlag

| Field Name      | GuaranteeFlag  |
|-----------------|--|
| Tag             | 9971   |
| Description     | Indicates if the trade is guaranteed or not (for clearing purposes).   |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 1 = Cleared but not Guaranteed<br>2 = Cleared and Guaranteed   |
| Conditions      | In inbound TradeCaptureReport (AE) messages field is mandatory if it is submitted with TradeReportTransType (487) set to 0 = New<br>In outbound TradeCaptureReportAck (AR) messages (from TCS) field is provided if the field SettlementFlag (9970) is set to 1 = True |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS ( Cash and Derivatives)  |

## H

## HeartBtInt

| Field Name      | HeartBtInt                       |
|-----------------|----------------------------------|
| Tag             | 108                              |
| Description     | Heartbeat interval (in seconds). |
| Format          | Int                              |
| Length          | 3                                |
| Possible Values | Numerical                        |
| Used In         | <a href="#">Logon (A)</a>        |
| Used For        | Cash and Derivatives             |

## I

## InputPxType

| Field Name      | InputPxType   |
|-----------------|---|
| Tag             | 9950  |
| Description     | Type of input price.  |
| Format          | Char  |
| Length          | 1   |
| Possible Values | 1 = Valuation Price<br>2 = Alternative Indicative Price (AIP) |
| Used In         | <a href="#">PriceInput (UI)</a>                               |
| Used For        | Cash  |

## InstrumentScopeSecurityID

| Field Name      | InstrumentScopeSecurityID   |
|-----------------|---|
| Tag             | 1538  |
| Description     | Security ID.  |
| Format          | String  |
| Length          | 10  |
| Possible Values | From 0 to 2 <sup>32</sup> -2  |
| Conditions      | Mandatory if NoInstrumentScopes (1656) >= 1.<br>If provided in the UserNotification (CB) message, it specifies the scope of the action specified in UserStatus (926). |
| Used In         | <a href="#">UserNotification (CB)</a>   |
| Used For        | Cash and Derivatives  |

## InstrumentScopeSecurityIDSource

| Field Name      | InstrumentScopeSecurityIDSource  |
|-----------------|--|
| Tag             | 1539   |
| Description     | Used to limit instrument scope.  |
| Format          | String   |
| Length          | 1  |
| Possible Values | 8 = Symbol Index   |
| Conditions      | Mandatory if NoInstrumentScopes (1656) >= 1.<br>If provided in the UserNotification (CB) message, is always set to value '8' = Symbol Index. |
| Used In         | <a href="#">UserNotification (CB)</a>  |
| Used For        | Cash and Derivatives   |

## IOIQltyInd

| Field Name      | IOIQltyInd   |
|-----------------|--|
| Tag             | 25   |
| Description     | Relative Quality of the indication of interest.                  |
| Format          | Char   |
| Length          | 1  |
| Possible Values | H = High<br>L = Low<br>M = Medium                                |
| Used In         | <a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a> |
| Used For        | Cash   |

## IOIQty

| Field Name      | IOIQty  |
|-----------------|---|
| Tag             | 27  |
| Description     | Indication of the size of the indication of interest. |
| Format          | Char  |
| Length          | 1   |
| Possible Values | S = Small<br>M = Medium                               |

| Field Name | IOIQty   |
|------------|--|
|            | L = Large<br>U = Undisclosed Qty                                 |
| Used In    | <a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a> |
| Used For   | Cash   |

## IOIRefID

| Field Name      | IOIRefID  |
|-----------------|---|
| Tag             | 26  |
| Description     | Reference identifier used with CANCEL and REPLACE transaction types.  |
| Format          | String  |
| Length          | 20  |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$  |
| Conditions      | In IOI (6) required when: <ul style="list-style-type: none"> <li>- attempting to cancel or modify a previously submitted indication of interest;</li> </ul> In IOINotification (U73) provided when: <ul style="list-style-type: none"> <li>- the message is being sent to acknowledge the cancellation or modification of a previously submitted indication of interest;</li> </ul> |
| Used In         | <a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a>  |
| Used For        | Cash  |

## IOITransType

| Field Name      | IOITransType   |
|-----------------|--|
| Tag             | 28   |
| Description     | Identifies the reason why the IOI message is being sent to the Exchange. |
| Format          | Char   |
| Length          | 1  |
| Possible Values | N = New<br>C = Cancel<br>R = Replace                                     |
| Used In         | <a href="#">IOI (6)</a>  |
| Used For        | Cash   |

## IOIType

| Field Name      | IOIType  |
|-----------------|--|
| Tag             | 21113  |
| Description     | Identifies the reason why the IOINotification (U73) is being sent by the Exchange.   |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 1 = Ack<br>2 = Reject<br>3 = New IOI Notification<br>4 = IOI Reply Notification<br>5 = IOI Cancellation Notification<br>6 = IOI Replacement Notification |

| Field Name | IOIType                               |
|------------|---------------------------------------|
| Used In    | <a href="#">IOINotification (U73)</a> |
| Used For   | Cash                                  |

## IOIID

| Field Name      | IOIID  |
|-----------------|--|
| Tag             | 23   |
| Description     | Unique identifier of IOI message.  |
| Format          | String   |
| Length          | 20   |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$   |
| Conditions      | In the NewOrderSingle (D), when populated must be set to the value of <i>the ExchangeIOIID (21114)</i> provided by the Exchange in the <i>IOINotification (U73)</i> sent to acknowledge the IOI (6). |
| Used In         | <a href="#">NewOrderSingle (D)</a><br><a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a>   |
| Used For        | Cash   |

## K

## KillReason

| Field Name      | KillReason  |
|-----------------|---|
| Tag             | 21807   |
| Description     | Future Use.<br>Detailed reason for cancellation of an order   |
| Format          | Char  |
| Length          | 5   |
| Possible Values | <ul style="list-style-type: none"> <li>1 = Order Cancelled by Client</li> <li>2 = Order Expired</li> <li>3 = Order Cancelled by Market Operations</li> <li>4 = Order Eliminated due to Corporate Event</li> <li>5 = Done for day</li> <li>6 = Cancelled MTL in an empty Order Book</li> <li>7 = Cancelled by STP</li> <li>8 = Remaining quantity killed (IOC)</li> <li>9 = Beginning of PAKO Period</li> <li>11 = Order Cancelled due to Cancel On Disconnect Mechanism</li> <li>12 = RFQ expired</li> <li>13 = RFQ partially or fully matched with other counterparts</li> <li>14 = RFQ cancelled by the issuer</li> <li>15 = RFQ Not matched due to issuer order's features</li> <li>16 = Quote cancelled due to Knock-Out</li> <li>17 = Order cancelled due to a Kill command</li> <li>19 = LP Order cancelled due to RFQ expiration</li> <li>20 = LP Order cancelled due to RFQ cancellation</li> <li>21 = RFQ Remaining quantity killed</li> <li>22 = LP Order cancelled due to RFQ confirmation</li> <li>23 = Order cancelled due to Market Maker Protection</li> <li>24 = Order cancelled by clearing risk manager</li> <li>25 = Order cancelled by member risk manager</li> </ul> |

| Field Name | KillReason   |
|------------|--|
|            | 26 = Order cancelled due to Trade Price Validation<br>30 = Conditional Order cancelled due to Potential Matching<br>36 = Order Cancelled due to a potential trade outside FSP limits<br>37 = Remaining RFC Quantity Cancelled<br>38 = Order Cancelled due to an incorrect Reactor response |
| Conditions | Future Use   |
| Used In    | <a href="#">ExecutionReport (8)</a>  |
| Used For   | Cash and Derivatives   |

## L

## LastBookInTime

| Field Name      | LastBookInTime   |
|-----------------|--|
| Tag             | 20031  |
| Description     | Last Matching Engine In Time (in ns) processed on the associated ResynchronizationID. (Format: YYYYMMDD-HH:MM:SS.ssssssss).              |
| Format          | UTCTimestamp   |
| Length          | 27   |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) |
| Used In         | <a href="#">SynchronizationTime (U51)</a>  |
| Used For        | Cash and Derivatives   |

## LastCapacity

| Field Name      | LastCapacity   |
|-----------------|--|
| Tag             | 29   |
| Description     | Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.   |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 7 = Dealing on own account (DEAL)<br>8 = Matched principal (MTCH)<br>9 = Any other capacity (AOTC)   |
| Conditions      | In outbound messages this field is populated only in Drop Copy   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives   |

## LastPx

| Field Name      | LastPx  |
|-----------------|---|
| Tag             | 31  |
| Description     | The LastPx (31) indicates the price of last fill on an instrument (to be calculated with Price/Index Level Decimals).   |
| Format          | Price   |
| Length          | 20  |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$  |
| Conditions      | <p>Provided only in case of a Full or Partial execution, or Trade Cancellation.</p> <p>For a trade cancellation in ExecutionReport (8) the LastPx (31) refers to price of the cancelled trade.</p> <p>Negative values are possible:</p> <ul style="list-style-type: none"> <li>- on ETF Access when the order is sent on the NAV trading Order Book (EMM = 8);</li> <li>- on Derivatives markets, in any conditions that results a negative price;</li> </ul> |
| Used In         | <a href="#">ExecutionReport (8)</a>   |
| Used For        | Cash and Derivatives  |

## LastQty

| Field Name      | LastQty  |
|-----------------|--|
| Tag             | 32   |
| Description     | The LastQty (32) indicates the quantity of the last fill on an instrument (to be calculated with Quantity Decimals).   |
| Format          | Qty  |
| Length          | 20   |
| Possible Values | From 0 to $2^{64}-2$   |
| Conditions      | Provided only in case of a Full or Partial execution and Trade Cancellation. In the ExecutionReport (8) message, sent as a notification of a trade cancellation, the LastQty (32) refers to Quantity of the cancelled trade. |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">RFQAudit (U72)</a>  |
| Used For        | Cash and Derivatives   |

## LastMsgSeqNumProcessed

| Field Name      | LastMsgSeqNumProcessed   |
|-----------------|--|
| Tag             | 369  |
| Description     | Indicates to the Client which was the Message Sequence Number of the last message processed by the Exchange. |
| Format          | SeqNum   |
| Length          | 10   |
| Possible Values | From 1 to $2^{32}-2$   |
| Conditions      | Provided to clients in outbound messages.  |
| Used In         | <a href="#">Header</a>   |
| Used For        | Cash and Derivatives   |

## LeavesQty

| Field Name  | LeavesQty   |
|-------------|---|
| Tag         | 151   |
| Description | Indicates the remaining quantity of an order, i.e. the quantity open for further execution (to be calculated with Quantity Decimals). |

| Field Name      | LeavesQty  |
|-----------------|--|
| Format          | Qty  |
| Length          | 20   |
| Possible Values | From -1 to 2 <sup>64</sup> -2  |
| Conditions      | <p>If the OrdStatus(39) is = 4 (Canceled), 3 (Done For Day), C (Expired) or 8 (Rejected) (in which case the order is no longer active) then LeavesQty is set to '0'. If the ExecType (150) and OrdStatus(39) is = H (Cancel Trade) then LeavesQty (151) is set to '-1' (meaning not provided).</p> <p>If the ExecType (150) and OrdStatus(39) are set to 'H' (Cancel Trade) or if ExecType (150) is set to value 'j' (RFQ Ack) then LeavesQty (151) is set to '-1' (meaning not provided).</p> |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Cash and Derivatives   |

## LegErrorCode

| Field Name      | LegErrorCode  |
|-----------------|---|
| Tag             | 21084   |
| Description     | <p>Error code of the Leg in case of rejection.</p> <p>Provides the return error code when a request is rejected for a functional or a technical reason.</p> |
| Format          | Int   |
| Length          | 5   |
| Possible Values | From 0 to 2 <sup>16</sup> -2  |
| Used In         | <a href="#">WholesaleOrderAck (U65)</a>   |
| Used For        | Derivatives   |

## LegExecID

| Field Name      | LegExecID  |
|-----------------|--|
| Tag             | 1893   |
| Description     | The LegExecID (1893) is unique per instrument and per day. It is the unique identifier of a trade for each leg of the strategy trade. This field is provided in case of fill, partial fill or trade cancellation for a strategy. |
| Format          | String   |
| Length          | 10   |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Derivatives  |

## LegLastPx

| Field Name      | LegLastPx   |
|-----------------|---|
| Tag             | 637   |
| Description     | Execution price assigned to a leg (to be calculated with Price/Index Level Decimals). |
| Format          | Price   |
| Length          | 20  |
| Possible Values | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1  |
| Conditions      | For derivatives markets only.   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">CrossOrder (U67)</a>               |
| Used For        | Derivatives   |

## LegLastQty

| Field Name      | LegLastQty  |
|-----------------|---|
| Tag             | 1418  |
| Description     | Execution quantity for the leg (to be calculated with Quantity Decimals). |
| Format          | Qty   |
| Length          | 20  |
| Possible Values | From 0 to $2^{64}-2$  |
| Conditions      | For derivatives market only.  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">CrossOrder (U67)</a>   |
| Used For        | Derivatives   |

## LegLastTradingDate

| Field Name      | LegLastTradingDate   |
|-----------------|--|
| Tag             | 21092  |
| Description     | Maturity Date of the leg of the strategy (text formatted as YYYYMMDD).   |
| Format          | LocalMktDate   |
| Length          | 8  |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31   |
| Conditions      | In SecurityDefinitionRequest (c) and NewWholesaleOrder (U64) messages this field should be populated when required to identify a Derivative outright as a leg of the strategy. |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">SecurityDefinitionRequest (c)</a>   |
| Used For        | Derivatives  |

## LegPrice

| Field Name      | LegPrice  |
|-----------------|---|
| Tag             | 566   |
| Description     | Price of corresponding strategy leg (to be calculated with the Price/Index Level Decimals).   |
| Format          | Price   |
| Length          | 20  |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$  |
| Conditions      | This field is populated in all SecurityDefinitionRequest (c) messages, except for the submission of a Delta-neutral strategy. For Delta-neutral this field should not be provided.<br><br>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 (c) message. In all other cases of submission of the Security Definition Request (c) messages this field should not be provided. |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">SecurityDefinitionRequest (c)</a>  |
| Used For        | Derivatives   |

## LegPutOrCall

| Field Name  | LegPutOrCall               |
|-------------|----------------------------|
| Tag         | 1358                       |
| Description | Type of the option as leg. |



| Field Name      | LegPutOrCall   |
|-----------------|--|
| Format          | Int  |
| Length          | 1  |
| Possible Values | 1 = Call<br>0 = Put  |
| Conditions      | Only for Derivative Markets and Mandatory in message SecurityDefinitionRequest (c) and NewWholesaleOrder (U64) only populated for strategies when leg is an Option, and LegSecurityType (609) = 'OPT'. |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">SecurityDefinitionRequest (c)</a>   |
| Used For        | Derivatives  |

## LegRatio

| Field Name      | LegRatio   |
|-----------------|--|
| Tag             | 21091  |
| Description     | Ratio of lots for the leg. For contingent trades, the delta. <ul style="list-style-type: none"> <li>■ 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).</li> <li>■ 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.</li> </ul> |
| Format          | Int  |
| Length          | 7  |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |
| Conditions      | For NewWholesaleOrder (U64) only populated for strategies  |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">SecurityDefinitionRequest (c)</a>   |
| Used For        | Derivatives  |

## LegSecurityIDSource

| Field Name      | LegSecurityIDSource  |
|-----------------|--|
| Tag             | 603  |
| Description     | Gives the type of LegSecurityID (602).   |
| Format          | String   |
| Length          | 1  |
| Possible Values | 8 = Symbol Index   |
| Conditions      | Required if LegSecurityID (602) is provided. For Derivatives markets only.   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">SecurityDefinitionRequest (c)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">CrossOrder (U67)</a> |
| Used For        | Derivatives  |

## LegSecurityType

| Field Name      | LegSecurityType  |
|-----------------|--|
| Tag             | 609  |
| Description     | Defines the type of instrument of the Leg  |
| Format          | String   |
| Length          | 11   |
| Conditions      | Defines the value in LegSecurityID (602). Required if LegSecurityID (602) is provided.   |
| Possible Values | FUT = Future<br>OPT = Option<br>CASH = Cash  |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">SecurityDefinitionRequest (c)</a> |
| Used For        | Derivatives  |

## LegSide

| Field Name      | LegSide   |
|-----------------|---|
| Tag             | 624   |
| Description     | Indicates the side of the trade leg.  |
| Format          | Char  |
| Length          | 1   |
| Possible Values | 1 = Buy<br>2 = Sell   |
| Conditions      | For Derivatives markets only. For NewWholesaleOrder (U64) only populated for strategies   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">SecurityDefinitionRequest (c)</a><br><a href="#">WholesaleOrderAck (U65)</a> |
| Used For        | Derivatives   |

## LegStrikePrice

| Field Name      | LegStrikePrice   |
|-----------------|--|
| Tag             | 612  |
| 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  |
| Length          | 20   |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$   |
| Conditions      | In SecurityDefinitionRequest (c) message this field should not be populated.<br>The value provided with Price/Index Level Decimals if the leg is an option.  |
| Used In         | <a href="#">SecurityDefinitionRequest (c)</a>  |
| Used For        | Derivatives  |

## LegSymbol

| Field Name | LegSymbol |
|------------|-----------|
| Tag        | 600       |

| Field Name      | LegSymbol  |
|-----------------|--|
| Description     | Identifies the contract of this instrument by its Symbol Index.  |
| Format          | String   |
| Length          | 10   |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |
| Conditions      | Required if NoLegs (555) >= 1. For Derivatives markets only. When populated should always contain the Symbol Index of the Contract |
| Used In         | <a href="#">SecurityDefinitionRequest (c)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">CrossOrder (U67)</a>       |
| Used For        | Derivatives  |

## LegSecurityID

| Field Name      | LegSecurityID  |
|-----------------|--|
| Tag             | 602  |
| 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          | String   |
| Length          | 10   |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |
| Conditions      | For Derivatives Markets only.  |
| Used In         | <a href="#">SecurityDefinitionRequest (c)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">CrossOrder (U67)</a>  |
| Used For        | Derivatives  |

## LISTransactionID

| Field Name      | LISTransactionID  |
|-----------------|---|
| Tag             | 21085   |
| Description     | ID that can be used to associated Executions belonging to the same LIS Transaction  |
| Format          | String  |
| Length          | 10  |
| Possible Values | From 0 to 2 <sup>32</sup> -2  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a> |
| Used For        | Derivatives   |

## LogicalAccessID

| Field Name      | LogicalAccessID                   |
|-----------------|-----------------------------------|
| Tag             | 21021                             |
| Description     | Identifier of the Logical Access. |
| Format          | Int                               |
| Length          | 10                                |
| Possible Values | From 0 to 2 <sup>32</sup> -2      |

| Field Name | LogicalAccessID  |
|------------|--|
| Conditions | <p>It is required in Logon (A) message.</p> <p>It is required in the OwnershipRequest (U18) message when the OrderID (37) is not provided.</p> <p>In the ExecutionReport (8) message, when combined to the OEPartitionID (21019), it provides the OE Session that owns the order.</p> <p>In the OrderMassCancelRequest (q) message it can be used as filter to cancel orders belonging to this Logical Access.</p> <p>In OrderCancelReject (9) message this field is provided only in Drop Copy.</p> |
| Used In    | <a href="#">ExecutionReport (8)</a><br><a href="#">Logon (A)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">OwnershipRequestAck (U29)</a><br><a href="#">UserNotification (CB)</a><br><a href="#">OrderCancelReject (9)</a>   |
| Used For   | Cash and Derivatives   |

## LongClientID

| Field Name      | LongClientID   |
|-----------------|--|
| Tag             | 21804  |
| 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. |
| Format          | String   |
| Length          | 16   |
| Possible Values | (see field description)  |
| Conditions      | If the field <i>LongClientID</i> (21804) is also provided for the Cash markets, it will be ignored.  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">CrossOrder (U67)</a>                      |
| Used For        | Derivatives  |

## LPActionCode

| Field Name      | LPActionCode   |
|-----------------|--|
| Tag             | 10076  |
| Description     | Action the Liquidity Provider wants to apply on the specified instrument of warrant type.  |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 1 = Knock-In By Issuer (KIBI)<br>2 = Knock-Out By Issuer (KOB)<br>3 = Payment After Knock-Out (PAKO)<br>4 = Bid Only<br>5 = Offer Only<br>6 = Price Input  |
| Conditions      | For RequestAckMessage (Uy) it is provided only if it is an answer to a LiquidityProviderCommand (UZ). In inbound LiquidityProviderCommand (UZ) messages, 6 (Price Input) is not a possible value, and is only provided in outbound RequestAckMessage (Uy) in response of the PriceInput (UI) |
| Used In         | <a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">RequestAckMessage (Uy)</a>  |

| Field Name | LPActionCode |
|------------|--------------|
| Used For   | Cash         |

## LPRole

| Field Name      | LPRole  |
|-----------------|---|
| Tag             | 20021   |
| Description     | Identifies the type of the Liquidity Provider when AccountCode is equal to 'Liquidity Provider'.  |
| Format          | Int   |
| Length          | 2   |
| Possible Values | 1 = Liquidity Provider or Market Maker<br>3 = Retail Liquidity Provider<br>12 = RFQ Liquidity Provider  |
| Conditions      | LPRole (20021) is mandatory when AccountCode (6399) is equal to 'Liquidity Provider'.<br>In OrderCancelReplaceRequest (G) message, if provided the value is ignored.                            |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a> |
| Used For        | Cash and Derivatives  |

## M

## MassActionReportID

| Field Name      | MassActionReportID                              |
|-----------------|---|
| Tag             | 1369  |
| Description     | Exchange allocated order mass cancel report ID. |
| Format          | String  |
| Length          | 20  |
| Possible Values | Value provided by the Trading Engine            |
| Used In         | <a href="#">OrderMassCancelReport (r)</a>       |
| Used For        | Cash and Derivatives                            |

## MassCancelRequestType

| Field Name      | MassCancelRequestType   |
|-----------------|---|
| Tag             | 530   |
| Description     | Specifies the scope of the OrderMassCancelRequest (q). The specified action is only applicable to the orders already present in the book. |
| Format          | Char  |
| Length          | 1   |
| Possible Values | 1 = Cancel orders for a security (cash and derivatives) or a contract (derivatives only)<br>A = Cancel orders for a security group        |
| Used In         | <a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (q)</a>   |
| Used For        | Cash and Derivatives  |

## MassCancelResponse

| Field Name      | MassCancelResponse   |
|-----------------|--|
| Tag             | 531  |
| Description     | Specifies the action taken by counterparty order handling system as a result of the OrderMassCancelRequest (AF). |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 1 = Cancel orders for a security<br>A = Cancel orders for a security group                                       |
| Used In         | <a href="#">OrderMassCancelReport (r)</a>  |
| Used For        | Cash and Derivatives   |

## MassStatusReqID

| Field Name      | MassStatusReqID   |
|-----------------|---|
| Tag             | 584   |
| Description     | Unique Identifier assigned by the client to the OrderMassStatusRequest (AF).  |
| Format          | String  |
| Length          | 20  |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$  |
| Conditions      | Mandatory in inbound OrderMassStatusRequest (AF) message. Provided in outbound ExecutionReport (8) if sent as a response to a OrderMassStatusRequest (AF) message.<br>In outbound ExecutionReport (8) messages if MassStatusReqID (584) is filled ClOrdID (11) is not provided. |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">OrderMassStatusRequest (AF)</a>  |
| Used For        | Cash and Derivatives  |

## MassStatusReqType

| Field Name      | MassStatusReqType                                       |
|-----------------|---|
| Tag             | 585   |
| Description     | Specifies the scope of the OrderMassStatusRequest (AF). |
| Format          | Int   |
| Length          | 3   |
| Possible Values | 101 = Status of a single order                          |
| Used In         | <a href="#">OrderMassStatusRequest (AF)</a>             |
| Used For        | Cash and Derivatives                                    |

## MessagePriceNotation

| Field Name      | MessagePriceNotation   |
|-----------------|--|
| Tag             | 21803  |
| 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          | Int  |
| Length          | 2  |
| Possible Values | 1 = Price  |

| Field Name | MessagePriceNotation  |
|------------|---|
|            | 2 = Spread in Basis Points<br>3 = Spread  |
| Conditions | Currently this functionality is used only for TRF and MOC products. Note that for the TRF products the value “Spread” means “Spread in index point” |
| Used In    | <a href="#">ExecutionReport (8)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">CrossOrder (U67)</a>                                  |
| Used For   | Derivatives   |

## MinQty

| Field Name      | MinQty   |
|-----------------|--|
| Tag             | 110  |
| Description     | Minimum quantity to be executed upon order entry (else the order is rejected), to be calculated with Quantity Decimals.  |
| Format          | Qty  |
| Length          | 20   |
| Possible Values | Value '0' by default and depending to a minimum value for the given instrument and/or market type  |
| Conditions      | Optional when entered in NewOrderSingle (D).<br>Provided as is (if previously entered by client) in ExecutionReport (8).   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">RFQAudit (U72)</a> |
| Used For        | Cash and Derivatives   |

## MICofSecondaryListing

| Field Name      | MICofSecondaryListing  |
|-----------------|--|
| Tag             | 21065  |
| Description     | Identifies the secondary listing place to which an instrument belongs by its MIC (Market Identification Code), segment MIC according to ISO 10383.   |
| Format          | String   |
| Length          | 10   |
| Possible Values | (See field description)  |
| Conditions      | In inbound TradeCaptureReport (AE) messages for declarations on the secondary listing place (TrdType = '1004'), the fields SecurityID and MICofSecondaryListing must be provided.<br>In associated outbound messages, provided only to acknowledge receipt of the original declaration |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS (Cash)   |

## MiscFeeAmt

| Field Name  | MiscFeeAmt  |
|-------------|---|
| Tag         | 137   |
| Description | Miscellaneous Fee Value. Total order fees related to the funds share creation or redemption applied by the Asset Manager per order. |
| Format      | Amt   |

|                 |  |
|-----------------|--|
| Length          | 20   |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$             |
| Used In         | <a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | TCS (Cash)                                 |

## MsgSeqNum

| Field Name      | MsgSeqNum   |
|-----------------|---|
| Tag             | 34  |
| Description     | The MsgSeqNum (34) is mandatory for all inbound messages and identifies the sequence number of the inbound or outbound message. |
| Format          | SeqNum  |
| Length          | 10  |
| Possible Values | From 1 to $2^{32}-2$  |
| Used In         | <a href="#">Header</a>  |
| Used For        | Cash and Derivatives  |

## MsgType

| Field Name      | MsgType   |
|-----------------|---|
| Tag             | 35  |
| Description     | Specifies the Message type.   |
| Format          | String  |
| Length          | 3   |
| Possible Values | 0 = Heartbeat<br>1 = TestRequest<br>2 = ResendRequest<br>3 = Reject<br>4 = SequenceReset<br>5 = Logout<br>6 = IOI<br>8 = ExecutionReport<br>9 = OrderCancelReject<br>A = Logon<br>D = NewOrderSingle<br>F = OrderCancelRequest<br>G = OrderCancelReplaceRequest<br>R = QuoteRequest<br>b = MassQuoteAck<br>i = MassQuote<br>q = OrderMassCancelRequest<br>r = OrderMassCancelReport<br>AF = OrderMassStatusRequest<br>AG = QuoteRequestReject<br>CB = UserNotification<br>U18 = OwnershipRequest<br>U29 = OwnershipRequestAck<br>U35 = RFQNotification<br>U36 = RFQMatchingStatus<br>U37 = RFQLPMatchingStatus<br>UI = PriceInput |



| Field Name | MsgType   |
|------------|---|
|            | c = SecurityDefinitionRequest<br>d = SecurityDefinition<br>UM = RequestForExecution<br>UL = AskForQuote<br>UZ = LiquidityProviderCommand<br>Uy = RequestAckMessage<br>U64 = NewWholesaleOrder<br>U65 = WholesaleOrderAck<br>U66 = RequestForImpliedExecution<br>U67 = CrossOrder<br>U68 = ERGCommand<br>U69 = ERGCommandAck<br>U70 = GetRiskControls<br>U71 = RiskControlDetails<br>U72 = RFQAudit<br>U73 = IOINotification<br>U50 = InstrumentSynchronizationList<br>U51 = SynchronizationTime<br>AE = TradeCaptureReport<br>AR = TradeCaptureReportAck<br>U44 = FundPriceInput<br>U45 = FundPriceInputAck |
| Used In    | <a href="#">Header</a>  |
| Used For   | Cash and Derivatives  |

## N

## NestedOrderAttributeType

| Field Name      | NestedOrderAttributeType  |
|-----------------|---|
| Tag             | 21087   |
| Description     | Represents the type of order attribute.   |
| Format          | Int   |
| Length          | 1   |
| Possible Values | 0 = Aggregated order<br>1 = Pending allocation  |
| Conditions      | Required if NoNestedOrderAttributes(21086) >= 1.  |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">ExecutionReport (8)</a> |
| Used For        | Cash and Derivatives  |

## NestedOrderAttributeValue

| Field Name  | NestedOrderAttributeValue   |
|-------------|---|
| Tag         | 21088   |
| Description | The value associated with the order attribute type specified in NestedOrderAttributeType (21087). |
| Format      | String  |
| Length      | 1   |

| Field Name      | NestedOrderAttributeValue   |
|-----------------|---|
| Possible Values | Y = Yes   |
| Conditions      | Required if NoNestedOrderAttributes(21086) >= 1.  |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">ExecutionReport (8)</a> |
| Used For        | Cash and Derivatives  |

## NestedPartyID

| Field Name      | NestedPartyID   |
|-----------------|---|
| Tag             | 524   |
| Description     | Party identifier/code within a repeating group. See NestedPartyIDSource (525) and NestedPartyRole (538).  |
| Format          | String  |
| Length          | 11  |
| Possible Values | Alphanumeric  |
| Conditions      | Mandatory if NoNestedPartyIDs (539) >= 1.<br>When used for MiFID short codes, the field's characters are restricted to numerical values ('0'.. '9'), with possible values range from -2^31 to 2^31-1.<br>When used in the inbound messages for specifying the Clearing Firm ID and the Client ID, the maximum length is 8 characters long, and value may be alphanumeric.<br>When used to provide the ClientIdentificationShortCode values 1 and 2 in this field are reserved for internal use by the Exchange, and must not be provided in the inbound messages. If submitted the associated inbound message will be rejected. |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | Cash and Derivatives  |

## NestedPartyIDSource

| Field Name      | NestedPartyIDSource   |
|-----------------|---|
| Tag             | 525   |
| Description     | Source of NestedPartyID (524) value.  |
| Format          | Char  |
| Length          | 1   |
| Possible Values | D = Proprietary / Custom code<br>P = Short code identifier<br>C = Generally accepted market participant identifier  |
| Conditions      | Mandatory if NoNestedPartyIDs (539) >= 1  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a> |

| Field Name | NestedPartyIDSource   |
|------------|---|
|            | <a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For   | Cash and Derivatives  |

## NestedPartyRole

| Field Name      | NestedPartyRole  |
|-----------------|--|
| Tag             | 538  |
| Description     | Identifies the type or role of the NestedPartyID (524) specified.  |
| Format          | Int  |
| Length          | 3  |
| Possible Values | 3 = Client ID<br>4 = Clearing Firm<br>26 = Correspondent Broker<br>122 = Investment decision maker<br>999 = Not Applicable   |
| Conditions      | Mandatory if No NestedPartyIDs (539) >= 1.<br>Value 999 = Not Applicable is used only in Drop Copy. The value is used when the original message from the trading OEG is sent in SBE and has no equivalent values in FIX protocol.  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives   |

## NestedPartyRoleQualifier

| Field Name      | NestedPartyRoleQualifier   |
|-----------------|--|
| Tag             | 2384   |
| Description     | Used to further qualify the value of NestedPartyRole(538).   |
| Format          | Int  |
| Length          | 2  |
| Possible Values | 3 = General clearing member<br>4 = Individual clearing member<br>22 = Algorithm<br>23 = Firm or legal entity<br>24 = Natural person<br>99 = Not Applicable   |
| Conditions      | In Inbound messages Mandatory if NoNestedPartyIDs (539) >= 1<br>In Outbound messages, with exception of case listed below - if submitted by the client, filled in with this information.<br>Exception case: in messages from TCS when the repeating group is used to provide the Clearing Firm ID - In this case, where NestedPartyIDSource (525) is set to D (Proprietary / Custom Code) AND NestedPartyRole (538) = 4 (Clearing Firm), this field is not provided. |

| Field Name | NestedPartyRoleQualifier   |
|------------|--|
|            | Value 99 = Not Applicable is used only in Drop Copy. The value is used when the original message from the trading OEG is sent in SBE and has no equivalent values in FIX protocol.   |
| Used In    | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For   | Cash and Derivatives   |

## NextExpectedMsgSeqNum

| Field Name      | NextExpectedMsgSeqNum   |
|-----------------|---|
| Tag             | 789   |
| Description     | Indicates the sequence number plus one (+1) of the last message received by the Client from the Exchange on the OE Session. |
| Format          | SeqNum  |
| Length          | 10  |
| Possible Values | From 1 to 2 <sup>32</sup> -2  |
| Used In         | <a href="#">Logon (A)</a>   |
| Used For        | Cash and Derivatives  |

## NewSeqNo

| Field Name      | NewSeqNo   |
|-----------------|--|
| Tag             | 36   |
| Description     | Identifies the MsgSeqNum (34) of the next message to be received from the counterpart application. |
| Format          | SeqNum   |
| Length          | 10   |
| Possible Values | From 1 to 2 <sup>32</sup> -2   |
| Used In         | <a href="#">SequenceReset (4)</a>  |
| Used For        | Cash and Derivatives   |

## NoInstrumentScopes

| Field Name      | NoInstrumentScopes  |
|-----------------|---|
| Tag             | 1656  |
| Description     | Number of Instrument scopes entries.  |
| Format          | NumInGroup  |
| Length          | 1   |
| Possible Values | If provided, always set to 1  |
| Conditions      | Provided in case UserStatus (926) refers to Block, Unblock or Order Size Limit. |
| Used In         | <a href="#">UserNotification (CB)</a>   |
| Used For        | Cash and Derivatives  |

## NoLegs

| Field Name      | NoLegs   |
|-----------------|--|
| Tag             | 555  |
| Description     | Number of legs entries for the requested strategy.   |
| Format          | NumInGroup   |
| Length          | 2  |
| Possible Values | From 1 to 32   |
| Conditions      | Provided as is (if previously entered by client) in ExecutionReport (8).   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">SecurityDefinitionRequest (c)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">CrossOrder (U67)</a> |
| Used For        | Cash and Derivatives   |

## NonExecClID

| Field Name      | NonExecClID  |
|-----------------|--|
| Tag             | 21081  |
| Description     | This field will be used as unique client Key. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc. |
| Format          | Int  |
| Length          | 5  |
| Possible Values | From 0 to 2 <sup>16</sup> -1   |
| Conditions      | In NewOrderSingle (D) message this field must be populated if AccountCode (6399) is "Omega Client" or "Ceres Client"                             |
| Used In         | <a href="#">NewOrderSingle (D)</a><br><a href="#">CrossOrder (U67)</a>   |
| Used For        | Derivatives  |

## NoNestedPartyIDs

| Field Name      | NoNestedPartyIDs   |
|-----------------|--|
| Tag             | 539  |
| Description     | Number of NestedPartyID entries.   |
| Format          | NumInGroup   |
| Length          | 1  |
| Possible Values | From 1 to 10   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |

| Field Name | NoNestedPartyIDs     |
|------------|----------------------|
| Used For   | Cash and Derivatives |

## NoOrderAttributes

| Field Name      | NoOrderAttributes   |
|-----------------|---|
| Tag             | 2593  |
| Description     | Number of order attribute entries.  |
| Format          | NumInGroup  |
| Length          | 1   |
| Possible Values | If provided, From 1 to 2  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a> |
| Used For        | Cash and Derivatives  |

## NoNestedOrderAttributes

| Field Name      | NoNestedOrderAttributes   |
|-----------------|---|
| Tag             | 21086   |
| Description     | Number of NoNestedOrderAttributes (21086) entries.  |
| Format          | NumInGroup  |
| Length          | 1   |
| Possible Values | If provided, Always set to 1  |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">ExecutionReport (8)</a> |
| Used For        | Cash and Derivatives  |

## NoParameters

| Field Name      | NoParameters  |
|-----------------|---|
| Tag             | 21107   |
| Description     | Indicates the number of control parameters provided after a request of the risk controls. |
| Format          | NumInGroup  |
| Length          | 3   |
| Possible Values | From 1 to 254   |
| Used In         | <a href="#">RiskControlDetails (U71)</a>  |

| Field Name | NoParameters |
|------------|--------------|
| Used For   | Derivatives  |

## NoPartyIDs

| Field Name      | NoPartyIDs  |
|-----------------|---|
| Tag             | 453   |
| Description     | Number of PartyID entries.  |
| Format          | NumInGroup  |
| Length          | 1   |
| Possible Values | From 1 to 2   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">UserNotification (CB)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives  |

## NoQuoteEntries

| Field Name      | NoQuoteEntries  |
|-----------------|---|
| Tag             | 295   |
| Description     | Number of entries in Quotes repeating group.                      |
| Format          | NumInGroup  |
| Length          | 1   |
| Possible Values | Always set to 1   |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a> |
| Used For        | Cash and Derivatives  |

## NoQuoteSets

| Field Name  | NoQuoteSets                                 |
|-------------|---|
| Tag         | 296   |
| Description | The number of sets of quotes in the message |
| Format      | NumInGroup                                  |
| Length      | 3   |

| Field Name      | NoQuoteSets  |
|-----------------|--|
| Possible Values | From 1 to 150  |
| Conditions      | On the Warrants & Certificates segment the possible values and maximum number of repetitions for this group is 150 |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a>  |
| Used For        | Cash and Derivatives   |

## NoRelatedSym

| Field Name      | NoRelatedSym   |
|-----------------|--|
| Tag             | 146  |
| Description     | Number of related symbols (instruments) in a message   |
| Format          | NumInGroup   |
| Length          | 3  |
| Possible Values | From 1 to 254  |
| Used In         | <a href="#">InstrumentSynchronizationList (U50)</a><br><a href="#">QuoteRequestReject (AG)</a> |
| Used For        | Cash and Derivatives   |

## NoRoutingIDs

| Field Name      | NoRoutingIDs  |
|-----------------|---|
| Tag             | 215   |
| Description     | Required if any RoutingType and RoutingIDs are specified. |
| Format          | NumInGroup  |
| Length          | 2   |
| Possible Values | From 1 to 10  |
| Used In         | <a href="#">IOI (6)</a>                                   |
| Used For        | Cash  |

## NoSides

| Field Name      | NoSides  |
|-----------------|--|
| Tag             | 552  |
| Description     | Number of sides.   |
| Format          | NumInGroup   |
| Length          | 1  |
| Possible Values | From 1 to 2  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives   |



## NoRFQCounterparts

| Field Name      | NoRFQCounterpartss  |
|-----------------|---|
| Tag             | 21110   |
| Description     | Indicates the number of counterpart having participated to the RFQ. |
| Format          | NumInGroup  |
| Length          | 1   |
| Possible Values | From 1 to 50  |
| Used In         | <a href="#">RFQAudit (U72)</a>                                      |
| Used For        | Cash  |

## NumberOfLPs

| Field Name      | NumberOfLPs   |
|-----------------|---|
| Tag             | 21034   |
| Description     | Indicates the number of LPs who sent an answer to a specific RFQ. |
| Format          | Int   |
| Length          | 2   |
| Possible Values | From 0 to 2^8-2   |
| Conditions      | In RFQ Matching Status (U36) this field is not sent when equal 0. |
| Used In         | <a href="#">RFQMatchingStatus (U36)</a>                           |
| Used For        | Cash  |

## O

## OEPartitionID

| Field Name      | OEPartitionID   |
|-----------------|---|
| Tag             | 21019   |
| Description     | Identifies uniquely an OE Optiq partition by which the engine is reached.   |
| Format          | Int   |
| Length          | 5   |
| Possible Values | From 0 to 2^16-2  |
| Conditions      | <p>In Logon (A) message it must be set according to the partition to which the messages are sent.</p> <p>In the OwnershipRequest (U18) message it is optional. If populated it is used to restrict the request of ownership to the orders belonging to the specified LogicalAccessID (21021) and entered through this partition.</p> <p>In the OrderMassCancelRequest (q) message it is optional, but if populated then LogicalAccessID (21021) field is mandatory. If populated it is used as a filter to cancel Potential Matching Price Orders entered through this partition (it can be combined with other criteria).</p> <p>In the ExecutionReport (8) message it indicates to which OE Session the orders belong to (in response to OrderMassStatusRequest (AF) and OwnershipRequest (U18)).</p> <p>In OrderCancelReject (9) message this field is provided only in Drop Copy.</p> |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">Logon (A)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">OwnershipRequestAck (U29)</a><br><a href="#">OrderCancelReject (9)</a>   |

| Field Name | OEPartitionID        |
|------------|----------------------|
| Used For   | Cash and Derivatives |

## OEGINFromME

| Field Name      | OEGINFromME   |
|-----------------|---|
| Tag             | 7765  |
| Description     | Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).  |
| Format          | UTCTimestamp  |
| Length          | 27  |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 00000000-99999999 (nanoseconds)  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">SecurityDefinition (d)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RFQAudit (U72)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">RiskControlDetails (U71)</a><br><a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a> |
| Used For        | Cash and Derivatives  |

## OEGINFromMember

| Field Name      | OEGINFromMember   |
|-----------------|---|
| Tag             | 5979  |
| Description     | Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).  |
| Format          | UTCTimestamp  |
| Length          | 27  |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 00000000-99999999 (nanoseconds)  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">SecurityDefinition (d)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">RiskControlDetails (U71)</a><br><a href="#">IOI (6)</a> |

| Field Name | OEGINFromMember                       |
|------------|---------------------------------------|
|            | <a href="#">IOINotification (U73)</a> |
| Used For   | Cash and Derivatives                  |

## OEGOUTtoME

| Field Name      | OEGOUTtoME  |
|-----------------|---|
| Tag             | 7764  |
| Description     | Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).  |
| Format          | UTCTimestamp  |
| Length          | 27  |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 00000000-999999999 (nanoseconds)   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">SecurityDefinition (d)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RFQAudit (U72)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">RiskControlDetails (U71)</a><br><a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a> |
| Used For        | Cash and Derivatives  |

## OfferErrorCode

| Field Name      | OfferErrorCode   |
|-----------------|--|
| Tag             | 9935   |
| Description     | Error code returned when a quote contains an invalid offer.<br>See Euronext Markets - Optiq & TCS Error List file (.csv) for details of error codes. |
| Format          | Int  |
| Length          | 6  |
| Possible Values | From 0 to 2 <sup>16</sup> -2   |
| Conditions      | If an error is detected in the field OfferSize (135) or in the field OfferPx (133), the error code is provided in the OfferErrorCode (9935) field.   |
| Used In         | <a href="#">MassQuoteAck (b)</a>   |
| Used For        | Cash and Derivatives   |

## OfferQuoteID

| Field Name  | OfferQuoteID   |
|-------------|--|
| Tag         | 1748   |
| Description | Numerical order identifier assigned by the matching engine, unique per instrument and EMM. |

| Field Name      | OfferQuoteID  |
|-----------------|---|
| Format          | String  |
| Length          | 20  |
| Possible Values | From 0 to 2 <sup>64</sup> -2  |
| Conditions      | Provided only if the MassQuote (i) message contains an offer quote. The field OrderID (37) in ExecutionReport (8) message sent in case of trade resulting from a matching against a (bulk) Quote is filled with value in OfferQuoteID (1748) field corresponding to the Offer quote that participated in the trade. |
| Used In         | <a href="#">MassQuoteAck (b)</a><br><a href="#">WholesaleOrderAck (U65)</a>   |
| Used For        | Cash and Derivatives  |

## OfferNonExecClID

| Field Name      | OfferNonExecClID  |
|-----------------|---|
| Tag             | 21090   |
| Description     | This field will be used as unique client Key for the Offer side. Field indicating the client ID of the participant in a commercial package, e.g. Ceres, Omega, etc. |
| Format          | Int   |
| Length          | 5   |
| Possible Values | From 0 to 2 <sup>16</sup> -1  |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a>  |
| Used For        | Derivatives   |

## OfferPx

| Field Name      | OfferPx  |
|-----------------|--|
| Tag             | 133  |
| Description     | Quote offer price (to be calculated with Price/Index Level Decimals).                                  |
| Format          | Price  |
| Length          | 20   |
| Possible Values | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   |
| Conditions      | In MassQuote (i) either the field OfferPx (133), or the field BidPx (132), or both, must be populated. |
| Used In         | <a href="#">MassQuote (i)</a>  |
| Used For        | Cash and Derivatives   |

## OfferSize

| Field Name      | OfferSize   |
|-----------------|---|
| Tag             | 135   |
| Description     | Quote offer quantity (to be calculated with Quantity Decimals).<br>Cancels a quote if set to zero '0'.  |
| Format          | Qty   |
| Length          | 20  |
| Possible Values | From 0 to 2 <sup>64</sup> -2  |
| Conditions      | Cancels the quote if set to '0'. In the NewWholesaleOrder (U64) messages submitted by the Initiator the OfferSize (135) must be the maximum volume to match in the transaction when the leading side is Sell. |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">NewWholesaleOrder (U64)</a>  |
| Used For        | Cash and Derivatives  |

## OnBehalfOfCompID

| Field Name      | OnBehalfOfCompID  |
|-----------------|---|
| Tag             | 115   |
| Description     | ID of the issuing firm when the message is send through a third party.  |
| Format          | String  |
| Length          | 8   |
| Possible Values | Inbound: Not used / Outbound: Firm ID   |
| Conditions      | In case a firm's Logical access is configured with Additional allowed member code(s) [ACL] on top of the mandatory Member Code [Owner] that owns / requests the connection:<br>If these member codes (between Owner and ACL) are not the same, the field OnBehalfOfCompID (115) is mandatory in Inbound messages. Otherwise the field is not mandatory. |
| Used In         | <a href="#">Header</a>  |
| Used For        | Cash and Derivatives  |

## OrderActorType

| Field Name      | OrderActorType                   |
|-----------------|----------------------------------|
| Tag             | 21109                            |
| Description     | Member role for RFC.             |
| Format          | Int                              |
| Length          | 1                                |
| Possible Values | 1 = Initiator<br>2 = Reactor     |
| Used In         | <a href="#">CrossOrder (U67)</a> |
| Used For        | Derivatives                      |

## OrderCategory

| Field Name      | OrderCategory  |
|-----------------|--|
| Tag             | 21041  |
| Description     | Field used as instruction for order handling. When not provided, it is assumed to be set at value 1 "Lit Order".<br>- Lit Order: indicates whether the client requests to cancel a Lit order.<br>- LIS Order: indicates whether the client requests to cancel a LIS order.<br>- Quote Request: indicates whether the client requests to cancel a Quote Request.<br>- RFQ LP Answer: indicates whether the client requests to cancel an LP Answer to a Quote Request. |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 1 = Lit Order<br>2 = LIS Order<br>3 = Quote Request<br>4 = RFQ LP Answer   |
| Conditions      | When not provided or provided, it is assumed to be set at value 1 "Lit Order".   |
| Used In         | <a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (g)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">OwnershipRequestAck (U29)</a><br><a href="#">RFQNotification (U35)</a>   |

| Field Name | OrderCategory |
|------------|---------------|
| Used For   | Cash          |

## OrderID

| Field Name      | OrderID   |
|-----------------|---|
| Tag             | 37  |
| Description     | Numerical order identifier assigned by the matching engine, unique per instrument and EMM.  |
| Format          | String  |
| Length          | 20  |
| Possible Values | From 0 to 2 <sup>64</sup> -2  |
| Conditions      | <p>In case a message is rejected for Technical reasons, it isn't processed by the trading engine and the OrderID (37) is not provided in the rejection message.</p> <p>Technical rejection cases can be identified by the type of the Error code, as provided in the field "Technical / Functional" within the Euronext Markets - Optiq &amp; TCS Error List file (.csv).</p> <p>If a client sends an OrderID (37) which, however, can be decoded by the system, this value is provided back to the client in the OrderCancelReject (9), exactly as entered.</p> <p>The field OrderID (37) in ExecutionReport (8) message sent in case of trade resulting from a matching against a (bulk) Quote is filled with value of either BidQuoteID (1747) or OfferQuoteID (1748), corresponding to the side of the quote that participated in the trade.</p> <p>On ETF Access platform:</p> <ul style="list-style-type: none"> <li>- In case of an ExecutionReport (8) message sent as a response to a QuoteRequest (R), the OrderID (37) field will contain the "RFQ Identifier" information.</li> <li>- In case the client uses OrderCancelRequest (F) to cancel an RFQ sent through the QuoteRequest (R), the OrderID (37) field should contain the "RFQ Identifier" information previously received in the ExecutionReport (8) message.</li> <li>- In case of an OrderCancelReject (9) message sent as a response to an OrderCancelRequest (F) previously sent about an RFQ, the OrderID (37) field will contain the "RFQ Identifier" information.</li> </ul> <p>For the Derivatives segments – in response to the Quote Request message (for RFQ) the value in this field is the same as the one provided in the QuoteReqID (131) field.</p> |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">OwnershipRequestAck (U29)</a><br><a href="#">RequestForImpliedExecution (U66)</a>   |
| Used For        | Cash and Derivatives  |

## OrderPriority

| Field Name      | OrderPriority  |
|-----------------|--|
| Tag             | 21004  |
| Description     | <p>Rank giving the priority of the order. The order with the lowest value of OrderPriority has the highest priority.</p> <p>OrderPriority (21004) is unique per SecurityID (48) and EMM (20020), therefore, it is also used as the unique order identifier in the market data feed.</p> <p>Order Priority should then allow clients to reconcile their orders between private order entry and market data feed.</p> <p>Used in conjunction with Previous Priority, for market data only.</p> |
| Format          | Int  |
| Length          | 20   |
| Possible Values | From 0 to 2 <sup>64</sup> -2   |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Cash and Derivatives   |

## OrderQty

| Field Name      | OrderQty   |
|-----------------|--|
| Tag             | 38   |
| Description     | Total order quantity, per quantity unit (to be calculated with Quantity Decimals).   |
| Format          | Qty  |
| Length          | 20   |
| Possible Values | From 0 to 2 <sup>64</sup> -2   |
| Conditions      | <p>In OrderCancelReplaceRequest (G) message:</p> <ul style="list-style-type: none"> <li>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration</li> <li>- (ii) when sent to modify an order, value will be modified to the one provided.</li> </ul> <p>In IOI (6) message:</p> <ul style="list-style-type: none"> <li>- required only when <i>IOIQty</i> (27) different than “Undisclosed Qty” – ignored in all other cases</li> </ul> |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a>  |
| Used For        | Cash and Derivatives   |

## OrderSizeLimit

| Field Name      | OrderSizeLimit  |
|-----------------|---|
| Tag             | 21102   |
| Description     | Indicates the Maximum Order Size above which all orders will be rejected by the Matching Engine (applied per order level). (to be calculated with Quantity Decimals).   |
| Format          | Qty   |
| Length          | 20  |
| Possible Values | From 0 to 2 <sup>64</sup> -2  |
| Conditions      | <p>In ERGCommand (U68), required when ActionType (21097) is set to 5 = Order Size Limit and OSLFlag (21101) is set to Y = True – it's ignored in all the other cases.</p> <p>In UserNotification (CB), for the cases when UserStatus (926) is sent with value 130 = Order Size Limit Deactivated by Risk Manager, OrderSizeLimit (21102) is not sent.</p> |
| Used In         | <a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">GetRiskControls (U70)</a><br><a href="#">RiskControlDetails (U71)</a><br><a href="#">UserNotification (CB)</a>   |
| Used For        | Derivatives   |

## OrdType

| Field Name  | OrdType  |
|-------------|--|
| Tag         | 40   |
| Description | <p>Type of Order.</p> <p>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.</p> |

| Field Name      | OrdType  |
|-----------------|--|
| Format          | Char   |
| Length          | 1  |
| Possible Values | 1 = Market<br>2 = Limit<br>3 = Stop-Market / Stop-Market on quote<br>4 = Stop limit / Stop on quote limit<br>K = Market to limit<br>P = Peg<br>T = Average Price<br>X = Iceberg  |
| Conditions      | Value 'T' is used only for RFQ validation on ETF Access platform only.<br>The only possible value in case of Cross Order (67) is value '2'.<br>For OrderCancelReplaceRequest (G) and OrderCancelRequest (F) messages if the OrdType (40) is different than the OrdType (40) of the targeted order, the request will be rejected with the reason "Unknown Order".<br>In OrderCancelReplaceRequest (G) message:<br>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration<br>- (ii) when sent to modify an order, if the value provided doesn't match the one of the original order, the modification is rejected. |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">CrossOrder (U67)</a>   |
| Used For        | Cash and Derivatives   |

## OrderAttributeType

| Field Name      | OrderAttributeType  |
|-----------------|---|
| Tag             | 2594  |
| Description     | The type of order attribute.  |
| Format          | Int   |
| Length          | 1   |
| Possible Values | 0 = Aggregated order<br>1 = Pending allocation<br>3 = Risk reduction order  |
| Conditions      | Required if NoOrderAttributes(2593) >= 1.   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a> |



| Field Name | OrderAttributeType   |
|------------|----------------------|
| Used For   | Cash and Derivatives |

## OrderAttributeValue

| Field Name      | OrderAttributeValue  |
|-----------------|--|
| Tag             | 2595   |
| Description     | The value associated with the order attribute type specified in OrderAttributeType (2594).   |
| Format          | String   |
| Length          | 1  |
| Possible Values | Y = Yes  |
| Conditions      | Required if NoOrderAttributes(2593) >= 1.  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TTradeCaptureReport (AE)</a> |
| Used For        | Cash and Derivatives   |

## OrderOrigination

| Field Name      | OrderOrigination   |
|-----------------|--|
| Tag             | 1724   |
| Description     | Identifies the origin of the order.  |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 5 = Order received from a direct access or sponsored access customer<br>11 = Central Order Book<br>12 = LP Answer  |
| Conditions      | Mandatory in case of a DEA access.<br>In OrderCancelReplaceRequest (G) message:<br>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration<br>- (ii) when sent to modify an order, value will be modified to the one provided.<br>In outbound messages this field is populated only in Drop Copy. |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a>  |

| Field Name | OrderOrigination  |
|------------|---|
|            | <a href="#">CrossOrder (U67)</a><br><a href="#">RFQAudit (U72)</a><br><a href="#">TradeCaptureReport (AE)</a> |
| Used For   | Cash and Derivatives  |

## OrdStatus

| Field Name      | OrdStatus  |
|-----------------|--|
| Tag             | 39   |
| Description     | Identifies the current status of the order.  |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = New<br>1 = Partially filled<br>2 = Filled<br>3 = Done for Day<br>4 = Cancelled<br>5 = Replaced<br>8 = Rejected<br>C = Expired<br>H = Cancel Trade<br>I = Order Status<br>M = RFQ expired<br>O = RFQ cancelled by the issuer<br>P = RFQ Not matched due to issuer order's features<br>Q = VFU/VFC Triggered Ack<br>R = OrderMassStatusRequest Ack<br>S = Stop Triggered Ack<br>T = MTL Second Ack<br>Z = Message Rejected |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">OrderCancelReject (9)</a>   |
| Used For        | Cash and Derivatives   |

## OrigClOrdID

| Field Name      | OrigClOrdID  |
|-----------------|--|
| Tag             | 41   |
| Description     | Identifies the ClOrdID (11) of the original order, used to identify the previous order on cancel and replacement requests. |
| Format          | String   |
| Length          | 20   |
| Possible Values | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   |

|            |  |
|------------|--|
| Conditions | It is provided in the ExecutionReport (8) message only as response of a modification or cancellation done on OrigClOrdID (41) only.<br>If both OrigClOrdID and ClOrdID are provided in a modification or cancellation request, the <i>OrigClOrdID</i> is totally ignored and the request is performed on OrderID only, and then only OrderID is present in ExecutionReport(8). |
| Used In    | <a href="#">ExecutionReport (8)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a>  |
| Used For   | Cash and Derivatives   |

## OrigSendingTime

| Field Name      | OrigSendingTime   |
|-----------------|---|
| Tag             | 122   |
| Description     | Time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).  |
| Format          | UTCTimestamp  |
| Length          | 27  |
| Possible Values | YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)  |
| Conditions      | Required for applicative messages resent as a result of a ResendRequest (2) or automatic resynchronization at Logon. Field is not populated in outbound SequenceReset-GapFill message and is not expected in inbound SequenceReset-GapFill message. |
| Used In         | <a href="#">Header</a>  |
| Used For        | Cash and Derivatives  |

## OSLFlag

| Field Name      | OSLFlag  |
|-----------------|--|
| Tag             | 21101  |
| Description     | Indicates if the Order Size Limit functionality is to be activated or deactivated.   |
| Format          | Boolean  |
| Length          | 1  |
| Possible Values | Y = True<br>N = False  |
| Conditions      | In ERGCommand (U68), required when ActionType (21097) is set to 5 = Order Size Limit – it's ignored in all the other cases.                                  |
| Used In         | <a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">GetRiskControls (U70)</a><br><a href="#">RiskControlDetails (U71)</a> |
| Used For        | Derivatives  |

## P

## ParentExecID

| Field Name  | ParentExecID  |
|-------------|---|
| Tag         | 21094   |
| Description | Unique identifier of a parent trade executed on the strategy. |

| Field Name      | ParentExecID   |
|-----------------|--|
| Format          | String   |
| Length          | 10   |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |
| Conditions      | For Derivatives markets the notifications of a trade cancellation for a strategy are sent on the individual leg level. When provided the field ParentExecID (21094) identifies the ExecID (17) provided in the ExecutionReport (8) for each partial or full fill and allows to map all legs of the strategy. |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Derivatives  |

## ParentSecurityID

| Field Name      | ParentSecurityID   |
|-----------------|--|
| Tag             | 21093  |
| Description     | Exchange identification code used to point to the strategy in the leg specific messages  |
| Format          | String   |
| Length          | 10   |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |
| Conditions      | For the Derivatives markets ExecutionReport (8) messages sent for cancellation of a trade for a strategy are sent on the individual leg level. When provided the fields ParentSecurityID (21093) and ParentExecID (21094), identify the original trade communicated via ExecutionReport (8) message. |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Derivatives  |

## PartyID

| Field Name      | PartyID  |
|-----------------|--|
| Tag             | 448  |
| Description     | Party identifier/code. See PartyIDSource (447) and PartyRole (452).  |
| Format          | String   |
| Length          | 11   |
| Possible Values | Alphanumeric   |
| Conditions      | <p>Mandatory if NoPartyIDs &gt;= 1.</p> <p>When used for MiFID short codes, the field's characters are restricted to numerical values ('0'..'9'), with possible values range from -2<sup>31</sup> to 2<sup>31</sup>-1.</p> <p>When used to provide the ClientIdentificationShortCode values 1 and 2 in this field are reserved for internal use by the Exchange, and must not be provided in the inbound messages. If submitted the associated inbound message will be rejected.</p>   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">UserNotification (CB)</a> |

| Field Name | PartyID   |
|------------|---|
|            | <a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For   | Cash and Derivatives  |

## PartyIDSource

| Field Name      | PartyIDSource   |
|-----------------|---|
| Tag             | 447   |
| Description     | Source of PartyID value.  |
| Format          | Char  |
| Length          | 1   |
| Possible Values | D = Proprietary / Custom Code<br>P = Short code identifier  |
| Conditions      | Mandatory if NoPartyIDs >= 1  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">UserNotification (CB)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives  |

## PartyRole

| Field Name      | PartyRole  |
|-----------------|--|
| Tag             | 452  |
| Description     | Identifies the type or role of the PartyID (448) specified.  |
| Format          | Int  |
| Length          | 3  |
| Possible Values | 1 = Executing Firm<br>3 = Client ID<br>12 = Executing Trader<br>17 = Contra Firm<br>999 = Not Applicable |

| Field Name | PartyRole  |
|------------|--|
| Conditions | <p>Mandatory if NoPartyIDs &gt;= 1.</p> <p>For every inbound message, at least one authorized value must be provided, e.g 12,3.</p> <p>Value 999 = Not Applicable is used only in Drop Copy. The value is used when the original message from the trading OEG is sent in SBE and has no equivalent values in FIX protocol.</p>   |
| Used In    | <p><a href="#">ExecutionReport (8)</a></p> <p><a href="#">LiquidityProviderCommand (UZ)</a></p> <p><a href="#">MassQuote (i)</a></p> <p><a href="#">NewOrderSingle (D)</a></p> <p><a href="#">NewWholesaleOrder (U64)</a></p> <p><a href="#">OrderCancelReplaceRequest (G)</a></p> <p><a href="#">OrderCancelRequest (F)</a></p> <p><a href="#">OrderMassCancelRequest (q)</a></p> <p><a href="#">OrderMassStatusRequest (AF)</a></p> <p><a href="#">OwnershipRequest (U18)</a></p> <p><a href="#">PriceInput (UI)</a></p> <p><a href="#">QuoteRequest (R)</a></p> <p><a href="#">UserNotification (CB)</a></p> <p><a href="#">WholesaleOrderAck (U65)</a></p> <p><a href="#">RequestForImpliedExecution (U66)</a></p> <p><a href="#">CrossOrder (U67)</a></p> <p><a href="#">OrderMassCancelReport (r)</a></p> <p><a href="#">TradeCaptureReport (AE)</a></p> <p><a href="#">TradeCaptureReportAck (AR)</a></p> |
| Used For   | Cash and Derivatives   |

## PartyRoleQualifier

| Field Name      | PartyRoleQualifier  |
|-----------------|---|
| Tag             | 2376  |
| Description     | Used to further qualify the value of PartyRole(452).  |
| Format          | Int   |
| Length          | 2   |
| Possible Values | <p>22 = Algorithm</p> <p>23 = Firm or legal entity</p> <p>24 = Natural person</p> <p>99 = Not Applicable</p>  |
| Conditions      | <p>Mandatory if NoPartyIDs &gt;= 1</p> <p>For notifications triggered due to Risk Guard Service this field is not sent.</p> <p>Value 99 = Not Applicable is used only in Drop Copy. The value is used when the original message from the trading OEG is sent in SBE and has no equivalent values in FIX protocol.</p>   |
| Used In         | <p><a href="#">ExecutionReport (8)</a></p> <p><a href="#">LiquidityProviderCommand (UZ)</a></p> <p><a href="#">MassQuote (i)</a></p> <p><a href="#">NewOrderSingle (D)</a></p> <p><a href="#">NewWholesaleOrder (U64)</a></p> <p><a href="#">OrderCancelReplaceRequest (G)</a></p> <p><a href="#">OrderCancelRequest (F)</a></p> <p><a href="#">OrderMassCancelRequest (q)</a></p> <p><a href="#">OrderMassStatusRequest (AF)</a></p> <p><a href="#">OwnershipRequest (U18)</a></p> <p><a href="#">PriceInput (UI)</a></p> <p><a href="#">QuoteRequest (R)</a></p> <p><a href="#">UserNotification (CB)</a></p> |

| Field Name | PartyRoleQualifier  |
|------------|---|
|            | <a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For   | Cash and Derivatives  |

## PegOffsetValue

| Field Name      | PegOffsetValue   |
|-----------------|--|
| Tag             | 211  |
| Description     | <p>Tick offset for a pegged order.</p> <p>Used to indicate the signed tick added to the peg reference for a pegged order.</p>  |
| Format          | Int  |
| Length          | 3  |
| Possible Values | From -127 to 127   |
| Conditions      | <p>Mandatory for Primary and Market Peg Orders.</p> <p>If the OrderCancelReplaceRequest (G) is used to confirm a new order that can be executed upon entry, but whose matching price hits a collar, this field can't be populated.</p> |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>   |
| Used For        | Cash   |

## PegPriceType

| Field Name      | PegPriceType  |
|-----------------|---|
| Tag             | 1094  |
| Description     | Defines the type of the peg order.  |
| Format          | Int   |
| Length          | 1   |
| Possible Values | <p>2 = Mid-price peg (midprice of inside quote)</p> <p>4 = Market peg</p> <p>5 = Primary peg (primary market - buy at bid or sell at offer)</p>   |
| Conditions      | <p>Mandatory if OrdType = P (Peg).</p> <p>In OrderCancelReplaceRequest (G) message:</p> <ul style="list-style-type: none"> <li>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration</li> <li>- (ii) when sent to modify an order, value will be modified to the one provided</li> </ul> |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a>  |
| Used For        | Cash  |

## PossDupFlag

| Field Name      | PossDupFlag   |
|-----------------|---|
| Tag             | 43  |
| Description     | Identifies if a message is being retransmitted or not.        |
| Format          | Boolean   |
| Length          | 1   |
| Possible Values | N = Original transmission (default)<br>Y = Possible duplicate |
| Conditions      | Field provided in all cases when the message is being resent. |
| Used In         | <a href="#">Header</a>  |
| Used For        | Cash and Derivatives  |

## PossResend

| Field Name      | PossResend   |
|-----------------|--|
| Tag             | 97   |
| Description     | Indicates if the message contains information that was already sent under a different sequence number. |
| Format          | Boolean  |
| Length          | 1  |
| Possible Values | N = Original transmission<br>Y = Possible resend   |
| Used In         | <a href="#">Header</a>   |
| Used For        | Cash and Derivatives   |

## PostingAction

| Field Name      | PostingAction   |
|-----------------|---|
| Tag             | 7443  |
| Description     | Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.<br>This field can contain up to 9 values, space delimited, provided in different positions.<br>The first character will be used to indicate whether this field is being actively used or not (1 = Actively Used ; 0 = Field Not Used).<br>For each Leg, 0 means Open and 1 means Close.<br>Leg 2 to Leg 9 are applicable for Derivatives strategy instruments (not for cash instruments). |
| Format          | MultipleCharValue   |
| Length          | 19  |
| Possible Values | 0 = Field Actively Used<br>1 = Leg 1<br>2 = Leg 2<br>3 = Leg 3<br>4 = Leg 4<br>5 = Leg 5<br>6 = Leg 6<br>7 = Leg 7<br>8 = Leg 8<br>9 = Leg 9  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a>  |



| Field Name | PostingAction  |
|------------|--|
|            | <a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">CrossOrder (U67)</a> |
| Used For   | Cash and Derivatives   |

## PotentialMatchingPrice

| Field Name      | PotentialMatchingPrice   |
|-----------------|--|
| Tag             | 21030  |
| Description     | <p>The PotentialMatchingPrice (21030) indicates to the RFQ issuer the matching price (to be calculated with Price/Index Level Decimals) for the PotentialMatchingQuantity (21031).</p> <p>The PotentialMatchingPrice (21030) is recalculated and resend to the RFQ issuer through the RFQMatchingStatus (U36) message each time the order book is updated.</p> |
| Format          | Price  |
| Length          | 20   |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$   |
| Conditions      | Can be negative when the price is expressed in bps. Available only for EMM = 8 (ETF MTF - NAV)   |
| Used In         | <a href="#">RFQMatchingStatus (U36)</a>  |
| Used For        | Cash   |

## PotentialMatchingQuantity

| Field Name      | PotentialMatchingQuantity  |
|-----------------|--|
| Tag             | 21031  |
| Description     | <p>The PotentialMatchingQuantity (21031) indicates the maximum volume that would be matched in case of an RFQ validation (to be calculated with Quantity Decimals).</p> <p>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 PotentialMatchingPrice (21030).</p> <p>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.</p> |
| Format          | Qty  |
| Length          | 20   |
| Possible Values | From 0 to $2^{64}-2$   |
| Used In         | <a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a>   |
| Used For        | Cash   |

## PreMatchingIndicator

| Field Name      | PreMatchingIndicator   |
|-----------------|--|
| Tag             | 10042  |
| Description     | Pre-matching delay indicator for a TCS Declaration.  |
| Format          | Int  |
| Length          | 1  |
| Possible Values | <p>1 = Not pre-matched</p> <p>2 = Pre-matched for the next fixing</p> <p>3 = Pre-matched for the second next fixing</p> <p>4 = Pre-matched for the third next fixing</p> |

|            |   |
|------------|---|
|            | 5 = Pre-matched for the fourth next fixing<br>6 = Pre-matched for the fifth next fixing   |
| Conditions | In inbound TradeCaptureReport (AE) message (TCS), provided only when TrdType = '1002' or '1003'.<br>In outbound TradeCaptureReportAck (AR) messages (TCS) provided only for messages with TrdType is '1002' or '1003' |
| Used In    | <a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For   | TCS (Cash and Derivatives)  |

## PreviousDayFlag

| Field Name      | PreviousDayFlag  |
|-----------------|--|
| Tag             | 9952   |
| 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  |
| Length          | 1  |
| Possible Values | 0 = False<br>1 = True  |
| Used In         | <a href="#">TradeCaptureReportAck (AR)</a>   |
| Used For        | TCS (Cash)   |

## Purge

| Field Name      | Purge  |
|-----------------|--|
| Tag             | 21100  |
| Description     | Identifies the action to be applied to the active orders/quotes.   |
| Format          | Boolean  |
| Length          | 1  |
| Possible Values | Y = True<br>N = False  |
| Conditions      | In ERGCommand (U68), only taken into account for the cases when ActionType (21097) is set to 1 = Suspend or 3 = Block – it's ignored in all the other cases. |
| Used In         | <a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a>  |
| Used For        | Derivatives  |

## Price

| Field Name      | Price  |
|-----------------|--|
| Tag             | 44   |
| Description     | Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).<br>It is mandatory for priced orders (Limit, Stop-limit) and must not be sent when the price is irrelevant (Market, Stop-market, Peg, MTL). |
| Format          | Price  |
| Length          | 20   |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$   |
| Conditions      | In NewOrderSingle (D) and OrderCancelReplaceRequest (G) requests:<br>- Mandatory if: OrdType (40) = 2 (Limit), OrdType (40) = 4 (Stop Limit) or OrdType (40) = X (Iceberg).;   |

| Field Name | Price  |
|------------|--|
|            | <ul style="list-style-type: none"> <li>- Negative values are possible on the Derivatives Markets and on ETF Access when the order is sent on the NAV trading Order Book (EMM = 8).</li> </ul> <p>In OrderCancelReplaceRequest (G) message:</p> <ul style="list-style-type: none"> <li>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration</li> <li>- (ii) when sent to modify an order, value will be modified to the one provided</li> </ul> <p>In NewWholesaleOrder (U64) message, for the Derivative markets, when price is not applicable, the field Price (44) should be populated with value of zero (0).</p> |
| Used In    | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a><br><a href="#">FundPriceInput (U44)</a><br><a href="#">FundPriceInputAck (U45)</a><br><a href="#">RFQAudit (U72)</a>  |
| Used For   | Cash and Derivatives   |

## PrincipalCode

| Field Name      | PrincipalCode  |
|-----------------|--|
| Tag             | 20155  |
| Description     | Identifies the beneficiary of the transaction when trading on behalf of another establishment. |
| Format          | String   |
| Length          | 20   |
| Possible Values | Alphanumeric   |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>          |
| Used For        | TCS ( Cash and Derivatives)  |

## Q

## Quantity

| Field Name      | Quantity  |
|-----------------|---|
| Tag             | 53  |
| Description     | Number of traded or ordered units (to be calculated with Quantity Decimals).  |
| Format          | Qty   |
| Length          | 20  |
| Possible Values | From 0 to 2 <sup>64-2</sup>   |
| Conditions      | <p>For TradeCaptureReport (AE) message, it is always provided when TrdType = '43', '44', '51', '1001', '1002' or '1004'. For a trade/declaration on Dutch Funds if expressed as an amount (TrdType = '1003'), this field should not be provided.</p> <p>In NewWholesaleOrder (U64) message for the Derivative markets, when quantity is not applicable, the field Quantity (53) should be populated with value of zero (0).</p> |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a>  |

| Field Name | Quantity  |
|------------|---|
|            | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For   | Cash and Derivatives  |

## QueueingIndicator

| Field Name      | QueueingIndicator   |
|-----------------|---|
| Tag             | 21020   |
| Description     | Indicates whether the client requests its orders to be queued or rejected in case of throttling. (0: False - Reject ; 1: True - Queue). |
| Format          | Int   |
| Length          | 1   |
| Possible Values | 0 = False<br>1 = True   |
| Used In         | <a href="#">Logon (A)</a>   |
| Used For        | Cash and Derivatives  |

## QuoteEntryID

| Field Name      | QuoteEntryID  |
|-----------------|---|
| Tag             | 299   |
| Description     | Uniquely identifies the quote across the complete set of all quotes for a given quote provider. |
| Format          | String  |
| Length          | 10  |
| Possible Values | From 0 to 2 <sup>32</sup> -2  |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a>                               |
| Used For        | Cash and Derivatives  |

## QuoteID

| Field Name      | QuoteID   |
|-----------------|---|
| Tag             | 117   |
| Description     | Quote identifier.   |
| Format          | String  |
| Length          | 20  |
| Possible Values | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1                    |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a> |
| Used For        | Cash and Derivatives  |

## QuoteReqID

| Field Name  | QuoteReqID   |
|-------------|--|
| Tag         | 131  |
| Description | Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM. |
| Format      | String   |
| Length      | 20   |

| Field Name      | QuoteReqID  |
|-----------------|---|
| Possible Values | From 0 to 2 <sup>64</sup> -2  |
| Conditions      | For ETF Access Platform, this field is Mandatory if the fields RFQAnswerIndicator (21037) and RFQConfirmationIndicator (21038) are set to 'Yes'.<br>For the Derivatives segments – this field specifies the Quote Request ID of the original submitted Quote Request (R) message (for RFQ) and has the same value as in the field OrderID (37). |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">RFQAudit (U72)</a>   |
| Used For        | Cash  |

## QuoteRequestRejectReason

| Field Name      | QuoteRequestRejectReason                  |
|-----------------|---|
| Tag             | 658                                       |
| Description     | Reason the QuoteRequest (R) was rejected. |
| Format          | Int                                       |
| Length          | 2   |
| Possible Values | 99 = Other                                |
| Used In         | <a href="#">QuoteRequestReject (AG)</a>   |
| Used For        | Cash and Derivatives                      |

## QuoteSetID

| Field Name      | QuoteSetID  |
|-----------------|---|
| Tag             | 302   |
| Description     | Unique ID for the Quote set.  |
| Format          | String  |
| Length          | 10  |
| Possible Values | From 1 to 2 <sup>32</sup> -2  |
| Conditions      | Sequential number for the Quote Set. For a given QuoteID (117) - assumed to start at 1. Must be the first field in the repeating group. |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a>   |
| Used For        | Cash and Derivatives  |

## QuoteStatus

| Field Name      | QuoteStatus                               |
|-----------------|---|
| Tag             | 297                                       |
| Description     | Status of the mass quote acknowledgement. |
| Format          | Int                                       |
| Length          | 2   |
| Possible Values | 0 = Accepted<br>5 = Rejected              |

| Field Name | QuoteStatus                      |
|------------|----------------------------------|
| Used In    | <a href="#">MassQuoteAck (b)</a> |
| Used For   | Cash and Derivatives             |

## R

## RefMsgType

| Field Name      | RefMsgType   |
|-----------------|--|
| Tag             | 372  |
| Description     | The MsgType (35) of the FIX message being referenced.  |
| Format          | String   |
| Length          | 3  |
| Possible Values | Value received in the rejected inbound message, if any   |
| Conditions      | This field is provided only if the message type is referenced in the rejection.                                    |
| Used In         | <a href="#">Reject (3)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives   |

## RefSeqNum

| Field Name      | RefSeqNum  |
|-----------------|--|
| Tag             | 45   |
| Description     | Identifies the message sequence number (MsgSeqNum (34)) of the message being rejected. |
| Format          | SeqNum   |
| Length          | 10   |
| Possible Values | From 1 to 2 <sup>32</sup> -2   |
| Used In         | <a href="#">Reject (3)</a>   |
| Used For        | Cash and Derivatives   |

## RefTagID

| Field Name      | RefTagID  |
|-----------------|---|
| Tag             | 371   |
| Description     | Identifies the tag number of the FIX field being referenced as the reason triggering the rejection. |
| Format          | Int   |
| Length          | 6   |
| Possible Values | Integer   |
| Conditions      | This field is provided only if the tag number is referenced in the rejection.                       |
| Used In         | <a href="#">Reject (3)</a>  |
| Used For        | Cash and Derivatives  |

## RequestID

| Field Name      | RequestID   |
|-----------------|---|
| Tag             | 21060   |
| Description     | Unique message identifier as assigned by the Client when submitting the message request.  |
| Format          | String  |
| Length          | 20  |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$  |
| Conditions      | <p>In case of an acknowledgement or rejection message for PriceInput (UI), LiquidityProviderCommand (UZ) or OwnershipRequest (U18) message, this field is filled with the ClOrdID (11).</p> <p>In case of an acknowledgement or rejection message for OrderMassStatusRequest (AF) message, this field is filled with the MassStatusReqID (584).</p> <p>In case of an acknowledgement or rejection message for RequestForImpliedExecution (U66) message, this field is filled with the ClOrdID (11).</p> |
| Used In         | <a href="#">RequestAckMessage (Uy)</a><br><a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">GetRiskControls (U70)</a><br><a href="#">RiskControlDetails (U71)</a>  |
| Used For        | Cash and Derivatives  |

## ResynchronizationID

| Field Name      | ResynchronizationID  |
|-----------------|--|
| Tag             | 20030  |
| Description     | Each Instrument is assigned to a ResynchronizationID (20030) that is used in case of failover.   |
| Format          | Int  |
| Length          | 5  |
| Possible Values | From 0 to $2^{16}-2$   |
| Used In         | <a href="#">InstrumentSynchronizationList (U50)</a><br><a href="#">SynchronizationTime (U51)</a> |
| Used For        | Cash and Derivatives   |

## RiskControlType

| Field Name      | RiskControlType   |
|-----------------|---|
| Tag             | 21103   |
| Description     | Identifies the type of Risk Guard Control on which the details are requested.     |
| Format          | Int   |
| Length          | 1   |
| Possible Values | 1 = All Parameters<br>2 = Order Size Limit<br>3 = Suspend<br>4 = Block            |
| Used In         | <a href="#">GetRiskControls (U70)</a><br><a href="#">RiskControlDetails (U71)</a> |
| Used For        | Derivatives   |

## RiskFamily

| Field Name      | RiskFamily  |
|-----------------|---|
| Tag             | 20165   |
| Description     | Identifier of the family.   |
| Format          | String  |
| Length          | 8   |
| Possible Values | Alphanumeric  |
| Conditions      | If provided in the UserNotification (CB) message, it specifies the scope of the action specified in UserStatus (926). |
| Used In         | <a href="#">UserNotification (CB)</a>   |
| Used For        | Cash and Derivatives  |

## RFEAnswer

| Field Name      | RFEAnswer   |
|-----------------|---|
| Tag             | 20022   |
| Description     | Indicate whether the MassQuote (i) message is an answer to a RequestForExecution (UM) message or not. (0: No [False] ; 1: Yes [True]) |
| Format          | Int   |
| Length          | 1   |
| Possible Values | 0 = False<br>1 = True   |
| Used In         | <a href="#">MassQuote (i)</a>   |
| Used For        | Cash and Derivatives  |

## RFQAnswerIndicator

| Field Name      | RFQAnswerIndicator   |
|-----------------|--|
| Tag             | 21037  |
| Description     | Indicates whether the message is, or not, a quote sent as an answer to a QuoteRequest (R) message. |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 0 = No<br>1 = Yes  |
| Conditions      | For ETF Access Platform, this field is Mandatory if the field QuoteReqID (131) is provided.        |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a>                          |
| Used For        | Cash and Derivatives   |

## RFQConfirmationIndicator

| Field Name      | RFQConfirmationIndicator   |
|-----------------|--|
| Tag             | 21038  |
| Description     | Indicates whether the message is, or not, an order sent as a confirmation of a QuoteRequest (R) message. |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 0 = No<br>1 = Yes  |



| Field Name | RFQConfirmationIndicator  |
|------------|---|
| Conditions | For ETF Access Platform, this field is Mandatory if the field QuoteReqID (131) is provided and if the Client is the RFQ issuer. |
| Used In    | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a>   |
| Used For   | Cash and Derivatives  |

## RoutingID

| Field Name      | RoutingID  |
|-----------------|--|
| Tag             | 217  |
| Description     | Identifies routing destination.  |
| Format          | String   |
| Length          | 30   |
| Possible Values | BUYSIDE<br>SELLSIDE<br>LOCALSPECIALISTSAMS<br>LOCALSPECIALISTSLIS<br>LOCALSPECIALISTSBRU<br>LOCALSPECIALISTSPAR<br>INTERESTLIST<br>HOLDINGS<br>SELLSIDEQUALITY<br>EURONEXTDRIVEN |
| Used In         | <a href="#">IOI (6)</a>  |
| Used For        | Cash   |

## RoutingTypes

| Field Name      | RoutingTypes                 |
|-----------------|------------------------------|
| Tag             | 216                          |
| Description     | Indicates type of RoutingID. |
| Format          | Int                          |
| Length          | 2                            |
| Possible Values | 2 = Target List              |
| Used In         | <a href="#">IOI (6)</a>      |
| Used For        | Cash                         |

## S

## SecurityID

| Field Name      | SecurityID   |
|-----------------|--|
| Tag             | 48   |
| Description     | Exchange identification code of the instrument, represented by SecurityID (48). This identifier is unique per triplet: MIC, ISIN and currency. The correspondence between the SecurityID (48) and the instrument characteristics is provided in the standing data messages and associated files. Symbol Index is valid for the life of the instrument. |
| Format          | String   |
| Length          | 10   |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |

| Field Name | SecurityID  |
|------------|---|
| Conditions | <p>In Message RequestAckMessage (Uy) the field SecurityID is populated when the message is sent to provide positive acknowledgement to a message PriceInput (UI) or LiquidityProviderCommand (UZ).</p> <p>In case of rejection of PriceInput (UI), LiquidityProviderCommand (UZ), OwnershipRequest (U18), OrderMassStatusRequest (AF) messages – field may not be provided in case of technical rejection, or if the data wasn't provided by the client in the Inbound message.</p> <p>For wholesale order this represents numerical leg instrument identifier (SecurityID (48)).</p> <p>In ERGCommand (U68) required when ActionType (21097) is set to 3 = Block, 4 = Unblock or 5 = Order Size Limit.</p>   |
| Used In    | <p><a href="#">AskForQuote (UL)</a></p> <p><a href="#">ExecutionReport (8)</a></p> <p><a href="#">InstrumentSynchronizationList (U50)</a></p> <p><a href="#">LiquidityProviderCommand (UZ)</a></p> <p><a href="#">MassQuote (i)</a></p> <p><a href="#">MassQuoteAck (b)</a></p> <p><a href="#">NewOrderSingle (D)</a></p> <p><a href="#">NewWholesaleOrder (U64)</a></p> <p><a href="#">OrderCancelReject (9)</a></p> <p><a href="#">OrderCancelReplaceRequest (G)</a></p> <p><a href="#">OrderCancelRequest (F)</a></p> <p><a href="#">OrderMassCancelReport (r)</a></p> <p><a href="#">OrderMassCancelRequest (q)</a></p> <p><a href="#">OrderMassStatusRequest (AF)</a></p> <p><a href="#">OwnershipRequest (U18)</a></p> <p><a href="#">OwnershipRequestAck (U29)</a></p> <p><a href="#">PriceInput (UI)</a></p> <p><a href="#">QuoteRequest (R)</a></p> <p><a href="#">QuoteRequestReject (AG)</a></p> <p><a href="#">RequestAckMessage (Uy)</a></p> <p><a href="#">RequestForExecution (UM)</a></p> <p><a href="#">RFQLPMatchingStatus (U37)</a></p> <p><a href="#">RFQMatchingStatus (U36)</a></p> <p><a href="#">RFQNotification (U35)</a></p> <p><a href="#">SecurityDefinition (d)</a></p> <p><a href="#">SecurityDefinitionRequest (c)</a></p> <p><a href="#">WholesaleOrderAck (U65)</a></p> <p><a href="#">RequestForImpliedExecution (U66)</a></p> <p><a href="#">CrossOrder (U67)</a></p> <p><a href="#">ERGCommand (U68)</a></p> <p><a href="#">ERGCommandAck (U69)</a></p> <p><a href="#">GetRiskControls (U70)</a></p> <p><a href="#">RiskControlDetails (U71)</a></p> <p><a href="#">TradeCaptureReportAck (AR)</a></p> <p><a href="#">TradeCaptureReportAck (AR)</a></p> <p><a href="#">FundPriceInput (U44)</a></p> <p><a href="#">RFQAudit (U72)</a></p> <p><a href="#">IOI (6)</a></p> <p><a href="#">IOINotification (U73)</a></p> <p><a href="#">FundPriceInputAck (U45)</a></p> |
| Used For   | Cash and Derivatives  |

## SecurityReqID

| Field Name  | SecurityReqID                                |
|-------------|--|
| Tag         | 320  |
| Description | ID of a strategy security definition request |

| Field Name      | SecurityReqID  |
|-----------------|--|
|                 | <p>Clients must provide a SecurityReqID (320) in every SecurityDefinitionRequest (U60) message, otherwise the message will be immediately rejected by the OEG.</p> <p>Clients should provide any numerical value. The Exchange recommends setting an unique ID per request and Firm.</p> <p>The SecurityReqID (320) value is not checked by the Exchange (besides the format), it is simply returned in the corresponding SecurityDefinitionAck (U61) message to allow clients reconciling the response message with their original security definition request.</p> |
| Format          | String   |
| Length          | 30   |
| Possible Values | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1   |
| Used In         | <a href="#">SecurityDefinition (d)</a><br><a href="#">SecurityDefinitionRequest (c)</a>  |
| Used For        | Derivatives  |

## SecurityIDSource

| Field Name      | SecurityIDSource  |
|-----------------|---|
| Tag             | 22  |
| Description     | Gives the type of SecurityID.   |
| Format          | String  |
| Length          | 1   |
| Possible Values | 8 = Symbol Index  |
| Conditions      | In Message RequestAckMessage (Uy) field populated when sent to provide positive acknowledgement of message PriceInput (UI) or LiquidityProviderCommand (UZ). In case of rejection of PriceInput (UI), LiquidityProviderCommand (UZ), OwnershipRequest (U18), OrderMassStatusRequest (AF) messages - field may not be provided in case of technical rejection, or if the data wasn't provided by the client in the inbound message.  |
| Used In         | <a href="#">AskForQuote (UL)</a><br><a href="#">ExecutionReport (8)</a><br><a href="#">InstrumentSynchronizationList (U50)</a><br><a href="#">LiquidityProviderCommand (UZ)</a><br><a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReject (9)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OrderMassStatusRequest (AF)</a><br><a href="#">OwnershipRequest (U18)</a><br><a href="#">OwnershipRequestAck (U29)</a><br><a href="#">PriceInput (UI)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">RequestAckMessage (Uy)</a><br><a href="#">RequestForExecution (UM)</a><br><a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">SecurityDefinition (d)</a><br><a href="#">SecurityDefinitionRequest (c)</a><br><a href="#">WholesaleOrderAck (U65)</a><br><a href="#">RequestForImpliedExecution (U66)</a> |

| Field Name | SecurityIDSource   |
|------------|--|
|            | <a href="#">CrossOrder (U67)</a><br><a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">GetRiskControls (U70)</a><br><a href="#">RiskControlDetails (U71)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a><br><a href="#">FundPriceInput (U44)</a><br><a href="#">FundPriceInputAck (U45)</a><br><a href="#">RFQAudit (U72)</a><br><a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a> |
| Used For   | Cash and Derivatives   |

## SecurityRequestType

| Field Name      | SecurityRequestType                             |
|-----------------|---|
| Tag             | 321   |
| Description     | Gives the type of SecurityDefinitionRequest (c) |
| Format          | Int   |
| Length          | 2   |
| Possible Values | 4 = Symbol                                      |
| Used In         | <a href="#">SecurityDefinitionRequest (c)</a>   |
| Used For        | Derivatives                                     |

## SecurityType

| Field Name      | SecurityType  |
|-----------------|---|
| Tag             | 167   |
| Description     | Indicates type of security.   |
| Format          | String  |
| Length          | 4   |
| Possible Values | MLEG = MLEG   |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">SecurityDefinitionRequest (c)</a><br><a href="#">WholesaleOrderAck (U65)</a> |
| Used For        | Derivatives   |

## SecuritySubType

| Field Name      | SecuritySubType  |
|-----------------|--|
| Tag             | 762  |
| Description     | Exchange-recognized strategy code                                    |
| Format          | String   |
| Length          | 1  |
| Possible Values | A = Jelly Roll<br>B = Butterfly<br>D = Spread<br>E = Calendar Spread |

| Field Name | SecuritySubType   |
|------------|---|
|            | F = Diagonal Calendar Spread<br>G = Guts<br>H = Two by One Ratio Spread<br>I = Iron Butterfly<br>J = Combo<br>K = Strangle<br>L = Ladder<br>M = Strip<br>N = Straddle Calendar Spread<br>O = Pack<br>P = Diagonal Straddle Calendar Spread<br>Q = Simple Inter Commodity Spread<br>R = Conversion / Reversal<br>S = Straddle<br>V = Volatility Trade<br>W = Condor<br>X = Box<br>Y = Bundle<br>a = Ladder versus Underlying<br>b = Butterfly versus Underlying<br>c = Call Spread versus Put versus Underlying<br>d = Call or Put Spread versus Underlying<br>e = Call or Put Calendar Spread versus Underlying<br>f = Call/Put Diagonal Calendar Spread versus Underlying<br>g = Guts versus Underlying<br>h = Two by One Call or Put Ratio Spread versus Underlying<br>i = Iron Butterfly versus Underlying<br>j = Combo versus Underlying<br>k = Strangle versus Underlying<br>m = Exchange for Physical<br>n = Straddle Calendar Spread versus Underlying<br>p = Put Spread versus Call versus Underlying<br>q = Diagonal Straddle Calendar Spread versus Underlying<br>r = Synthetic<br>s = Straddle versus Underlying<br>t = Condor versus Underlying<br>v = Iron Condor versus Underlying<br>w = Iron Condor<br>x = Call Spread versus Sell a Put<br>y = Put Spread versus Sell a Call<br>z = Put Straddle versus Sell a Call or a Put |
| Used In    | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">SecurityDefinitionRequest (c)</a><br><a href="#">WholesaleOrderAck (U65)</a>   |
| Used For   | Derivatives   |

## SellRevisionIndicator

| Field Name  | SellRevisionIndicator  |
|-------------|--|
| Tag         | 21009  |
| Description | Indicates whether the offer quote is a new quote, a replacement of a previous quote or a cancellation. |
| Format      | Int  |
| Length      | 1  |

| Field Name      | SellRevisionIndicator   |
|-----------------|---|
| Possible Values | 0 = New<br>1 = Replacement<br>2 = Cancellation                      |
| Conditions      | Provided only if the MassQuote (i) message contains an offer quote. |
| Used In         | <a href="#">MassQuoteAck (b)</a>                                    |
| Used For        | Cash and Derivatives  |

## SenderCompID

| Field Name      | SenderCompID   |
|-----------------|--|
| Tag             | 49   |
| Description     | Identifier of the member firm that sends the message.<br>It is provided by the Exchange upon the registration of the Firm by the Membership department.. |
| Format          | String   |
| Length          | 8  |
| Possible Values | Inbound: Firm ID / Outbound: Exchange ID   |
| Conditions      | In inbound messages it is the ID of the firm that sent the message.<br>In outbound messages it is the ID of the Exchange.                                |
| Used In         | <a href="#">Header</a>   |
| Used For        | Cash and Derivatives   |

## SendingTime

| Field Name      | SendingTime  |
|-----------------|--|
| Tag             | 52   |
| Description     | Time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).   |
| Format          | UTCTimestamp   |
| Length          | 27   |
| Possible Values | YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds) |
| Used In         | <a href="#">Header</a>   |
| Used For        | Cash and Derivatives   |

## SessionStatus

| Field Name      | SessionStatus  |
|-----------------|--|
| Tag             | 1409   |
| Description     | Provides the code associated to the reason for the logout.   |
| Format          | Int  |
| Length          | 3  |
| Possible Values | 4 = Session logout complete<br>5 = Invalid username or password<br>9 = Received MsgSeqNum(34) is too low<br>10 = Received NextExpectedMsgSeqNum(789) is too high<br>100 = Regular Logout By Client<br>101 = End Of Day<br>102 = System unavailable<br>103 = Client session already logged on |

| Field Name | SessionStatus  |
|------------|--|
|            | 104 = Invalid Logon Value<br>105 = SequenceReset - Reset Mode not allowed<br>106 = Excessive Number of Messages<br>107 = Excessive Amount of Data in Bytes<br>108 = Excessive Number of Messages and Amount of Data in Bytes |
| Used In    | <a href="#">Logout (5)</a>   |
| Used For   | Cash and Derivatives   |

## SessionRejectReason

| Field Name      | SessionRejectReason  |
|-----------------|--|
| Tag             | 373  |
| Description     | Session reject reason code.<br>Code to identify the reason for a session-level rejection message.  |
| Format          | Int  |
| Length          | 2  |
| Possible Values | 0 = Invalid Tag Number<br>1 = Required Tag Missing<br>2 = Tag not defined for this message type<br>3 = Undefined tag<br>4 = Tag specified without a value<br>5 = Value is incorrect (out of range) for this tag<br>6 = Incorrect data format for value<br>7 = Decryption problem<br>8 = Signature problem<br>9 = CompID problem<br>11 = Invalid MsgType<br>13 = Tag appears more than once<br>14 = Tag specified out of required order<br>15 = Repeating group fields out of order<br>16 = Incorrect NumInGroup count for repeating group<br>18 = Invalid/Unsupported Application Version<br>19 = NewSeqNo(36) too low<br>20 = Requested MsgSeqNum is higher than last known MsgSeqNum<br>21 = EndSeqNo is lower than BeginSeqNo<br>22 = MsgSeqNum too high<br>23 = Invalid MsgType while waiting for Gap fill<br>24 = PossDupFlag set to Y while OEG is not in Gap Fill Mode<br>25 = Throttling queue full<br>26 = Throttling Rate exceeded<br>27 = System busy<br>28 = Message type not allowed for the functional configuration of the Logical Access<br>99 = Other |
| Conditions      | Provided only in case of rejection due to a poorly formatted message or unknown message type.  |
| Used In         | <a href="#">Reject (3)</a>   |
| Used For        | Cash and Derivatives   |

## SettlementFlag

| Field Name  | SettlementFlag  |
|-------------|---|
| Tag         | 9970  |
| Description | Indicates whether the trade must be settled or not. (0: Not Settled ; 1: Settled) |

|                 |   |
|-----------------|---|
| Format          | Char  |
| Length          | 1   |
| Possible Values | 0 = False<br>1 = True   |
| Conditions      | In inbound TradeCaptureReport (AE) messages field is mandatory if it is submitted with TradeReportTransType (487) set to 0 = New<br>In outbound TradeCaptureReportAck (AR) messages (from TCS) field SettlementFlag (9970) is always provided |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>   |
| Used For        | TCS (Cash)  |

## SettlPeriod

| Field Name      | SettlPeriod  |
|-----------------|--|
| Tag             | 10055  |
| Description     | Indicates the settlement delay in trading days, from 0 to 30 days.   |
| Format          | Int  |
| Length          | 2  |
| Possible Values | From 0 to 30   |
| Conditions      | In inbound TradeCaptureReport (AE) messages field is mandatory if it is submitted with TradeReportTransType (487) set to 0 = New<br>In outbound TradeCaptureReportAck (AR) messages (from TCS) field is provided if the field SettlementFlag (9970) is set to 1 = True |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS (Cash)   |

## Side

| Field Name      | Side   |
|-----------------|--|
| Tag             | 54   |
| Description     | Indicates the side of the order.   |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 1 = Buy<br>2 = Sell<br>7 = Undisclosed   |
| Conditions      | For OrderCancelReplace (G) and OrderCancelRequest (F) messages if the Side (54) is different than the Side (54) of the targeted order, the request will be rejected with the reason "Unknown Order".<br>In OrderCancelReplaceRequest (G) message:<br>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration<br>- (ii) when sent to modify an order, if the value provided doesn't match the one of the original order, the modification is rejected.<br>Mandatory in every inbound TradeCaptureReport (AE) message where TradeReportTransType (487) is 0 = New.<br>In outbound TradeCaptureReportAck (AR) messages provided only when TrdRptStatus (939) is one of the following values: 4 = Pending New, 10 = Verified, 19 = Filled or 18 = Pre-Matched.<br>In all inbound messages required if NoSides (552) >= 1.<br>Value 7 = Undisclosed it's only allowed while sending an IOI (6) – if used in any other inbound message, the message will be rejected; |
| Used In         | <a href="#">ExecutionReport (8)</a>  |



| Field Name | Side  |
|------------|---|
|            | <a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">RFQLPMatchingStatus (U37)</a><br><a href="#">RFQMatchingStatus (U36)</a><br><a href="#">RFQNotification (U35)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a><br><a href="#">IOI (6)</a><br><a href="#">IOINotification (U73)</a> |
| Used For   | Cash  |

## SoftwareProvider

| Field Name      | SoftwareProvider   |
|-----------------|--|
| Tag             | 21050  |
| Description     | Free text field entered by the client in the Logon (A) message, identifying the provider of the software used for exchange of messages for trading purposes. |
| Format          | String   |
| Length          | 8  |
| Possible Values | Free text field  |
| Used In         | <a href="#">Logon (A)</a>  |
| Used For        | Cash and Derivatives   |

## StopPx

| Field Name      | StopPx  |
|-----------------|---|
| Tag             | 99  |
| Description     | Stop Trigger Price is mandatory for stop orders.  |
| Format          | Price   |
| Length          | 20  |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$  |
| Conditions      | <p>This field is mandatory for Stop orders.</p> <p>In OrderCancelReplaceRequest (G) message:</p> <ul style="list-style-type: none"> <li>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration</li> <li>- (ii) when sent to modify an order, value will be modified to the one provided. It is not provided in the ExecutionReport (8) in outgoing messages.</li> </ul> |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>  |
| Used For        | Cash  |

## SelfMatchPreventionID

| Field Name      | SelfMatchPreventionID  |
|-----------------|--|
| Tag             | 2362   |
| Description     | For Future Use.  |
| Format          | String   |
| Length          | 5  |
| Possible Values | From 0 to 2 <sup>16</sup> -2   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a> |

## STPAggressorIndicator

| Field Name      | STPAggressorIndicator  |
|-----------------|--|
| Tag             | 21015  |
| Description     | Field used as instruction for order handling.<br>- STP resting order: indicates whether the STP rule is "cancel resting order" or not. (0: STP Resting Order deactivated; 1: Cancel Resting Order)<br>- STP incoming order: indicates whether the STP rule is "cancel incoming order" or not. (0: STP Incoming Order deactivated; 1: Cancel Incoming Order)<br>- STP is not applicable for Dark Orders |
| Format          | Int  |
| Length          | 1  |
| Possible Values | 0 = Cancel resting order<br>1 = Cancel incoming order<br>9 = Disable STP   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>   |
| Used For        | Cash and Derivatives   |

## T

## TargetClientShortCode

| Field Name      | TargetClientShortCode   |
|-----------------|---|
| Tag             | 21108   |
| Description     | Identifier of the ClientIdentificationShortCode (provided through <i>Parties</i> or <i>NestedParties</i> ) to which the action will be applied.   |
| Format          | String  |
| Length          | 11  |
| Possible Values | Alphanumeric  |
| Conditions      | If provided within ERGCommand (U68) message identifies the ClientIdentificationShortCode upon which the action specified within ActionType (21097) is to be applied – requires TargetFirmID (21098) to be provided as well.<br>If provided within GetRiskControls (U70) message identifies the ClientIdentificationShortCode for which the risk control details are to be provided. |
| Used In         | <a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">GetRiskControls (U70)</a>  |

| Field Name | TargetClientShortCode                    |
|------------|--|
|            | <a href="#">RiskControlDetails (U71)</a> |
| Used For   | Cash and Derivatives                     |

## TargetFirmID

| Field Name  | TargetFirmID  |
|-------------|---|
| Tag         | 21098   |
| Description | Identifier of the member firm to which the specified action is to be applied.   |
| Format      | String  |
| Length      | 8   |
| Conditions  | In ERGCommand (U68) message required in case TargetLogicalAccessID (21099), TargetPartyID (21095) or TargetClientShortCode (21108) are specified, or in case ActionType (21097) is 5 = Order SizeLimit.<br>In GetRiskControls (U70) message required in case TargetLogicalAccessID (21099), TargetPartyID (21095) or TargetClientShortCode (21108) are specified. |
| Used In     | <a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">GetRiskControls (U70)</a><br><a href="#">RiskControlDetails (U71)</a>  |
| Used For    | Derivatives   |

## TargetCompID

| Field Name      | TargetCompID   |
|-----------------|--|
| Tag             | 56   |
| Description     | Message receptor ID.   |
| Format          | String   |
| Length          | 8  |
| Possible Values | Inbound: Exchange ID / Outbound: Firm ID   |
| Conditions      | In inbound messages it is the ID of the Exchange.<br>In outbound messages it is the ID of the firm to which the message is sent. |
| Used In         | <a href="#">Header</a>   |
| Used For        | Cash and Derivatives   |

## TargetLogicalAccessID

| Field Name      | TargetLogicalAccessID  |
|-----------------|--|
| Tag             | 21099  |
| Description     | Identifier of the Logical Access for which the specified action is to be applied.  |
| Format          | Int  |
| Length          | 10   |
| Possible Values | From 0 to 2 <sup>32</sup> -2   |
| Conditions      | In ERGCommand (U68) message the field TargetLogicalAccessID (21099) is ignored if field ActionType (21097) is set to value 5 = Order Size Limit.             |
| Used In         | <a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">GetRiskControls (U70)</a><br><a href="#">RiskControlDetails (U71)</a> |
| Used For        | Cash and Derivatives   |

## TargetPartyID

| Field Name      | TargetPartyID  |
|-----------------|--|
| Tag             | 21095  |
| Description     | Identifier of the ShortCode used as: <ul style="list-style-type: none"> <li>- a filter to reduce the scope of the OrderMassCancelRequest (q) <b>or</b></li> <li>- an identifier of the shortcode for which the Risk Guard command is to be applied;</li> </ul>   |
| Format          | String   |
| Length          | 11   |
| Possible Values | Alphanumeric   |
| Conditions      | <p>If provided in the OrderMassCancelRequest (q) message 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 PartyID (448), within Parties group, as being the ExecutionWithinFirmShortCode, in the OrderMassCancelRequest (1) message.</p> <p>If provided within ERGCommand (U68) message identifies the Trader or Algorithm upon which the action specified within ActionType (21097) is to be applied – requires TargetFirmID (21098) to be provided as well.</p> <p>If provided within GetRiskControls (U70) message identifies the Trader or Algorithm for which the risk control details are to be provided.</p> |
| Used In         | <a href="#">OrderMassCancelRequest (q)</a><br><a href="#">OrderMassCancelReport (r)</a><br><a href="#">ERGCommand (U68)</a><br><a href="#">ERGCommandAck (U69)</a><br><a href="#">GetRiskControls (U70)</a><br><a href="#">RiskControlDetails (U71)</a>  |
| Used For        | Cash and Derivatives   |

## TechnicalOrdType

| Field Name      | TechnicalOrdType   |
|-----------------|--|
| Tag             | 9941   |
| 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          | Char   |
| Length          | 1  |
| Possible Values | 1 = Index trading arbitrage<br>2 = Portfolio strategy<br>3 = Unwind order<br>4 = Other orders (default)<br>5 = Cross margining   |
| Conditions      | In ExecutionReport (8) message, this field is provided only for Drop Copy. Conditions for Drop Copy will be provided at a later date.  |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">CrossOrder (U67)</a> |
| Used For        | Cash and Derivatives   |

## TestReqID

| Field Name      | TestReqID   |
|-----------------|---|
| Tag             | 112   |
| Description     | Test Request ID to be returned in Heartbeat (0).                                    |
| Format          | String  |
| Length          | 24  |
| Possible Values | Numerical   |
| Conditions      | Required when the HeartBeat (0) message is the result of a TestRequest (1) Message. |
| Used In         | <a href="#">Heartbeat (0)</a><br><a href="#">TestRequest (1)</a>                    |
| Used For        | Cash and Derivatives  |

## Text

| Field Name      | Text  |
|-----------------|---|
| Tag             | 58  |
| Description     | Free Text is manually entered by the trader issuing the order, or provided by the Exchange or Risk manager. For order submission message this field is part of the clearing aggregate.  |
| Format          | String  |
| Length          | 18  |
| Possible Values | Alphanumeric  |
| Conditions      | In ExecutionReport (8) message, this field is provided only for Drop Copy. Conditions for Drop Copy will be provided at a later date.   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">MassQuote (i)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">NewWholesaleOrder (U64)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">QuoteRequestReject (AG)</a><br><a href="#">UserNotification (CB)</a><br><a href="#">CrossOrder (U67)</a><br><a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives  |

## TimeInForce

| Field Name      | TimeInForce  |
|-----------------|--|
| Tag             | 59   |
| Description     | Specifies the maximum validity of an order.<br>For Stop orders it provides the maximum validity when not triggered.                              |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = Day<br>1 = Good Till Cancel (GTC)<br>3 = Immediate or Cancel (IOC)<br>4 = Fill or Kill (FOK)<br>6 = Good till Date (GTD)<br>7 = At the Close |

| Field Name | TimeInForce  |
|------------|--|
|            | <p>A = Good for Time (GTT)</p> <p>B = Good for Auction (GFA)</p> <p>S = Valid for Session</p>  |
| Conditions | <p>In ExecutionReport (8) message, this field is provided only for Drop Copy. Absence of this field is NOT interpreted as a DAY order.</p> <p>In OrderCancelReplaceRequest (G) message:</p> <ul style="list-style-type: none"> <li>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration</li> <li>- (ii) when sent to modify an order, value will be modified to the one provided; modifying order from, or to, one of the following validity types: 7 = At the Close (C), B = Good for Auction (GFA) (C), or S = Valid for Session (D), to any other, will result in loss of priority, or rejection of the request.</li> </ul> |
| Used In    | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>   |
| Used For   | Cash and Derivatives   |

## TotalAffectedOrders

| Field Name      | TotalAffectedOrders  |
|-----------------|--|
| Tag             | 533  |
| Description     | Number of orders affected following a global request. It is set to -1 to indicate that the request is processed. |
| Format          | Int  |
| Length          | 10   |
| Possible Values | From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1   |
| Used In         | <a href="#">OrderMassCancelReport (r)</a><br><a href="#">OwnershipRequestAck (U29)</a>                           |
| Used For        | Cash and Derivatives   |

## TotNoQuotEntries

| Field Name      | TotNoQuotEntries   |
|-----------------|--|
| Tag             | 304  |
| Description     | Total number of quotes for the quote set across all messages. Should be the sum of all NoQuoteEntries (295) in each message that has repeating quotes that are part of the same quote set. |
| Format          | Int  |
| Length          | 1  |
| Possible Values | Always equal to NoQuoteEntries (295)   |
| Used In         | <a href="#">MassQuote (i)</a><br><a href="#">MassQuoteAck (b)</a>  |
| Used For        | Cash and Derivatives   |

## TradeID

| Field Name  | TradeID  |
|-------------|--|
| Tag         | 1003   |
| Description | The unique ID assigned by the matching engine to the trade entity, once it is received or matched. |
| Used For    | Cash and Derivatives   |
| Format      | String   |
| Length      | 20   |

|                 |   |
|-----------------|---|
| Possible Values | From 0 to 2 <sup>64</sup> -2  |
| Conditions      | In TradeCaptureReportAck (AR) message, in case of a declaration acknowledgment or notice it provides the identifier of the declaration.<br>In TradeCaptureReportAck (AR) message, in case of a declaration cancel and refusal it provides the identifier of the declaration refused/to be cancelled.<br>In inbound TradeCaptureReport (AE) message, provided by the client requesting cancellation of a previously matched declaration. |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>   |

## TradePriceCondition

| Field Name      | TradePriceCondition  |
|-----------------|--|
| Tag             | 1839   |
| Description     | Contribution to price formation or the price discovery process.  |
| Format          | Int  |
| Length          | 3  |
| Possible Values | 15 = Non-price forming trade (NPFT)<br>101 = Plain Vanilla Trade<br>102 = Trade Not Contributing to Price Discovery Process<br>103 = Dark Trade (For Future Use) |
| Conditions      | In outbound <b>TradeCaptureReportAck</b> (AR) message provided only if previously set in the corresponding inbound <b>TradeCaptureReport</b> (AE) message        |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS (Cash)   |

## TradeReportID

| Field Name      | TradeReportID   |
|-----------------|---|
| Tag             | 571   |
| Description     | Unique identifier of trade capture report.  |
| Format          | String  |
| Length          | 20  |
| Possible Values | From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1  |
| Conditions      | In outbound TradeCaptureReportAck (AR) messages (from TCS) field TradeReportID (571) is provided only if TrdRptStatus (939) is set to 19 = Filled OR 18 = Pre-Matched |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>   |
| Used For        | TCS (Casha and Derivatives)   |

## TradeReportTransType

| Field Name      | TradeReportTransType           |
|-----------------|--------------------------------|
| Tag             | 487                            |
| Description     | Trade Report Transaction Type. |
| Format          | Int                            |
| Length          | 1                              |
| Possible Values | 0 = New                        |

|          |   |
|----------|---|
|          | 1 = Cancel                              |
| Used In  | <a href="#">TradeCaptureReport (AE)</a> |
| Used For | TCS (Cash)                              |

## TradeReportType

| Field Name      | TradeReportType   |
|-----------------|---|
| Tag             | 856   |
| Description     | Trade Report Type.  |
| Format          | Int   |
| Length          | 1   |
| Possible Values | 1 = Alleged<br>3 = Decline<br>6 = Trade Report Cancel   |
| Conditions      | Field used in conjunction with field TradeReportTransType to identify the action type for the TCS declaration.<br>Used only to Decline, Cancel or Refuse a declaration. |
| Used In         | <a href="#">TradeCaptureReport (AE)</a>   |
| Used For        | TCS (Cash and Derivatives)  |

## TradeQualifier

| Field Name      | TradeQualifier   |
|-----------------|--|
| Tag             | 21080  |
| Description     | <p>Trade Qualifier. This field can contain up to 7 values, space delimited, provided in different positions.</p> <ul style="list-style-type: none"> <li>- Uncrossing Trade: indicates whether the trade occurred during an Uncrossing, or not. (0: No ; 1: Yes)</li> <li>- Opening Trade: indicates whether the trade is the first trade of the day, or not. (0: No ; 1: Yes) Please note that during an Uncrossing phase there can be multiple Opening Trades.</li> <li>- Passive Order: indicates whether the corresponding order was passive, or not. (0: No ; 1: Yes)</li> <li>- Aggressive Order: indicates whether the corresponding order was aggressive, or not. (0: No ; 1: Yes)</li> <li>- Trade Creation by Market Operations: indicates whether the trade results from a creation by Market Operations, or not. (0: No ; 1: Yes)</li> <li>- 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)</li> <li>- NAV Trade expressed in price currency: indicates whether the trade is a NAV trade expressed in price currency. This trade is always an update from a previous NAV trade expressed in basis point on the ETF Access platform. (0: No ; 1: Yes)</li> <li>- Deferred Publication: indicates whether the trade publication is deferred or immediate. (0: Immediate Publication; 1: Deferred Publication)</li> </ul> <p>For the Market Data feed:</p> <ul style="list-style-type: none"> <li>- The values Passive Order and Aggressive Order always qualify the Buy order.</li> </ul> |
| Format          | MultipleCharValue  |
| Length          | 13   |
| Possible Values | 0 = Uncrossing Trade<br>1 = First Trade Price<br>2 = Passive Order<br>3 = Aggressive Order<br>4 = Trade Creation by Market Operations<br>5 = NAV Trade expressed in bps<br>6 = NAV Trade expressed in price currency<br>7 = Deferred Publication   |
| Conditions      | Provided only in case of Fill or Partial Fill.   |



| Field Name | TradeQualifier   |
|------------|--|
|            | Values '5' and '6' will be used only for the NAV trading on the ETF Access platform. |
| Used In    | <a href="#">ExecutionReport (8)</a>  |
| Used For   | Cash and Derivatives   |

## TradeType

| Field Name      | TradeType  |
|-----------------|--|
| Tag             | 21010  |
| Description     | Type of trade.   |
| Format          | Int  |
| Length          | 3  |
| Possible Values | <p>1 = Conventional Trade (Cash and Derivatives)</p> <p>2 = Large in Scale (LiS) Trade (Derivatives Only)</p> <p>4 = Large in Scale (LiS) Package Trade (Derivatives Only)</p> <p>5 = Guaranteed Cross Trade (Cash and Derivatives)</p> <p>6 = Against Actual Trade (Derivatives Only)</p> <p>9 = Exchange for Swaps Trade (Derivatives Only)</p> <p>11 = Strategy Leg Conventional Trade (Derivatives Only)</p> <p>20 = BoB Trade (Cash Only)</p> <p>24 = Trade Cancellation (Cash and Derivatives)</p> <p>25 = Out of Market Trade (Cash Only)</p> <p>26 = Delta Neutral Trade - Underlying Cash Leg (Cash Only)</p> <p>27 = Market VWAP Operation Trade (Cash Only)</p> <p>28 = Euronext Fund Service Trade (Cash Only)</p> <p>29 = Secondary Listing Trade (Cash Only)</p> <p>30 = Request for Cross Trade (Derivatives Only)</p> <p>31 = Request for cross strategy Leg Trade (Derivatives Only)</p> <p>32 = Trade Publication (Cash Only)</p> <p>33 = Dark Trade (Cash Only)</p> <p>34 = Delta Neutral Trade - Underlying Future Leg (Derivatives Only)</p> <p>36 = Total Traded Volume (For future use)</p> <p>39 = Guaranteed Cross – Negotiated deal NLIQ (Liquid)</p> <p>40 = Guaranteed Cross – Negotiated deal OILQ (illiquid)</p> <p>41 = Large in Scale (LiS) Trade (Cash)</p> <p>42 = Large in Scale (LiS) Trade in basis points (Derivatives Only)</p> <p>43 = Large in Scale (LiS) Package Trade in basis points (Derivatives Only)</p> <p>45 = Trade Reversal</p> <p>46 = Non-Standard Settlement</p> <p>47 = Repurchase Agreement – Repo (OBOE only)</p> <p>48 = Exchange Granted Trade (OBOE only)</p> <p>49 = Other (OBOE only)</p> <p>50 = Odd Lot</p> <p>100 = Conventional Trade - Provisional price</p> <p>101 = Large in Scale (LiS) Trade - Provisional price</p> <p>102 = Large in Scale (LiS) Package Trade - Provisional price</p> |
| Conditions      | For the ExecutionReport (8) message, the following values are <u>NOT</u> used: '4', '7', '10', '14', '16', '19', '22', '24', '25', '36', '37', '38' and '45'. Mandatory in ExecutionReport (8) message following a trade execution (Full or Partial).  |
| Used In         | <a href="#">ExecutionReport (8)</a>  |
| Used For        | Cash and Derivatives   |

## TradingSessionID

| Field Name      | TradingSessionID  |
|-----------------|---|
| Tag             | 336   |
| Description     | <p>Trading Session Validity. Defines the validity time periods for VFS (Valid for Session) orders.</p> <p>Sessions represent the following:</p> <ul style="list-style-type: none"> <li>■ Session 1 – Normal Trading Hours (Cash)</li> <li>■ Session 2 – Normal Trading Hours (Derivatives for future use)</li> <li>■ Session 3 – Extended Trading Hours (for Index Derivatives segment, corresponds to the extension 17.30 CET - 22.00 CET for future use – for Structured Products segment, corresponds to the first extension 18.30 CET - 20.00 CET)</li> <li>■ Session 4 – Second Extended Trading Hours (for Structured Products segment, corresponds to the second extension 20.00 CET to 22.00 CET).</li> </ul> |
| Format          | String  |
| Length          | 3   |
| Possible Values | <p>101 = Session 1</p> <p>102 = Session 2 (future use)</p> <p>103 = Session 3 (future use)</p> <p>104 = Session 4 (future use)</p> <p>205 = Session 1 and Session 3</p> <p>313 = Session 1, 3 and Session 4</p> <p>123 = All Sessions, deprecated (no more used on Optiq)</p>   |
| Conditions      | <ul style="list-style-type: none"> <li>■ For Cash Markets segments except Structured Products: <ul style="list-style-type: none"> <li>- Session 1 (101)</li> </ul> </li> <li>■ For Cash Markets Structured Products segments: <ul style="list-style-type: none"> <li>- Session 1 (101)</li> <li>- Session 1 + Session 3 (205)</li> <li>- Session 1 + Session 3 + Session 4 (313)</li> </ul> </li> <li>■ For Derivatives Markets, this field is not provided.</li> </ul>   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>  |
| Used For        | Cash and Derivatives  |

## TransactTime

| Field Name      | TransactTime   |
|-----------------|--|
| Tag             | 60   |
| Description     | Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).   |
| Format          | UTCTimestamp   |
| Length          | 27   |
| Possible Values | Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)   |
| Conditions      | In ExecutionReport (8) it is provided only in case of Full or Partial execution.   |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a><br><a href="#">OrderCancelRequest (F)</a><br><a href="#">OrderMassCancelRequest (q)</a><br><a href="#">QuoteRequest (R)</a><br><a href="#">TradeCaptureReportAck (AR)</a> |
| Used For        | Cash and Derivatives   |

## TriggeredStopTimeInForce

| Field Name      | TriggeredStopTimeInForce   |
|-----------------|--|
| Tag             | 20175  |
| Description     | Specifies the maximum validity of an triggered stop order.<br>If both TimeInForce (59) and TriggeredStopTimeInForce (21075) are Good till Date they will both refer to the same ExpireDate (432) provided in the order. If ExpireDate (432) 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          | Char   |
| Length          | 1  |
| Possible Values | 0 = Day<br>1 = Good Till Cancel<br>6 = Good till Date  |
| Conditions      | It is mandatory for stop orders.<br>In OrderCancelReplaceRequest (G) message:<br>- (i) when sent to confirm a breached collar of an order, values in this field must be provided, but won't be taken into consideration<br>- (ii) when sent to modify an order, value will be modified to the one provided<br>In outbound messages, this field is provided only in Drop Copy.          |
| Used In         | <a href="#">ExecutionReport (8)</a><br><a href="#">NewOrderSingle (D)</a><br><a href="#">OrderCancelReplaceRequest (G)</a>   |
| Used For        | Cash and Derivatives   |

## TrdRegPublicationReason

| Field Name      | TrdRegPublicationReason   |
|-----------------|---|
| Tag             | 2670  |
| Description     | Waiver Indicator. 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.<br>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          | Int   |
| Length          | 2   |
| Possible Values | 0 = LRGS (for future use)<br>1 = RFPT<br>2 = NLIQ<br>3 = OILQ<br>4 = PRIC<br>5 = SIZE<br>6 = ILQD<br>7 = OMF (for future use)   |
| Conditions      | In outbound TradeCaptureReportAck (AR) messages (from TCS) field TrdRegPublicationReason (2670) is filled with one of the possible values if TrdRptStatus (939) is set to 19 = Filled OR 18 = Pre-Matched; AND the transaction meets the conditions required for a waiver   |
| Used In         | <a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS (Cash)  |

## TrdRptStatus

| Field Name      | TrdRptStatus  |
|-----------------|---|
| Tag             | 939   |
| Description     | Trade Report Type.  |
| Format          | Int   |
| Length          | 2   |
| Possible Values | 1 = Rejected<br>2 = Cancelled<br>4 = Pending New<br>5 = Pending Cancel<br>10 = Verified<br>12 = Time Out<br>13 = Restated<br>14 = Expiration of a pending declaration<br>15 = Elimination of a pending declaration<br>16 = Elimination of a pre-matched declaration following a CE<br>17 = Elimination of a pre-matched declaration by MOC<br>18 = Pre-Matched<br>19 = Filled |
| Used In         | <a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS (Cash)  |

## TrdType

| Field Name      | TrdType  |
|-----------------|--|
| Tag             | 828  |
| Description     | Type of Operation.   |
| Format          | Int  |
| Length          | 4  |
| Possible Values | 51 = Volume weighted average trade<br>1001 = Declaration of a trade outside the book<br>1002 = Fund order (quantity)<br>1003 = Fund order (cash amount)<br>1004 = Declaration of a trade on a Secondary listing place  |
| Conditions      | Mandatory for every submission of a new TradeCaptureReport (AE) declaration message where TradeReportTransType is 0 = 'New'.<br><br>In Message TradeCaptureReportAck (AR) the field is not provided in case the message is being sent back to indicate rejection of the TradeCaptureReport (AE) message due to technical of data inconsistency in the message. |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS (Cash)   |

## U

## UndisclosedIcebergType

| Field Name | UndisclosedIcebergType |
|------------|------------------------|
| Tag        | 20005                  |

| Field Name      | UndisclosedIcebergType  |
|-----------------|---|
| Description     | [N/A](For Future Use, Pending Regulatory Approval) Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity. |
| Format          | Int   |
| Length          | 1   |
| Possible Values | 1 = Limit<br>2 = Peg Mid-Point<br>3 = Peg Primary<br>4 = Peg Market   |
| Conditions      | In ExecutionReport (8) message, this field is provided only for Drop Copy. Conditions for Drop Copy will be provided at a later date.                                       |
| Used In         | ExecutionReport (8)<br>NewOrderSingle (D)<br>OrderCancelReplaceRequest (G)  |
| Used For        | Cash  |

## UndisclosedPrice

| Field Name      | UndisclosedPrice  |
|-----------------|---|
| Tag             | 20004   |
| Description     | (For Future Use, Pending Regulatory Approval) Optional price for the hidden part of an Iceberg order.                                 |
| Format          | Price   |
| Length          | 20  |
| Possible Values | From $-2^{63}+1$ to $2^{63}-1$  |
| Conditions      | In ExecutionReport (8) message, this field is provided only for Drop Copy. Conditions for Drop Copy will be provided at a later date. |
| Used In         | ExecutionReport (8)<br>NewOrderSingle (D)<br>OrderCancelReplaceRequest (G)  |
| Used For        | Cash  |

## UserStatus

| Field Name      | UserStatus   |
|-----------------|--|
| Tag             | 926  |
| Description     | Status of the user.  |
| Format          | Int  |
| Length          | 3  |
| Possible Values | 101 = Trader-Algo Suspended<br>102 = Trader-Algo Suspension Cleared<br>103 = Trader-Algo Killed<br>104 = Trader-Algo Kill Cleared<br>105 = Firm Suspended<br>106 = Firm Suspension Cleared<br>107 = Firm Killed<br>108 = Firm Kill Cleared<br>109 = DEA Suspended<br>110 = DEA Suspension Cleared<br>111 = DEA Killed<br>112 = DEA Kill Cleared<br>113 = Trader - Algo Suspended by Risk Manager |

| Field Name | UserStatus  |
|------------|---|
|            | 114 = Trader - Algo Unsuspended by Risk Manager<br>115 = Firm Suspended by Risk Manager<br>116 = Firm Unsuspended by Risk Manager<br>117 = DEA Suspended by Risk Manager<br>118 = DEA Unsuspended by Risk Manager<br>119 = Logical Access Suspended by Risk Manager<br>120 = Logical Access Unsuspended by Risk Manager<br>121 = Trader - Algo Blocked by Risk Manager<br>122 = Trader - Algo Unblocked by Risk Manager<br>123 = Firm Blocked by Risk Manager<br>124 = Firm Unblocked by Risk Manager<br>125 = DEA Blocked by Risk Manager<br>126 = DEA Unblocked by Risk Manager<br>127 = Logical Access Blocked by Risk Manager<br>128 = Logical Access Unblocked by Risk Manager<br>129 = Order Size Limit Activated by Risk Manager<br>130 = Order Size Limit Deactivated by Risk Manager |
| Conditions | For the cases where value 130 = Order Size Limit Deactivated by Risk Manager is sent, OrderSizeLimit (21102) tag is not sent.   |
| Used In    | <a href="#">UserNotification (CB)</a>   |
| Used For   | Cash and Derivatives  |

## W

## WholesaleSide

| Field Name      | WholesaleSide  |
|-----------------|--|
| Tag             | 21082  |
| Description     | Indicates the side of the Wholesale order.   |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 1 = Buy<br>2 = Sell<br>3 = Cross   |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a><br><a href="#">WholesaleOrderAck (U65)</a> |
| Used For        | Derivatives  |

## WholesaleTradeType

| Field Name      | WholesaleTradeType   |
|-----------------|--|
| Tag             | 21083  |
| Description     | Wholesale trade type supported by the trading host.                      |
| Format          | Char   |
| Length          | 1  |
| Possible Values | 0 = Large in Scale Trade<br>1 = Against Actual<br>2 = Exchange For Swaps |
| Used In         | <a href="#">NewWholesaleOrder (U64)</a>                                  |

| Field Name | WholesaleTradeType                      |
|------------|---|
|            | <a href="#">WholesaleOrderAck (U65)</a> |
| Used For   | Derivatives                             |

## VWAPBegTime

| Field Name      | VWAPBegTime  |
|-----------------|--|
| Tag             | 10026  |
| Description     | Start time for the Volume Weight Average price computation period.   |
| Format          | UTCTimestamp   |
| Length          | 27   |
| Possible Values | YYYYMMDD-HH:MM:SS.sss.nnn  |
| Conditions      | For TradeCaptureReport (AE) message, it is provided only for declarations when TrdType '51' (Volume weighted average trade), and if not provided it is assumed that the VWAP calculation period lasts until the end of the trading session, and if not provided it is assumed that the VWAP calculation period starts at the beginning of the trading session. |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>  |
| Used For        | TCS (Cash)   |

## VWAPEndTime

| Field Name      | VWAPEndTime   |
|-----------------|---|
| Tag             | 10027   |
| Description     | End time for the Volume Weight Average price computation period.  |
| Format          | UTCTimestamp  |
| Length          | 27  |
| Possible Values | YYYYMMDD-HH:MM:SS.sss.nnn   |
| Conditions      | For TradeCaptureReport (AE) message, it is provided only for declarations when TrdType '51' (Volume weighted average trade), and if not provided it is assumed that the VWAP calculation period lasts until the end of the trading session. |
| Used In         | <a href="#">TradeCaptureReport (AE)</a><br><a href="#">TradeCaptureReportAck (AR)</a>   |
| Used For        | TCS (Cash)  |

## 7. EXAMPLES

### Example 1: Gap in Administration Messages that is not a Logon (A), Logout (5), Resendrequest (2) or a Sequencereset (4)

Example below indicates handling of the gap in this case, with the gap detected in the *MsgSeqNum* (34) field of the **HeartBeat** (0) message sent by the client.

| # | Received From Client   | Sent by Exchange   |
|---|--|--|
| 1 | At the start of session client sends the first Logon (A) message<br><b>Logon</b> (A)<br><i>MsgSeqNum</i> (34) = 1<br><i>NextExpectedMsgSeqNum</i> (789) = 1  | < <b>Logon</b> (A)<br><i>MsgSeqNum</i> (34) = 1<br><i>NextExpectedMsgSeqNum</i> (789) = 2  |
| 2 | Following a successful logon the exchange of application messages proceeds during the session<br><b>NewOrderSingle</b> (D) order #1<br><i>MsgSeqNum</i> (34) = 2<br><i>Side</i> (54) = 1 (Buy)<br><br><b>NewOrderSingle</b> (D) order #2<br><i>MsgSeqNum</i> (34) = 3<br><i>Side</i> (54) = 1 (Buy)  | < <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 2<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New)<br><br>< <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 3<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New) |
| 3 | Following a period of inactivity Exchange sends a TestRequest (1) message to check the status of the connection  | < <b>TestRequest</b> (1)<br><i>MsgSeqNum</i> (34) = 4  |
| 4 | In the meantime client is sending messages for new orders, that do not appear to be reaching the exchange<br><b>NewOrderSingle</b> (D) order #3<br><i>MsgSeqNum</i> (34) = 4<br><i>Side</i> (54) = 1 (Buy)<br><br><b>NewOrderSingle</b> (D) order #4<br><i>MsgSeqNum</i> (34) = 5<br><i>Side</i> (54) = 1 (Buy)<br><br><b>NewOrderSingle</b> (D) order #5<br><i>MsgSeqNum</i> (34) = 6<br><i>Side</i> (54) = 1 (Buy)   |  |
| 5 | Either due to inactivity or as a delayed answer to the TestRequest (1) message in step 3 client's system sends a HeartBeat (0) message<br><b>HeartBeat</b> (0)<br><i>MsgSeqNum</i> (34) = 7  |  |
| 6 | Exchange detects a gap in the HeartBeat (0) message from client, and issues a ResendRequest (2) to fill the gap.   | < <b>ResendRequest</b> (2)<br><i>MsgSeqNum</i> (34) = 5<br><i>BeginSeqNo</i> (7) = 4<br><i>EndSeqNo</i> (16) = 7   |
| 7 | Client resends order messages that were missed, starting with the indicated sequence number of 4 to fill the gap, with Exchange acknowledging them<br><b>NewOrderSingle</b> (D) order #3<br><i>MsgSeqNum</i> (34) = 4<br><i>Side</i> (54) = 1 (Buy)<br><i>PossDupFlag</i> (43) = Y (Possible duplicate)<br><i>OrgSendingTime</i> (122) = set to time of original sending<br><br><b>NewOrderSingle</b> (D) order #4<br><i>MsgSeqNum</i> (34) = 5<br><i>Side</i> (54) = 1 (Buy)<br><i>PossDupFlag</i> (43) = Y (Possible duplicate)<br><i>OrgSendingTime</i> (122) = set to time of original sending | < <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 6<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New)<br><br>< <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 7<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New) |



| # | Received From Client   | Sent by Exchange  |
|---|--|---|
|   | <b>NewOrderSingle (D) order #5</b> ><br><i>MsgSeqNum (34) = 6</i><br><i>Side (54) = 1 (Buy)</i><br><i>PossDupFlag (43) = Y (Possible duplicate)</i><br><i>OrgSendingTime (122) = set to time of original sending</i> |   |
|   |  | < <b>ExecutionReport (8)</b><br><i>MsgSeqNum (34) = 8</i><br><i>OrdStatus (39) = 0 (New) / ExecType (150) = 0 (New)</i> |
| 8 | After resending missed order messages client sends a SequenceReset (4) message, to replace the HeartBeat (0) message, before resending a HeartBeat (0) message that is assigned the new sequence number identified   |   |
|   | <b>SequenceReset (4)</b> ><br><i>MsgSeqNum (34) = 7</i><br><i>PossDupFlag (43) = Y (Possible duplicate)</i><br><i>OrgSendingTime (122) = set to current time</i><br><i>NewSeqNo (36) = 8</i>                         |   |
|   | <b>HeartBeat (0)</b> ><br><i>MsgSeqNum (34) = 8</i>  |   |
|   | ...  |   |

## Example 2: Gap in Application Messages

Example below indicates handling of the gap in this a case, with the gap is detected in the field *MsgSeqNum* (34) of the **NewOrderSingle** (D) message sent by the client.

| # | Received From Client  | Sent by Exchange   |
|---|---|--|
| 1 | At the start of session client sends the first Logon (A) message<br><b>Logon</b> (A)<br><i>MsgSeqNum</i> (34) = 1<br><i>NextExpectedMsgSeqNum</i> (789) = 1   | < <b>Logon</b> (A)<br><i>MsgSeqNum</i> (34) = 1<br><i>NextExpectedMsgSeqNum</i> (789) = 2  |
| 2 | Following a successful logon the exchange of application messages proceeds during the session<br><b>NewOrderSingle</b> (D) order #1<br><i>MsgSeqNum</i> (34) = 2<br><i>Side</i> (54) = 1 (Buy)<br><br><b>NewOrderSingle</b> (D) order #2<br><i>MsgSeqNum</i> (34) = 3<br><i>Side</i> (54) = 1 (Buy)   | < <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 2<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New)<br><br>< <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 3<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New)   |
| 3 | Client sends three (3) messages for new orders that do not appear to be reaching the exchange<br><b>NewOrderSingle</b> (D) order #3<br><i>MsgSeqNum</i> (34) = 4<br><i>Side</i> (54) = 1 (Buy)<br><br><b>NewOrderSingle</b> (D) order #4<br><i>MsgSeqNum</i> (34) = 5<br><i>Side</i> (54) = 1 (Buy)<br><br><b>NewOrderSingle</b> (D) order #5<br><i>MsgSeqNum</i> (34) = 6<br><i>Side</i> (54) = 1 (Buy)  |  |
| 4 | Client sends one more order message that reaches the exchange, that indicates the gap of the previously missed messages<br><b>NewOrderSingle</b> (D) order #6<br><i>MsgSeqNum</i> (34) = 7<br><i>Side</i> (54) = 1 (Buy)  |  |
| 6 | Exchange detects a gap in sequence numbers in the <b>NewOrderSingle</b> (D) message sent by the client, which reaches the exchange, and issues a <b>ResendRequest</b> (2) to fill the gap. The message for order #6 is ignored by the exchange  | < <b>ResendRequest</b> (2)<br><i>MsgSeqNum</i> (34) = 4<br><i>BeginSeqNo</i> (7) = 4<br><i>EndSeqNo</i> (16) = 7   |
| 7 | Client resends the four (4) order messages that were missed, starting with the indicated sequence number of 4 to fill the gap, with Exchange acknowledging them<br><b>NewOrderSingle</b> (D) order #3<br><i>MsgSeqNum</i> (34) = 4<br><i>Side</i> (54) = 1 (Buy)<br><i>PossDupFlag</i> (43) = Y (Possible duplicate)<br><i>OrgSendingTime</i> (122) = set to time of original sending<br><br><b>NewOrderSingle</b> (D) order #4<br><i>MsgSeqNum</i> (34) = 5<br><i>Side</i> (54) = 1 (Buy)<br><i>PossDupFlag</i> (43) = Y (Possible duplicate)<br><i>OrgSendingTime</i> (122) = set to time of original sending<br><br><b>NewOrderSingle</b> (D) order #5<br><i>MsgSeqNum</i> (34) = 6<br><i>Side</i> (54) = 1 (Buy)<br><i>PossDupFlag</i> (43) = Y (Possible duplicate)<br><i>OrgSendingTime</i> (122) = set to time of original sending | < <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 5<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New)<br><br>< <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 6<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New)<br><br>< <b>ExecutionReport</b> (8)<br><i>MsgSeqNum</i> (34) = 7<br><i>OrdStatus</i> (39) = 0 (New) / <i>ExecType</i> (150) = 0 (New) |

| # | Received From Client  | Sent by Exchange   |
|---|---|--|
|   | <b>NewOrderSingle</b> (D) order #6<br>MsgSeqNum (34) = <b>7</b><br>Side (54) = 1 (Buy)<br>PossDupFlag (43) = Y (Possible duplicate)<br>OrgSendingTime (122) = set to time of original sending | >  |
|   |   | < <b>ExecutionReport</b> (8)<br>MsgSeqNum (34) = <b>8</b><br>OrdStatus (39) = 0 (New) / ExecType (150) = 0 (New) |
|   |   | ...  |

**Example 3: Gap in Logout Request**

| # | Received From Client   | Sent by Exchange   |
|---|--|--|
| 1 | At the start of session client sends the first Logon (A) message<br><b>Logon (A)</b> ><br><i>MsgSeqNum (34) = 1</i><br><i>NextExpectedMsgSeqNum (789) = 1</i>  | < <b>Logon (A)</b><br><i>MsgSeqNum (34) = 1</i><br><i>NextExpectedMsgSeqNum (789) = 2</i>  |
| 2 | Following a successful logon the exchange of application messages proceeds during the session<br><b>NewOrderSingle (D) order #1</b> ><br><i>MsgSeqNum (34) = 2</i><br><i>Side (54) = 1 (Buy)</i>   | < <b>ExecutionReport (8)</b><br><i>MsgSeqNum (34) = 2</i><br><i>OrdStatus (39) = 0 (New) / ExecType (150) = 0 (New)</i>  |
| 3 | Client sends two (2) messages for new orders that do not appear to be reaching the exchange<br><b>NewOrderSingle (D) order #2</b> ><br><i>MsgSeqNum (34) = 3</i><br><i>Side (54) = 1 (Buy)</i><br><br><b>NewOrderSingle (D) order #3</b> ><br><i>MsgSeqNum (34) = 4</i><br><i>Side (54) = 1 (Buy)</i>  |  |
| 4 | Client chooses to close connection, and send a Logout (5) message<br><b>Logout (5)</b> ><br><i>MsgSeqNum (34) = 5</i>  |  |
| 5 | Exchange detects a gap in sequence numbers in the Logout (5) message and issues a ResendRequest (2) to fill the gap. The Logout message is ignored by the exchange   | < <b>ResendRequest (2)</b><br><i>MsgSeqNum (34) = 3</i><br><i>BeginSeqNo (7) = 3</i><br><i>EndSeqNo (16) = 5</i>   |
| 6 | Client resends the two orders with Exchange acknowledging the orders<br><b>NewOrderSingle (D) order #2</b> ><br><i>MsgSeqNum (34) = 3</i><br><i>Side (54) = 1 (Buy)</i><br><i>PossDupFlag (43) = Y (Possible duplicate)</i><br><i>OrgSendingTime (122) = set to time of original sending</i><br><br><b>NewOrderSingle (D) order #3</b> ><br><i>MsgSeqNum (34) = 4</i><br><i>Side (54) = 1 (Buy)</i><br><i>PossDupFlag (43) = Y (Possible duplicate)</i><br><i>OrgSendingTime (122) = set to time of original sending</i> | < <b>ExecutionReport (8)</b><br><i>MsgSeqNum (34) = 4</i><br><i>OrdStatus (39) = 0 (New) / ExecType (150) = 0 (New)</i><br><br>< <b>ExecutionReport (8)</b><br><i>MsgSeqNum (34) = 5</i><br><i>OrdStatus (39) = 0 (New) / ExecType (150) = 0 (New)</i> |
| 7 | Then clients sends the last message of SequenceReset (4) to replace the sequence id of the previously sent Logout message and is logged out by the Exchange<br><b>SequenceReset (4)</b> ><br><i>MsgSeqNum (34) = 5</i><br><i>PossDupFlag (43) = Y (Possible duplicate)</i><br><i>OrgSendingTime (122) = set to current time</i><br><i>NewSeqNo (36) = 6</i>  | < <b>Logout (5)</b><br><i>MsgSeqNum (34) = 6</i>   |

## REVISION HISTORY

| Version | Change Description   |
|---------|--|
| 4.10.0  | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ Add clarification on tag 41 OrigClOrdID field conditions:<br/>If both OrigClOrdID and ClOrdID are provided in a modification or cancellation request, the OrigClOrdID is totally ignored and the request is performed on OrderID only, and then only OrderID is present in ExecutionReport(8).</li> <li>■ Add clarification on tag530 MassCancelRequestType possible values:<br/>'1' = Cancel orders for a security (cash and derivatives) or a contract (derivatives only)</li> <li>■ Update in <a href="#">OrderMassCancelRequest (q)</a> Message Description:<br/>The MassCancelRequestType (530) field defines the scope of the mass cancellation request:<br/>Derivatives only: To cancel orders assigned to instruments of a derivative contract, MassCancelRequestType (530) must be set to '1' and the SecurityID (48) field must be populated with the symbol index of the contract concerned.</li> <li>■ Improved description of 2.4 Order ID section</li> <li>■ Update in <a href="#">CrossOrder (U67)</a> :<br/>The field OrderActorType (21109) is mandatory</li> <li>■ Add clarification on tag 21801 FRMARAMPLP description:<br/>French Market Abuse Regulation Accepted Market Practice Liquidity provision is related to the AMAFI (Association française des marchés financiers) market abuse prevention.</li> </ul> |
| 4.8.0   | Introduction of SBE 308 – no impacts   |
| 4.7.0   | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ In <a href="#">ExecutionReport (8)</a>:<br/>- Update description of ExecutionReport (8) Message Signature Tags</li> </ul>  |
| 4.6.2   | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ In <a href="#">ExecutionReport (8)</a>:<br/>- Update description of <a href="#">Trading Venue Transaction Identification Code (TVTIC)</a></li> <li>■ In <a href="#">TradeCaptureReportAck (AR)</a>:<br/>- Add description of <a href="#">Trading Venue Transaction Identification Code (TVTIC)</a></li> </ul>  |
| 4.6.1   | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ In <a href="#">Field Description</a>:<br/>a) Add value 28 = <i>Message type not allowed for the functional configuration of the Logical Access</i> in the sessionRejectReason (373) list of authorized values;</li> </ul>  |
| 4.6.0   | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ In <a href="#">Field Description</a>:<br/>Updated description of field: <a href="#">ExpireDate</a> and <a href="#">ContraBroker</a></li> </ul>   |
| 4.5.0   | <p>The following messages were added – only available for Block Segment:</p> <ul style="list-style-type: none"> <li>■ IOI (6)</li> <li>■ IOINotification (U73);</li> </ul> <p>The following message structure was updated:</p> <ul style="list-style-type: none"> <li>■ NewOrderSingle (D): Added IOIID (23);</li> </ul> <p>The following section was updated:</p> <ul style="list-style-type: none"> <li>■ <a href="#">4.10 Direct Response to Application Messages</a> to include the new IOI (6) message;</li> <li>■ <a href="#">5.3.1.1 Message Description</a>;</li> </ul> <p>The following field got the possible values updated:</p> <ul style="list-style-type: none"> <li>■ MsgType (35):<br/>a) Value 6 = IOI added;<br/>b) Value U73= IOINotification added;<br/>c) Value U72 = RFQAudit added;</li> <li>■ SessionRejectReason (373):<br/>a) 28 = Message type not allowed for the functional configuration of the Logical Access;</li> </ul> <p>The following field got the conditions updated:</p> <ul style="list-style-type: none"> <li>■ OrderQty (38): adjusted to include <i>"In IOI (6) message: required only when IOIQty (27) different than "Undisclosed Qty" – ignored in all other cases"</i></li> </ul> <p>The following fields got the list of messages on which they are used updated to include IOI (6) and IOINotification (U73):</p> <ul style="list-style-type: none"> <li>■ OrderQty (38);</li> </ul>                        |

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|             | <ul style="list-style-type: none"> <li>■ Side (54);</li> <li>■ EMM (20020);</li> <li>■ SecurityID (48);</li> <li>■ SecurityIDSource (22);</li> <li>■ ClientMessageSendingTime (21005);</li> <li>■ BookINTime (21002);</li> <li>■ BookOUTTime (21003);</li> <li>■ OEGINFromME (7765);</li> <li>■ OEGINFromMember (5979);</li> <li>■ OEGOUTToME (7764);</li> <li>■ ErrorCode (9955);</li> </ul>  |
| 4.4.0       | Introduction of SBE 304 – no impacts   |
| 4.3.0       | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ In <a href="#">Error Codes</a>, removal of the note indicating “Dark feature is for future use”*</li> <li>■ Correction of the definition of the session 3 for the field Trading Session ID</li> </ul>  |
| 4.2.1       | <p>Adjusted section 4.2 Structure Representation:</p> <ul style="list-style-type: none"> <li>■ Representation of examples of components and nested components within the messages structures adjusted;</li> </ul> <p>Text describing those same representations adjusted as well.</p>  |
| 4.2.0 [FBO] | <p>Integration of Oslo Fixed Incomes:</p> <ul style="list-style-type: none"> <li>■ New values for Trade Type: <ul style="list-style-type: none"> <li>46 = Non-Standard Settlement</li> <li>47 = Repurchase Agreement – Repo (OBOE only)</li> <li>48 = Exchange Granted Trade (OBOE only)</li> <li>49 = Other (OBOE only)</li> <li>50 = Odd Lot</li> </ul> </li> </ul> <p>Added note on TVTIC determination in section 5.3.2.1 ExecutionReport (8) message description.</p>   |
| 4.1.0       | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ In <a href="#">Direct Responses to Application Messages</a> – added QuoteRequest (R).</li> <li>■ In <a href="#">OrderMassCancelRequest (q)</a> – added details for processing of mass cancellation.</li> <li>■ In <a href="#">Application Messages</a>: <ul style="list-style-type: none"> <li>- <a href="#">QuoteRequest (R)</a>: AccountCode changed from Optional to Conditional (Mandatory for ETF Access Platform).</li> </ul> </li> <li>■ In <a href="#">Field Description</a>: <ul style="list-style-type: none"> <li>- Enriched conditions and descriptions of fields: <a href="#">ContraBroker</a> (375), <a href="#">NumberOfLPs</a> (21034), <a href="#">AccountCode</a> (6399), <a href="#">TradingSessionID</a> (334);</li> <li>- Enriched values for field as follows: <a href="#">TradingSessionID</a> (334) with new value ‘104’ (Session 4).</li> </ul> </li> </ul> |
| 4.0.3       | <p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ Field <a href="#">OEGOUTToME</a> is conditional in messages: <a href="#">RFQNotification</a> (U35), <a href="#">RFQMatchingStatus</a> (U36) and <a href="#">RFQLPMatchingStatus</a> (U37).</li> </ul>  |
| 4.0.2       | <p>The following changes have been made to this version of the document:</p> <p><b>Document Improvements:</b></p> <ul style="list-style-type: none"> <li>■ Add following definition in Conditions for field “LegStrikePrice”: The value provided with Price/Index Level Decimals if the leg is an option.</li> <li>■ ConditionalOrderFlag field “Used In” is update to “Cash” instead of “Cash and Derivatives” because it is only used for Block.</li> <li>■ The segment Financial Derivatives FID is removed from the document.</li> <li>■ Update Scope section by adding new table.</li> <li>■ Add “Document Audience” section.</li> </ul> <p>Change the PREFACE page before the CONTENTS.</p>  |
| 4.0.1       | <p>The following changes have been made to this version of the document:</p> <p><b>Document Improvements:</b></p> <ul style="list-style-type: none"> <li>■ Update the Support contact information.</li> <li>■ Change the name of Purpose section to “About This document”.</li> <li>■ Add <b>Scope</b> section.</li> <li>■ Add note about <b>Financial Derivatives</b> segment which is out of scope in page 40 ( Optiq segment table).</li> </ul>   |


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|         | <ul style="list-style-type: none"> <li>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).</li> <li>In <b>WholesaleOrderAck</b> (U65) message add new note about MIFID II Short Codes section.</li> </ul> <p><b>Merge of TCS OEG FIX :</b></p> <ul style="list-style-type: none"> <li>The section 4.4 “Date and Time Conventions” is add under section for Data and Timestamp format in case of TCS reporting.</li> <li>Add all TCS Application messages are added under 5.4 Application Messages section. ( From section 5.3.37 to section 5.3.40) .</li> <li>In section 1.4 add the definition of the use of “Declaration” for TCS.</li> <li>Add list of TCS fields that was not available in OEG FIX document and used for TCS messages under section 6. Fields Description .</li> <li>Update existing fields by adding TCS messages using that fields in “Used in” at field description level.</li> <li>Update CCP ID field description by adding new values used for Oslo Market Place.</li> </ul>  |
| 4.0.0   | <p>The following changes have been made to this version of the document:</p> <p><b>1) Document Improvements:</b></p> <ul style="list-style-type: none"> <li>Change StrikeLegPrice by LegPrice in 3 sections for Deulta Neutral Strategy description.</li> <li>In section 5.3.30 <b>ERGCommand</b> (U68), the case of <b>TargetFirmID</b> (21098) description is updated</li> <li>In <b>OrderCancelReject</b> (9) message section, update description to highlight that fields <b>LogicalAccessID</b> (21021) and <b>OEPartitionID</b> are only provided in Drop Copy.</li> <li>Update the <b>NoPartyIDs</b> (453) value from Always set to 1 to From 1 to 2 in <b>OrderMassCancelReport</b> section 5.3.19.</li> <li>For User Notification (page 109), Case 4 is updated by removing value 24 from PartyRoleQualifier (2376) and update the value of PartyIDSource (447) to D.</li> <li>Update the number of occurrence of NoOrderAttributes in OwnershipRequest (U18) message to “if provided always set to 1”</li> <li>The table in section 4.10 updated by adding the message <b>RequestForImpliedExecution</b> (U66) and its reject message <b>RequestAck</b> (Uy).</li> <li>Update <b>Delta-Neutral</b> description in page 134.</li> <li>Update the Wholesale Transaction paragraph in page 133.</li> <li>Following fields are optional in message <b>SecurityDefinition</b> (d): <b>SecurityID</b> (48) and <b>SecurityIDSource</b> (22).</li> <li>In section 2.3.3.1 update the restricted values from 0 to 2 63 -1 for Regular “In House” Accesses.</li> </ul> <p>In the <b>ExecutionReport</b> (8) section 5.3.2 , add details in <b>ClientIdentificationShortCode</b> to mention that the field is not provided in cas of <b>Cross Orders rejection</b>.</p> <p><b>2) ETF Access / Oslo Migration and ETF Warrant Updates :</b></p> <ul style="list-style-type: none"> <li>Add the field <b>AccountCode</b> as optional for following messages: <b>RFQNotification</b> (35) and <b>QuoteRequest</b> ( R ).</li> <li>Add new message <b>RFQ Audit</b> in section 5.3.36</li> <li>Add new field “<b>NoRFQCounterparts</b>” definition. This field is used in message <b>RFQ Audit</b>.</li> <li><b>OrderOrigination</b> field updated by adding two values: 11 and 12.</li> <li><b>RFQ issuer</b> description added in sections 5.3.5.1, 5.3.11.1 and 5.3.18.1</li> <li><b>Contrabroker</b> field updated by adding 3 new values: <b>2 = Bilateral Settlement</b>, <b>3 = LCH Limited</b> and <b>5 = SIX x-clear</b>.</li> </ul> |
| 2.1.1   | <ul style="list-style-type: none"> <li>Fix: in Execution Report (8) message description, it was mentioned that using this message in case of order collar rejection report was restricted to cash markets, which is not the case.</li> </ul>  |
| 2.1.0   | <p>The following changes have been made:</p> <ul style="list-style-type: none"> <li>The following new messages have been added: <ul style="list-style-type: none"> <li>a) RequestForImpliedExecution (U66)</li> <li>b) CrossOrder (U67);</li> <li>c) ERGCommand (U68);</li> <li>d) ERGCommandAck (U69);</li> <li>e) GetRiskControls (U70);</li> <li>f) RiskControlDetails (U71);</li> </ul> </li> <li>The following changes have been applied in the existing messages: <ul style="list-style-type: none"> <li>a) <b>UserNotification (CB):</b> <ul style="list-style-type: none"> <li>i) Added fields <i>LogicalAccessID</i> (21021) and <i>OrderSizeLimit</i> (21102) for Risk Guard Service;</li> <li>ii) Message description updated to accommodate Risk Guard Service;</li> <li>iii) Added Combinations used to provide ShortCodes for Risk Guard Service;</li> <li>iv) <i>NoPartyIDs</i> and <i>NoInstrumentScope</i> changed from Mandatory to Conditional;</li> </ul> </li> <li>b) <b>ExecutionReport (8):</b></li> </ul> </li> </ul>   |

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|         | <ul style="list-style-type: none"> <li>i) Message description adjusted: <ul style="list-style-type: none"> <li>(1) with clarifications concerning cancellation of orders triggered by an OrderCancelRequest (F) or an OrderMassCancelRequest (q);</li> <li>(2) with clarifications concerning QuoteRequest (R) message;</li> <li>(3) with clarifications concerning how to fill clearing data information for both Cash and Derivatives Markets;</li> <li>(4) with clarifications concerning cancellation of orders at the close of business;</li> <li>(5) notes on processing of Fill messages sent for Strategy transactions submitted as Wholesales.</li> </ul> </li> <li>ii) Table updated to accommodate CrossOrder functionality;</li> <li>iii) Added fields: <i>LongClient</i> (21804) for clearing data information, <i>FinalSecurityID</i> (21805), <i>FinalExecID</i> (21806), <i>MessagePriceNotation</i> (21803) for TRF and MOC;</li> <li>c) <b>RequestAckMessage (Uy):</b> <ul style="list-style-type: none"> <li>i) Message description updated to accommodate request for implied execution functionality;</li> </ul> </li> <li>d) <b>TestRequest (1):</b> <ul style="list-style-type: none"> <li>i) Message description adjusted;</li> </ul> </li> <li>e) <b>NewWholesaleOrder (U64):</b> <ul style="list-style-type: none"> <li>i) Message description updated to: <ul style="list-style-type: none"> <li>(1) clarify delta neutral functionality;</li> <li>(2) Remove Client ID information as one of the possible combinations to be provided within NestedParties repeating group;</li> <li>(3) Added notes on processing of Fill messages sent for Strategy transactions submitted as Wholesales.</li> </ul> </li> <li>ii) Added <i>LongClient</i> (21804) for clearing data information and <i>MessagePriceNotation</i> (21803) for TRF and MOC;</li> <li>iii) <i>LastCapacity</i> (29) moved into NoSides group;</li> </ul> </li> <li>f) <b>WholesaleOrderAck (U65):</b> <ul style="list-style-type: none"> <li>i) Changed presence of the field <i>LegSide</i> (624) to conditional;</li> <li>ii) <i>LastCapacity</i> (29) removed;</li> </ul> </li> <li>g) <b>OrderCancelReplaceRequest (G):</b> <ul style="list-style-type: none"> <li>i) Added <i>LongClient</i> (21804) for clearing data information;</li> <li>ii) Message description adjusted concerning how to fill clearing data information for both Cash and Derivatives markets;</li> </ul> </li> <li>h) <b>NewOrderSingle (D):</b> <ul style="list-style-type: none"> <li>i) Added <i>LongClient</i> (21804) for clearing data information;</li> <li>ii) Message description adjusted concerning how to fill clearing data information for both Cash and Derivatives markets;</li> </ul> </li> <li>■ <b>Field Descriptions:</b> <ul style="list-style-type: none"> <li>a) Added fields: <i>LongClient</i> (21804), <i>FinalSecurityID</i> (21805), <i>FinalExecID</i> (21806), <i>MessagePriceNotation</i> (21803); <i>KillReason</i> (21807)</li> <li>b) Enriched values for fields as follows: <i>ExecType</i> (150) with values v= Order Cancelled by Clearing Risk Manager, n = Order Cancelled due to a potential trade outside FSP limits, w = Order Cancelled due to Trade Price Validation, 1 = Order Cancelled due to an incorrect Reactor Response, 2 = Cross Order Ack; ! = Remaining RFC quantity cancelled; <i>UserStatus</i> (926) with values 113 = Trader - Algo Suspended by Risk Manager, 114 = Trader - Algo Unsuspended by Risk Manager, 115 = Firm Suspended by Risk Manager, 116 = Firm Unsuspended by Risk Manager, 117 = DEA Suspended by Risk Manager, 118 = DEA Unsuspended by Risk Manager, 119 = Logical Access Suspended by Risk Manager, 120 = Logical Access Unsuspended by Risk Manager, 121 = Trader - Algo Blocked by Risk Manager, 122 = Trader - Algo Unblocked by Risk Manager, 123 = Firm Blocked by Risk Manager, 124 = Firm Unblocked by Risk Manager, 125 = DEA Blocked by Risk Manager, 126 = DEA Unblocked by Risk Manager, 127 = Logical Access Blocked by Risk Manager, 128 = Logical Access Unblocked by Risk Manager, 129 = Order Size Limit Activated by Risk Manager, 130 = Order Size Limit Deactivated by Risk Manager; <i>EMM</i> (20020) – 15 = Delta Neutral Contingency Leg; <i>PartyRole</i> (452) – 999 = Not Applicable; <i>PartyRoleQualifier</i> (2376) – 99 = Not Applicable; <i>NestedPartyRole</i> (538) – 999 = Not Applicable; <i>NestedPartyRoleQualifier</i> (2384) – 99 = Not Applicable; <i>TradeType</i> (21010) - 100 = Conventional Trade - Provisional price, 101 = Large in Scale (LiS) Trade - Provisional price, 102 = Large in Scale (LiS) Package Trade - Provisional price; ; <i>MsgType</i> (35) with values for new messages U66, U67, U68, U69, U70, U71</li> <li>c) The following values have been removed from <i>SecuritySubType</i> (762): 'C' - Call or Put Cabinet, 'Z' - Reduced Tick Spread, 'u' - Buy Write;</li> <li>d) Possible Values updated for NoLegs (555), from "1 to 7" to "1 to 32";</li> <li>e) Updated description for field <i>LegRatio</i> (21091);</li> <li>a) Conditions updated for fields <i>SecurityID</i> (48), <i>UserStatus</i> (926), <i>RequestID</i> (21060), <i>PartyD</i> (448), <i>PartyRole</i> (452), <i>PartyRoleQualifier</i> (2376), <i>NestedPartyID</i> (524), <i>NestedPartyRole</i> (538), <i>NestedPartyRoleQualifier</i> (2384), <i>OrderID</i> (37), <i>QuoteReqID</i> (131), <i>RFQAnswerIndicator</i> (21037), <i>RFQConfirmationIndicator</i> (21038), <i>CumQty</i> (14) and <i>LeavesQty</i> (151));</li> </ul> </li> </ul> |



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|         | <ul style="list-style-type: none"> <li>b) Conditions removed for field <i>SelfMatchPreventionID</i> (2362) – field is for future use;</li> <li>c) “Used For” adjusted for fields <i>CollarRejType</i> (9962) and <i>OrdType</i> (40)</li> <li>■ Section 1.2.1 Maintenance of Relevant Data relating to Orders in Financial instruments adjusted with the new messages;</li> <li>■ Section 4.10 Direct response to Application messages adjusted with Risk Guard service messages;</li> <li>■ Clarifications added for how <i>ClientIdentificationShortCode</i> should be provided</li> </ul>  |
| 2.0.0   | <p>Major update for the migration of the Derivatives Markets to Optiq. The following changes have been made:</p> <ul style="list-style-type: none"> <li>■ For support of the Derivative segments, the following New messages have been added: <ul style="list-style-type: none"> <li>a) <b>Security Definition Request</b> (c) and <b>Security Definition</b> (d) for intraday strategy creation</li> <li>b) <b>NewWholesaleOrder</b> (U64) and <b>WholesaleOrderAck</b> (U65) for wholesale order messages</li> </ul> </li> <li>■ In section 5.3 “Administration Messages” – added support for the Derivatives segments</li> <li>■ For support of the Derivative segments, the following existing messages have been updated as following: <ul style="list-style-type: none"> <li>a) <b>NewOrderSingle</b> (D): Added new fields <i>NonExecClID</i> (21081) for Derivatives segments, <i>FRMARAMPLP</i> (21810) and <i>UndisclosedIcebergType</i> (20005) – for future use on Cash segments; Removed field <i>CustOrderCapacity</i> (582); Added support for the Derivative segments</li> <li>b) <b>ExecutionReport</b> (8): Added new fields <i>NonExecClID</i> (21081), <i>ParentExecID</i> (21094), <i>ParentSecurityID</i> (21093), <i>ESCBMembership</i> (21096), <i>LegSymbol</i> (600), <i>LegExecID</i> (1893), <i>LISTransactionID</i> (21085) for Derivatives segments, <i>FRMARAMPLP</i> (21810) and <i>UndisclosedIcebergType</i> (20005) – for future use on Cash segments; Removed fields <i>CustOrderCapacity</i> (582), <i>UnderlyingLastPx</i> (651), <i>PackageID</i> (5883), <i>OtherLegSecurityID</i> (7773), <i>QtyDelta</i> (8011), <i>OtherLegSecurityIDSource</i> (7489), <i>OtherLegReferenceNo</i> (7774); Added support for the Derivative segments; Updated description to clarify use for Cash and Derivative segments</li> <li>c) NOTE: <i>MassQuote</i> (i) was not modified. Derivatives markets do not support submission of Quotes in FIX protocol</li> <li>d) <b>MassQuoteAck</b> (b): Added new field <i>AckQualifier</i> (21014)</li> <li>e) <b>OrderCancelRequest</b> (F): Removed mention of field <i>DarkExecutionInstruction</i> (20052); Added support for the Derivative segments;</li> <li>f) <b>OrderCancelReplaceRequest</b> (G): Added new fields <i>FRMARAMPLP</i> (21810) and <i>UndisclosedIcebergType</i> (20005) – for future use on Cash segments; Added support for the Derivative segments; Updated description to clarify use for Cash and Derivative segments</li> <li>g) <b>OrderCancelReject</b> (9): Added new field <i>AckQualifier</i> (21014); Added support for the Derivative segments; Updated description to clarify use for Cash and Derivative segments</li> <li>h) <b>QuoteRequest</b> (R): Added support for the Derivative segments without changes to the message structure; Updated description to clarify use for Cash and Derivative segments</li> <li>i) <b>OrderMassCancelOrderRequest</b> (q): Added new field <i>TargetPartyID</i> (21095); Removed field <i>DerivativeSymbol</i> (1214), <i>DerivativePutOrCall</i> (1323), <i>MaturityMonthYearFormat</i> (1303), <i>MaturityMonthYear</i> (200); Fields flagged for Futures use <i>LPRole</i> (20021), <i>AccountCode</i> (6399); Added support for the Derivative segments without changes to the message structure; Updated description to clarify use for Cash and Derivative segments</li> <li>j) <b>OrderMassCancelReport</b> (r): added new field <i>AckQualifier</i> (21014), <i>TargetPartyID</i> (21095), <i>NoPartyIDs</i> (453), <i>PartyID</i> (448), <i>PartyIDSource</i> (447), <i>PartyRole</i> (452), <i>PartyRoleQualifier</i> (2376); Removed field <i>DerivativeSymbol</i> (1214), <i>DerivativePutOrCall</i> (1323), <i>MaturityMonthYearFormat</i> (1303), <i>MaturityMonthYear</i> (200); Added support for the Derivative segments; Updated description to clarify use repeating groups</li> <li>k) <b>RFQNotification</b> (U35): added field <i>OrderCategory</i> (21041) - for future use on Cash segments</li> </ul> </li> <li>■ For support of the Derivative segments, the following changes have been updated in the existing messages:</li> <li>■ Added support for the Derivatives segments for the existing messages that do not change in structure: <b>RequestAckMessage</b> (Uy), <b>OwnershipRequest</b> (U18), <b>OwnershipRequestAck</b> (U29), <b>QuoteRequestReject</b> (AG), <b>UserNotification</b> (CB), <b>OrderMassStatusRequest</b> (AF), <b>InstrumentSynchronizationList</b> (U50), <b>SynchronizationTime</b> (U51)</li> <li>■ Field Descriptions: <ul style="list-style-type: none"> <li>a) Added new fields: <i>AckStatus</i> (5711), <i>BidNonExecClID</i> (21089), <i>ESCBMembership</i> (21096), <i>FRMARAMPLP</i> (21810), <i>LegErrorCode</i> (21084), <i>LegExecID</i> (1893), <i>LegLastTradingDate</i> (21092), <i>LegPrice</i> (566), <i>LegPutOrCall</i> (1358), <i>LegRatio</i> (21091), <i>LegSecurityType</i> (609), <i>LegStrikePrice</i> (612), <i>LegSymbol</i> (600), <i>LISTransactionID</i> (21085), <i>NestedOrderAttributeType</i> (21087), <i>NestedOrderAttributeValue</i> (21088), <i>NestedPartyRoleQualifier</i> (2384), <i>NonExecClID</i> (21081), <i>NoNestedOrderAttributes</i> (21086), <i>OfferNonExecClID</i> (21090), <i>ParentExecID</i> (21094), <i>ParentSecurityID</i> (21093), <i>Quantity</i> (53), <i>SecurityReqID</i> (320), <i>SecurityRequestType</i> (321), <i>SecurityType</i> (167), <i>SecuritySubType</i> (762), <i>TargetPartyID</i> (21095), <i>UndisclosedIcebergType</i> (20005), <i>WholesaleSide</i> (21082), <i>WholesaleTradeType</i> (21083)</li> <li>b) Enriched values for fields as follows: <i>AckQualifiers</i> (21014) with new values ‘2’ (Request with Client Order ID), ‘3’ (Use of Cross Partition), ‘6’ (Execution Upon Entry Flag Enabled) and ‘7’ (Executed Upon Entry Flag); <i>MassCancelRequestType</i> (530) with new value ‘3’ (Cancel orders for a Product); <i>PostingAction</i> (7443) with new values ‘Leg 2’ through ‘Leg 7’; <i>AccountCode</i> (6399) with new values ‘14’ (Ceres Client) and ‘15’ (Omega Client); <i>PartyRole</i> (452) value 17 renamed from ‘Contract Broker’ to FIX value ‘Contra Firm’; <i>ExecType</i> (150) added values for future use on the Cash segments R = RFQ partially or fully matched with other counterparts, S = RFQ cancelled by the issuer, T = RFQ Not matched due to issuer order's features;</li> <li>c) Enriched conditions and descriptions of fields: <i>AFQReason</i> (9939), <i>BidErrorCode</i> (9934), <i>BidPx</i> (132), <i>BookInTime</i> (21002), <i>BreachedCollarPrice</i> (21001), <i>BuyRevisionIndciator</i> (21088), <i>ClassID</i> (9945), <i>ClOrdID</i> (11), <i>CollarRejType</i> (9962), <i>CumQty</i> (14), <i>CxlrejResponseTo</i> (434), <i>DarkExecutionInstruction</i> (20052), <i>DisclosedQtyRandIndicator</i> (21016), <i>DisplayQty</i> (1138), <i>EMM</i> (20020), <i>ExecID</i> (17), <i>ExecPhase</i> (21023), <i>ExecRefID</i> (19), <i>ExecType</i> (150), <i>ExpireDate</i> (432), <i>ExpireTime</i> (126), <i>InstrumentScopeSecurityID</i> (1538), <i>InstrumentScopeSecurityIDSource</i> (1539),</li> </ul> </li> </ul> |

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|         | <p><i>LastCapacity</i> (29), <i>LastMsgSeqNumProcessed</i> (369), <i>LastPx</i> (31), <i>LastQty</i> (32), <i>LeavesQty</i> (151), <i>LegExecID</i> (1893), <i>LegLastPx</i> (637), <i>LegLastQty</i> (1418), <i>LegRatioQty</i> (623), <i>LegSecurityID</i> (602), <i>LegSecurityType</i> (609), <i>LogicalAccessID</i> (21021), <i>LPActionCode</i> (10076), <i>LPRole</i> (20021), <i>MassCancelRequestType</i> (530), <i>MassStatusReqID</i> (584), <i>MinQty</i> (110), <i>MsgType</i> (35), <i>NestedPartyID</i> (524), <i>NestedPartyIDSource</i> (525), <i>NestedPartyRole</i> (538), <i>NestedpartyRoleQualifier</i> (2384), <i>NewSeqNo</i> (36), <i>OEPartitionID</i> (21019), <i>OfferErrorCode</i> (9935), <i>OfferPx</i> (133), <i>OfferQuoteID</i> (1748), <i>OfferSize</i> (135), <i>OnBehalfOfCompID</i> (115), <i>OrderID</i> (37), <i>OrderOrigination</i> (1724), <i>OrdType</i> (40), <i>OrigClOrdID</i> (41), <i>OrigSendingTime</i> (122), <i>PossDupFlag</i> (43), <i>PotentialMatchingPrice</i> (21030), <i>PotentialMatchingQty</i> (21031), <i>Price</i> (44), <i>Quantity</i> (53), <i>QuoteReqID</i> (131), <i>QuoteSetID</i> (302), <i>RefSeqNum</i> (45), <i>RefTagID</i> (371), <i>RFQAnswerIndicator</i> (21037), <i>RFQConfirmationIndicator</i> (21038), <i>SecurityID</i> (48), <i>SecurityIDSource</i> (22), <i>SellRevisionIndicator</i> (21009), <i>Side</i> (54), <i>StopPx</i> (99), <i>TestReqID</i> (112), <i>Text</i> (58), <i>TimeInForce</i> (59), <i>TradeType</i> (21010), <i>TransactTime</i> (60)</p> <p>d) Removed fields: <i>CustOrderCapacity</i> (582), <i>DerivativeSymbol</i> (1214), <i>DerivativePutOrCall</i> (1323), <i>MaturityMonthYearFormat</i> (1303), <i>MaturityMonthYear</i> (200); <i>PackageID</i> (5883), <i>OtherLegSecurityID</i> (7773), <i>QtyDelta</i> (8011), <i>OtherLegSecurityIDSource</i> (7489), <i>OtherLegReferenceNo</i> (7774)</p> <p>e) Use of the following fields extended to be for both Cash and Derivatives: <i>BuyRevisionIndicator</i> (21008), <i>OrderPriority</i> (21004), <i>RFEAnswer</i> (20022), <i>SellRevisionIndicator</i> (21009), <i>TechnicalOrdType</i> (9941)</p> <ul style="list-style-type: none"> <li>■ Throughout the document: <ul style="list-style-type: none"> <li>a) 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</li> <li>b) Updated references to the documentation, that covers both Cash and Derivatives markets</li> <li>c) Formatting updates and correction of phrasing, typos and cosmic changes</li> <li>d) Replaced segment tags on individual messages with text based ones, for convenient searching</li> </ul> </li> <li>■ Added section 1.5 “Error Codes” – where description from the dedicated document “Euronext Markets - Optiq &amp; TCS Error List”. Associated references to the document removed.</li> <li>■ Updated content of section “Work in Progress”</li> <li>■ Section 4.5 “Price, Quantity, Ratio and Amount Formats” added clarification for prices in basis points</li> <li>■ Section 4.6.2 “Order Priority” added clarification for reconciliation use in Market data for Cash markets only</li> <li>■ Section 4.10 “Direct Responses to Application Messages” – updated with responses to the newly added messages</li> <li>■ 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</li> </ul> |
| 1.6.3   | <i>DarkExecutionInstruction</i> (20052) has been added in RFQNotification (U35) message.  |
| 1.6.2   | <p><i>OrderCategory</i> (21041) has been removed from RFQNotification (U35) message.</p> <p><i>DarkExecutionInstruction</i> (20052) has been removed from OrderCancelRequest (F) message.</p> <p>Clarification in the <i>DarkExecutionInstruction</i> (20052) [Used In] description : <i>DarkExecutionInstruction</i> is present in ExecutionReport (8) message <u>only</u> for Drop Copy.</p> <p><i>MinQty</i> (110) and <i>DarkExecutionInstruction</i> (20052) have been added in QuoteRequest (R) message.</p>  |
| 1.6.1   | <p>Correction in ExecutionReport (8) Message Signature Tags table for two cases:</p> <ul style="list-style-type: none"> <li>- Cancellation due to RFQ cancellation</li> </ul> <p>Cancellation due to RFQ confirmation</p>   |
| 1.6.0   | <p><b>Please note that all the changes introduced with this release and listed below are applicable and used for Euronext Block only</b></p> <p><b><u>The following field has been created:</u></b></p> <p><i>ConditionalOrderFlag</i> (21800) is used to determine if an order is conditional or firm in <a href="#">NewOrderSingle (D)</a>, <a href="#">OrderCancelReplaceRequest (G)</a> and <a href="#">ExecutionReport (8)</a> messages.</p> <p><b><u>Values have been updated for the following fields:</u></b></p> <p><i>AckPhase</i> (21013): addition of value 8 = Random Uncrossing Phase</p> <p><i>ExecType</i> (150) : addition of the following value :</p> <p>c = Conditional Order cancelled due to Potential Matching</p> <p><b><u>Formatting changes :</u></b></p> <p>Tag <b>BLK</b> has been added in the whole document for each message on which Block Optiq Segment is applied on.</p>   |
| 1.5.0   | <p><b><u>The following message has been created:</u></b></p> <ul style="list-style-type: none"> <li>- <b>RFQLPMatchingStatus (U37).</b></li> </ul> <p><b><u>The following messages have been updated:</u></b></p> <ul style="list-style-type: none"> <li>- <b>NewOrderSingle (D):</b> <i>QuoteReqID</i>, <i>Dark Execution Instruction</i>, <i>Peg Offset</i>: 'For Future Use' has been removed from field description</li> </ul>  |

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|         | <ul style="list-style-type: none"> <li>- <b>OrderCancelReplaceRequest (G):</b> <i>Dark Execution Instruction, Peg Offset:</i> 'For Future Use' has been removed from field description</li> <li>- <b>QuoteRequest (R):</b> fields <i>QuoteReqID, EndClient</i> and <i>SenderCompIDPublication</i> have been removed</li> <li>- <b>OrderCancelRequest (F):</b> field <i>OrderCategory</i> has been added</li> <li>- <b>OrderMassStatusRequest (AF):</b> field <i>OrderCategory</i> has been added</li> <li>- <b>OrderMassCancelRequest (q):</b> field <i>OrderCategory</i> has been added</li> <li>- <b>OrderMassCancelReport (r):</b> field <i>OrderCategory</i> has been added</li> <li>- <b>OwnershipRequest (U18):</b> field <i>OrderCategory</i> has been added</li> <li>- <b>OwnershipRequestAck (U29):</b> field <i>OrderCategory</i> has been added</li> <li>- <b>RFQNotification (U35):</b> fields <i>OrderCategory</i> and <i>MinQty</i> have been added. Fields <i>EndClient, ContraBroker</i> and <i>RFQUpdateType</i> have been removed</li> <li>- <b>RFQMatchingStatus (U36):</b> field <i>RecipientType</i> has been removed; 'For Future Use' has been removed from message description</li> </ul> <p><b>The following field has been created:</b> <b>Order Category</b></p> <p><b>The following field has been removed:</b> <b>Undisclosed Iceberg Type</b></p> <p><b>Values have been updated for the following fields:</b></p> <p><i>TradeQualifier</i> (21080): addition of value 7 = Deferred Publication</p> <p><i>EMM</i> (20020): addition of value 9 (= Listed-not traded)</p> <p><i>ExecType</i> (150) : addition of the following values :</p> <ul style="list-style-type: none"> <li>r = LP Order cancelled due to RFQ expiration</li> <li>f = LP Order cancelled due to RFQ cancellation</li> <li>q = RFQ Remaining quantity killed</li> <li>s = LP Order cancelled due to RFQ confirmation</li> </ul> <p><i>DarkExecutionInstruction</i> (20052):</p> <ul style="list-style-type: none"> <li>First Position = Dark Indicator (0: No ; 1: Yes)</li> <li>Forth Position = Sweep Order Indicator (0: No ; 1: Yes)</li> <li>Fifth Position = Minimum Quantity Type (0: MAQ ; 1: MES)</li> </ul> <p><b>Descriptions have been updated for the following fields:</b></p> <p><i>STPAggressorIndicator</i> (21015): STP is not applicable for Dark orders</p> <p><b>Formatting changes :</b></p> <p>In <a href="#">OrderMassCancelRequest (q)</a> and <a href="#">OrderMassCancelReport (r)</a> messages:</p> <ul style="list-style-type: none"> <li>- Fields <i>DerivativeSymbol</i> (1214), <i>DerivativePutOrCall</i> (1323), <i>MaturityMonthYearFormat</i> (1303), <i>MaturityMonthYear</i> (200) have been greyed and set to italic.</li> <li>- Tag  has been added</li> </ul> |
| 1.4.1   | <p><b>The following messages have been updated:</b></p> <ul style="list-style-type: none"> <li>- <b>ExecutionReport (8):</b> field <i>IDCCP</i> has been removed.</li> </ul> <p><b>The following field description has been updated:</b></p> <ul style="list-style-type: none"> <li>- <i>ContraBroker</i> (375)</li> </ul>   |
| 1.4.0   | <p><b>The following field description has been updated:</b></p> <ul style="list-style-type: none"> <li>- <i>ContraBroker</i> (375)</li> </ul>  |
| 1.3.2   | <p><b>Conditions have been updated for the following fields:</b></p> <p><i>OrigSendingTime</i> (122) ; <i>LastMsgSeqNumProcessed</i> (369) ; <i>LastCapacity</i> (29) ; <i>OrderOrigination</i> (1724) ; <i>DisplayQty</i> (1138) ; <i>SecurityID</i> (48) ; <i>SecurityIDSource</i> (22) ; <i>EMM</i> (20020) ; <i>LPActionCode</i> (10076), <i>OrderID</i> (37) ; <i>OnBehalfOfCompID</i> (115) ; <i>DeliverToCompID</i> (128).</p> <p><b>Description have been updated for the following fields:</b></p> <p><i>IDCCP</i> (21040) ; <i>ConfirmFlag</i> (9930)</p> <p><b>Presence Rule has been updated for the following fields:</b></p> <ul style="list-style-type: none"> <li>- In <b>Message Header</b> <i>LastMsgSeqNumProcessed</i> (369) is Conditional</li> <li>- In <b>RequestAckMessage (Uy)</b>, <i>BookINTime</i> (21002), <i>SecurityID</i> (48), <i>SecurityIDSource</i> (22), <i>EMM</i> (20020) are Conditional.</li> </ul> <p><b>Values have been updated for the following fields:</b></p>  |

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|         | <ul style="list-style-type: none"> <li>- <i>SessionRejectReason</i> (373): addition of values values identified for rejection in case of throttling :<br/><b>25</b> = Throttling queue full; <b>26</b> = Throttling Rate exceeded; <b>27</b> = System busy.</li> <li>- <i>DisplayQty</i> (1138) : Value starts from 1.</li> <li>- <i>RefSeqNum</i> (45), <i>NextExpectedMsgSeqNum</i> (789), <i>MsgSeqNum</i> (34), <i>LastMsgSeqNumProcessed</i> (369) : Values go from 1 to 2<sup>32</sup>-2.</li> </ul> <p><b>The following sections have been updated:</b></p> <ul style="list-style-type: none"> <li>- “2.4 Order ID” paragraph revamping for clarification.</li> <li>- “4.7.1 Message Header”: Values indicated for field <i>LastMsgSeqNumProcessed</i> (369) are incorrect and are changed to “From 1 to 2<sup>32</sup>-2”. Clarification regarding <i>OnBehalfOfCompID</i> (115) and <i>DeliverToCompID</i> (128) fields.</li> <li>- “4.8 Rejection and Disconnection when handling missing mandatory tags or incorrect values in tags”: addition of a clarification regarding unknown tags in messages.</li> <li>- “4.9.1.4 Gap Fill Processing – Rejection Cases”: clarification in the case when message resent by the client does not have the <i>OrigSendingTime</i> (122).</li> <li>- “5.2.4 SequenceReset (4)” : Removal of this case : While a <i>ResendRequest</i> (2) is pending, if the Client sends a <b>SequenceReset – Gap Fill Mode</b> message with <i>MsgSeqNum</i> lower than the expected sequence number and <i>PossDupFlag</i> (43) set to 'Y', the trading engine ignores the message;</li> <li>- “5.3.2 Execution Report”: Correction in the table “ExecutionReport (8) Message Signature Tags”,<br/>For Order Status case value of <i>ExecType</i> (150) is “m”,<br/>For Ownership Request case, the value of <i>ExecType</i> (150) is “k”.</li> <li>- “5.3.17 OrderMassStatusRequest (AF)” : correction of <i>ExecType</i>=“m”.</li> <li>- “5.3.14 UserNotification (CB)” : add clarification on notification of suspension. In “Case 4: ExecutionwithinFirmShortCode for a Firm or DEA change the value of <i>PartyIDSource</i> (447) is P (Short code identifier).</li> <li>- “5.3.5 OrderCancelRequest (F)”, “5.3.9 OwnershipRequest (U18)”, “5.3.15 PriceInput (UI)”, “5.3.16 LiquidityProviderCommand (UZ)”, “5.3.17 OrderMassStatusRequest (AF)”, “5.3.18 OrderMassCancelRequest (q)”, add clarification on <i>Components Usage within the message</i> section for <i>ClientIdentificationShortcode</i> : if the information in the repeating group is not identical, the message is rejected.</li> <li>- “5.3.7 OrderCancelReject (9)” addition of Rejection Behaviour paragraph</li> </ul> <p><b>The following section has been added:</b></p> <ul style="list-style-type: none"> <li>- “4.10 Direct Responses to Application Messages”</li> </ul> |
| 1.3.1   | <p><b>The following messages have been updated:</b></p> <ul style="list-style-type: none"> <li>- <b>Header:</b> Added field <i>LastMsgSeqNumProcessed</i> (369).</li> <li>- <b>UserNotification (CB):</b> The fields <i>NoOrderAttributes</i> (2593), <i>OrderAttributeType</i> (2594), <i>OrderAttributeValue</i> (2595) have been removed.</li> </ul> <p><b>The following values have been removed:</b></p> <ul style="list-style-type: none"> <li>- In field <i>OrdStatus</i> (39): values ‘F’ (Trade) and ‘N’ (RFQ partially or fully matched with other counterparts (Future Use) have been removed.</li> <li>- In field <i>ExecType</i> (150): values ‘1’ (Partially filled) and ‘2’ (Filled) have been removed.</li> <li>- In field <i>TradeType</i> (21010): values not supported by OEG have been removed.</li> </ul> <p><b>The values for the following field were updated:</b></p> <ul style="list-style-type: none"> <li>- <i>SessionStatus</i> (1409): new values are added for the excessive breaches of rate (throttling limits):<br/><b>106</b> = Excessive Number of Messages; <b>107</b> = Excessive Amount of Data in Bytes; <b>108</b> = Excessive Number of Messages &amp; Amount of Data in Bytes</li> <li>- Values of fields identify number of repeating sections to be remove possible value of Zero (0). If a repeating group is optional or conditional, and no values are to be provided, these fields are no sent. Impacted fields: <i>NoOrderAttributes</i> (2593); <i>NoNestedPartyIDs</i> (539); <i>NoPartyIDs</i> (453).</li> </ul> <p><b>Conditions updated for the following fields:</b></p> <p><i>ClOrdID</i> (11); <i>CumQty</i> (14) ; <i>ExecID</i> (17); <i>ExecRefID</i> (19); <i>LastCapacity</i> (29); <i>OrderID</i> (37); <i>PossDupFlag</i> (43); <i>Side</i> (54); <i>ExpireTime</i> (126); <i>LeavesQty</i> (151); <i>ExpireDate</i> (432); <i>NestedPartyRoleQualifier</i> (2384); <i>NestedPartyID</i> (524); <i>ClearingInstruction</i> (577); <i>MassStatusReqID</i> (584); <i>OrderAttributeType</i> (2594); <i>OrderAttributeValue</i> (2595); <i>TriggeredStopTimelnForce</i> (20175); <i>TradeType</i> (21010) ; <i>StopPx</i> (99)</p> <p><b>Description of the following messages has been updated with clarifications and corrections:</b></p>   |

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|         | <ul style="list-style-type: none"> <li>- <b>ResendRequest (2)</b> / [Section 5.2.2]: Simplified description, and removed repeating text</li> <li>- <b>Reject (3)</b> / [Section 5.2.3]: Simplified description. Rejection cases moved to new sections on rejection and disconnection, add use of message for throttling.</li> <li>- <b>SequenceReset (4)</b> / [Section 5.2.4]: Added clarification on fields and codes used</li> <li>- <b>ExecutionReport (8)</b> / [Section 5.3.2]: Added clarification for use of repeating group to provide Clearing Firm ID and the Client ID data</li> <li>- <b>UserNotification (CB)</b> / [Section 5.3.14]: Added identifiers used in various cases of Kill scope</li> </ul> <p><b>The following field description has been updated:</b></p> <ul style="list-style-type: none"> <li>- <i>DarkExecutionInstruction</i> (20052) : Label of values “LiS Indicator” updated</li> </ul> <p><b>The following sections have been added:</b></p> <ul style="list-style-type: none"> <li>- “4.8 Rejection and Disconnection when Handling Missing Mandatory Tags or Incorrect Values”</li> <li>- “4.9 Sequence Number Gap Management &amp; Rejection”</li> <li>- “7 Examples”</li> </ul> <p><b>The following sections have been updated:</b></p> <ul style="list-style-type: none"> <li>- “2.4 Order ID”: Added notes on cases where Order Id is not provided and how to identify them.</li> <li>- “4.3 FIX Optional Fields”: Added further clarification</li> <li>- “4.5 Price, Quantity, Ratio and Amount Formats”: Updated intra-document link references</li> <li>- “4.6.1 Symbol Index”: added the tag for field <i>SymbolIndex</i> (48) in the description</li> </ul> <p><b>The following section has been removed:</b></p> <p>“1.2.3 Short Codes management before January 2018”</p>   |
| 1.3.0   | <p><b>The following messages have been updated:</b></p> <ul style="list-style-type: none"> <li>- <b>Header:</b> Added field <i>OrigSendingTime</i></li> <li>- <b>Logon (A):</b> Update description for <i>NextExpectedMsgSeqNum</i> management, update presence of the field <i>NextExpectedMsgSeqNum</i> from Conditional to Mandatory</li> <li>- <b>Reject (3):</b> Update description for special cases</li> <li>- <b>ResendRequest (2):</b> Update description for gap fill management</li> <li>- <b>SequenceReset (4):</b> Update global description</li> <li>- <b>Heartbeat (0):</b> Update description for message rejection cases</li> <li>- <b>NewOrderSingle (D):</b> Update presence of the field <i>DisclosedQtyRandIndicator</i> from Optional to Conditional, Update presence of the field <i>DarkExecutionInstruction</i> from Mandatory to Conditional</li> <li>- <b>ExecutionReport (8):</b> Updated description for VFU/VFC Ack, update Message Signature Tags table following the updates of the fields <i>ExecType</i> and <i>OrdStatus</i>, updated presence of the field <i>LastCapacity</i> from Mandatory to Conditional, removed field <i>TradeTime</i>, added fields <i>ExecRestatementReason</i>, <i>IDCCP</i>, <i>MassStatusReqID</i> and <i>ClientMessageSendingTime</i></li> <li>- <b>MassQuote (i):</b> Updated description for rejection message and for Clearing Data and Short Codes management, removed fields <i>ClOrdID</i> and <i>TransactTime</i></li> <li>- <b>MassQuoteAck (b):</b> Added field <i>ClientMessageSendingTime</i>, updated presences of the following fields from Mandatory to Conditional: <i>OEGINFromMember</i> and <i>OEGOUTToME</i>, removed repeating groups <i>Parties</i> and <i>NestedParties</i>, removed field <i>TransactTime</i>, updated description following the removal of repeating groups and for rejection message</li> <li>- <b>OrderCancelRequest (F):</b> Updated description and added repeating group <i>OrderAttributeGrp</i> for particular client short code management (AGGR and PNAL)</li> <li>- <b>OrderCancelReplaceRequest (G):</b> Updated description, removed field <i>AccountCode</i>, Update presence of the field <i>DarkExecutionInstruction</i> from Mandatory to Conditional</li> <li>- <b>OrderCancelReject (9):</b> Updated description for rejection in case of invalid values, added field <i>ClientMessageSendingTime</i>, removed field <i>TransactTime</i></li> <li>- <b>RequestAckMessage (Uy):</b> Updated description for message use, removed fields <i>ClOrdID</i> and <i>TransactTime</i>, added fields <i>ClientMessageSendingTime</i> and <i>RequestID</i>, Updated presences of the following fields from Mandatory to Conditional: <i>OEGINFromMember</i>, <i>OEGOUTToME</i>, <i>BookOUTTime</i> and <i>OEGINFromME</i></li> </ul> |



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|         | <ul style="list-style-type: none"> <li>- <b>OwnershipRequest (U18):</b> Updated description and added repeating group <i>OrderAttributeGrp</i> for particular client short code management (AGGR and PNAL), updated description for rejection message, added fields <i>OrigClOrdID</i> and <i>EMM</i>, removed field <i>TransactTime</i></li> <li>- <b>AskForQuote (AL):</b> removed field <i>TransactTime</i></li> <li>- <b>PricelInput (UI):</b> Updated description and added repeating group <i>OrderAttributeGrp</i> for particular client short code management (AGGR and PNAL), Removed value '3' (Reference Price) from the field <i>InputPxType</i>, updated description following the removal of this value, removed field <i>TransactTime</i></li> <li>- <b>LiquidityProviderCommand (UZ):</b> Updated description and added repeating group <i>OrderAttributeGrp</i> for particular client short code management (AGGR and PNAL), removed field <i>TransactTime</i></li> <li>- <b>OrderMassStatusRequest (AF):</b> Updated description and added repeating group <i>OrderAttributeGrp</i> for particular client short code management (AGGR and PNAL), removed fields <i>ClOrdID</i> and <i>TransactTime</i></li> <li>- <b>OrderMassCancelRequest (q):</b> Updated description and added repeating group <i>OrderAttributeGrp</i> for particular client short code management (AGGR and PNAL)</li> <li>- <b>OrderMassCancelReport (r):</b> Added field <i>ClientMessageSendingTime</i></li> <li>- <b>UserNotification (CB):</b> Updated description for repeating group usage in case of a firm suspension, updated description and added repeating group <i>OrderAttributeGrp</i> for particular client short code management (AGGR and PNAL), updated presences of the following fields from Mandatory to Conditional: <i>NoInstrumentScopes</i>, <i>InstrumentScopeSecurityID</i> and <i>InstrumentScopeSecurityIDSource</i>, added value 'D' (Proprietary / Custom Code) to the field <i>PartyIDSource</i></li> </ul> <p><b>The following messages have been added:</b></p> <ul style="list-style-type: none"> <li>- <b>InstrumentSynchronisationList (U50)</b></li> <li>- <b>SynchronisationTime (U51)</b></li> </ul> <p><b>The following fields have been updated:</b></p> <ul style="list-style-type: none"> <li>- <u>Multiple integer fields updated to align possible values with their presence in messages structures:</u> the mandatory fields have one less authorized value (Null Value is not accepted)</li> <li>- <u>Multiple bitmap fields updated to remove “Future Use” values previously set on unused bits</u></li> <li>- <u>Updated descriptions for fields:</u> <i>Account</i>; <i>LastCapacity</i>; <i>OrderPriority</i>; <i>Price</i>; <i>SoftwareProvider</i>; <i>STPAggressorIndicator</i></li> <li>- <u>Updated length for fields as follows:</u> <i>Account</i>: from '14' to '12'; <i>AckQualifiers</i>: from '15' to '3'; <i>DarkExecutionInstruction</i>: from '8' to '9'; <i>MassStatusReqID</i>: from '30' to '20'; <i>PostingAction</i>: from '19' to '17'</li> <li>- <u>Updated or Added conditions for fields:</u> <i>Account</i>; <i>AckPhase</i>; <i>BidErrorCode</i>; <i>BidPx</i>; <i>BidQuoteID</i>; <i>BidSize</i>; <i>BuyRevisionIndicator</i>; <i>ClOrdID</i>; <i>CancelOnDisconnectionIndicator</i>; <i>ClearingInstruction</i>; <i>DarkExecutionInstruction</i>; <i>DeliverToCompID</i>; <i>DisplayQty</i>; <i>ExecID</i>; <i>ExpireDate</i>; <i>ExpireTime</i>; <i>InstrumentScopeSecurityID</i>; <i>InstrumentScopeSecurityIDSource</i>; <i>InvestmentDecisionWFirmShortCode</i>; <i>LPRole</i>; <i>OfferErrorCode</i>; <i>OfferPx</i>; <i>OfferQuoteID</i>; <i>OfferSize</i>; <i>OrderOrigination</i>; <i>OrderQty</i>; <i>OrdType</i>; <i>PegOffsetValue</i>; <i>PegPriceType</i>; <i>Price</i>; <i>QuoteReqID</i>; <i>RequestID</i>; <i>SelfMatchPreventionID</i>; <i>SellRevisionIndicator</i>; <i>SenderCompID</i>; <i>Side</i>; <i>StopPx</i>; <i>STPAggressorIndicator</i>; <i>TargetCompID</i>; <i>TechnicalOrdType</i>; <i>Text</i>; <i>TimeInForce</i>; <i>TradeType</i>; <i>TradingSessionID</i>; <i>TriggeredStopTimeInForce</i>; <i>UndisclosedIcebergType</i>; <i>UndisclosedPrice</i></li> </ul> <p><u>Modified Values as follows:</u> <i>AccountCode</i>: value '8' changed from 'Riskless Principal' to 'Structured Product Market Maker' ; <i>AckQualifiers</i>: removed values '2 = Future Ack Use 1', '3 = Future Ack Use 2', '4 = Future Ack Use 3', '5 = Future Ack Use 4', '6 = Future Ack Use 5' and '7 = Future Ack Use 6' ; <i>CumQty</i>: update values from 'From 0 to 2^64-2' to 'From -1 to 2^64-2'; <i>DarkExecutionInstruction:up</i> removed values '5 = Future Dark Use 1', '6 = Future Dark Use 2' and '7 = Future Dark Use 3' ; <i>EMM</i>: value 'Not Applicable' changed from '254' to '99' ; <i>ExecType</i>: added values 'D = Restated', 'L = Triggered or Activated by System' and 'm = OrderMassStatusRequest Ack' ; removed values 'c = Stop Triggered Ack' and 'f = MTL Second Ack' ; <i>InputPxType</i>: removed value '3' ; <i>LastCapacity</i>: update values from '1 = Dealing on own account (DEAL)', '2 = Matched principal (MTCH)' and '3 = Any other capacity (AOTC)' to '7 = Dealing on own account (DEAL)', '8 = Matched principal (MTCH)' and '9 = Any other capacity (AOTC)' ; <i>LeavesQty</i>: update values from 'From 0 to 2^64-1' to 'From -1 to 2^64-2'; <i>MassStatusReqID</i>: update value from 'User-defined value' to 'From -2^63 to 2^63-1' ; <i>MsgSeqNum</i>: update values from 'From 0 to 2^32-1' to 'From 1 to 2^32-1' ; <i>MsgType</i>: added values 'U50 = InstrumentSynchronizationList' and 'U51 = SynchronizationTime' ; <i>NextExpectedMsgSeqNum</i>: update values from 'Integer' to 'From 1 to 2^32-1' ; <i>NoInstrumentScopes</i>: update value from 'From 1 to 100' to 'If provided, always set to 1' ; <i>OrdStatus</i>: added values 'M = RFQ expired', 'N = RFQ partially or fully matched with other counterparts', 'O = RFQ cancelled by the issuer', 'P = RFQ Not matched due to issuer order's features', 'Q = VFU/VFC Triggered Ack', 'R = OrderMassStatusRequest Ack' and 'Z = Message Rejected', removed value 'L = Triggered or Activated by System' ; <i>PostingAction</i>: removed value '0 = Field Actively Used', values '2' to '9' set for Derivatives only ; <i>RefTagID</i>: update values from 'Integer' to 'From 1 to 999 999' ; <i>SessionRejectReason</i>: added value '19 = NewSeqNo(36) too low' ; <i>TradeType</i>: removed value '35', added values '37' and '38' ; <i>TriggeredStopTimeInForce</i>: removed values '2', '3', '4', '5', '7' and '8'</p> |

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|         | <p><b>The following sections have been added:</b> 1.3 FUTURE USE</p> <p><b>The following sections have been modified:</b></p> <ul style="list-style-type: none"> <li>- 1.2.1 Maintenance of Relevant Data relating to Orders in Financial Instruments: Added paragraph on short code general presence rules</li> <li>- 2.2.2 Drop Copy: Removed details of SBE Drop Copy as it will be provided in FIX only</li> <li>- 4.1 Field Format: Added further explanation for <i>MultipleCharValue</i> field type usage</li> <li>- 4.6.1 Symbol Index: Removed tab depicting Symbol Index ranges</li> <li>- 5.1.1 Scope of Messages and Functionalities: Removed 'TCS &amp; Transaction Reporting service' segment</li> </ul> <p><b>The following sections have been removed:</b></p> <ul style="list-style-type: none"> <li>- 2.4 Throttling Mechanism: will be described in a dedicated document</li> <li>- 2.5 Throttling Parameters: will be described in a dedicated document</li> </ul>   |
| 1.2.0   | <p><b>The following sections have been updated:</b></p> <ul style="list-style-type: none"> <li>- 1.2 MiFID Related Changes: updated fields possible values in description.</li> <li>- 4.6.1 Price, Quantity, Ratio and Amount Formats: added fields calculation method and formulas description.</li> </ul> <p><b>The following messages have been updated:</b></p> <p><b>General message description updates:</b></p> <ul style="list-style-type: none"> <li>- Description of messages updated with clarification &amp; examples of field use for MIFID II short codes and clearing IDs: NewOrderSingle, ExecutionReport, MassQuote, MassQuoteAck, OrderCancelRequest, OrderCancelReplaceRequest, OrderCancelReject, OwnershipRequest, QuoteRequest, UserNotification, PriceInput, LiquidityProviderCommand, OrderMassStatusRequest, OrderMassCancelRequest</li> </ul> <p><b>NewOrderSingle:</b></p> <ul style="list-style-type: none"> <li>- Updated field from Optional to Conditional: <i>NoNestedPartyIDs</i></li> <li>- Updated field from Mandatory to Conditional: <i>NestedPartyRoleQualifier</i></li> </ul> <p><b>ExecutionReport:</b></p> <ul style="list-style-type: none"> <li>- Updated fields from Mandatory to Conditional: <i>BookInTime, DarkExecutionInstruction, LastPx, LastQty, AckQualifiers, TradeType, ExecPhase, TradeQualifier, TradeTime, OEPartitionID, LogicalAccessID, OrdType, TimeInForce, NoSides, AccountCode, NestedPartyRoleQualifier, ErrorCode, TransactTime</i></li> <li>- Update fields from Optional to Conditional: <i>UndisclosedPrice, MinQty, ClearingInstruction, Text, Account, TechnicalOrdType, NoNestedPartyIDs</i></li> </ul> <p><b>MassQuote:</b></p> <ul style="list-style-type: none"> <li>- Added fields: <i>NoNestedPartyIDs, NestedPartyID, NestedPartyIDSource, NestedPartyRole, NestedPartyRoleQualifier</i></li> </ul> <p><b>MassQuoteAck:</b></p> <ul style="list-style-type: none"> <li>- Updated field from Mandatory to Conditional: <i>BookInTime</i></li> <li>- Added fields: <i>NoNestedPartyIDs, NestedPartyID, NestedPartyIDSource, NestedPartyRole, NestedPartyRoleQualifier</i></li> </ul> <p><b>OrderCancelReplaceRequest:</b></p> <ul style="list-style-type: none"> <li>- Added fields: <i>NoNestedPartyIDs, NestedPartyID, NestedPartyIDSource, NestedPartyRole, NestedPartyRoleQualifier</i></li> </ul> <p><b>OrderCancelReject:</b></p> <ul style="list-style-type: none"> <li>- Removed unused field: <i>OrigClOrdID</i></li> <li>- Updated field from Mandatory to Conditional: <i>ErrorCode</i></li> </ul> <p><b>RequestAckMessage:</b></p> <ul style="list-style-type: none"> <li>- Updated field from Mandatory to Conditional: <i>ErrorCode</i></li> </ul> <p><b>The following individual field descriptions have been updated:</b></p> <ul style="list-style-type: none"> <li>- Description updated for fields: <i>SoftwareProvider, BidPx, BidSize, CumQty, DisplayQty, LastPx, LastQty, LeavesQty, LegLastPx, LegLastQty, MinQty, OfferPx, OrderQty, OfferSize, PotentialMatchingPrice, PotentialMatchingQuantity, BreachedCollarPrice, Price, ClOrdID</i></li> <li>- Updated length of fields: <i>NestedPartyID</i> from 10 to 11, <i>OEPartitionID</i> from 10 to 5</li> <li>- Updated / Added Conditions of field: <i>BookInTime, CumQty, DarkExecutionInstruction, ErrorCode, ExpireTime, ExpireDate, LeavesQty, DisplayQty</i></li> <li>- Updated possible values of fields: <i>BeginSeqNo, EndSeqNo, ExecType, EMM, SessionStatus, OrdStatus, NestedPartyRoleQualifier, PartyRole, PartyRoleQualifier, PartyIDSource, OrderAttributeType</i></li> </ul> |

| Version | Change Description   |
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| 1.1.0   | <p><b>Specifications, including all messages, components, structures, descriptions and values have been fully revamped to take into consideration:</b></p> <ul style="list-style-type: none"> <li>- Latest guidelines from the FIX community on specifications and best practices on implementation of version 5.0</li> <li>- Implementation of MIFID II and MIFIR requirements EP222 - Critical data requirements identified by the sub-working groups on transparency, and order data and recordkeeping</li> <li>- Client consultations on functionalities previously identified or missing from the scope of the Optiq specifications</li> </ul> <p><b>The following sections &amp; messages have been removed:</b></p> <ul style="list-style-type: none"> <li>- <b>Sections:</b> 1.2 Work In Progress Section &amp; 3.1.5 Accepted messages</li> <li>- <b>Messages:</b> NewOrderMiFIDExtension (U02) &amp; NewOrderMiFIDExtensionAck (U30)</li> </ul> <p><b>The following sections &amp; messages have been added:</b></p> <ul style="list-style-type: none"> <li>- <b>Sections:</b> 1.2 MiFID II Related Changes; 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; 2.4 Throttling Mechanism; 2.4.1 General Overview; 2.4.2 Throttling Scope; 2.5 Throttling parameters; 2.5.1 Throttling Methods; 2.5.2 Counting Window; 2.5.3 Unacknowledged Requests; 2.5.4 Queuing or Rejection; 4.4 Date and Time Conventions; 4.5 Sequence Numbers; 4.6.2 Order Priority; 5.3.9 OwnershipRequestAck (U29); 5.3.10 OwnershipRequest (U18); 5.3.11 QuoteRequest (R); 5.3.12 RFQNotification (U35); 5.3.13 RFQMatchingStatus (U36); 5.3.14 UserNotification (CB)</li> <li>- <b>Messages:</b> OwnershipRequestAck (U29); OwnershipRequest (U18); QuoteRequest (R) ; RFQNotification (U35); RFQMatchingStatus (U36); UserNotification (CB)</li> </ul> |
| 1.0.0   | First Version  |

## Document History

| Revision No. | Date                                      | Author                   | Change Description  |
|--------------|---|--------------------------|---|
| 4.10.0       | 6 Oct 2021                                | IT Market Services – WMA | Introduction of SBE 310 – no impacts  |
| 4.8.0        | 3 Aug 2021                                | IT Market Services – WMA | Introduction of SBE 308 – no impacts  |
| 4.7.0        | 9 Jul 2021                                | IT Market Services – WMA | Introduction of SBE 307 – no impacts<br>Updated description of ExecutionReport (8) Message Signature Tags   |
| 4.6.2        | 2 Jul 2021                                | IT Market Services – WMA | Updated description for TVTIC computation   |
| 4.6.0        | 8 Feb 2021                                | IT Market Services – WMA | Introduction of SBE 306 – no impacts  |
| 4.5.0        | 4 Jan 2021                                | IT Market Services       | Major release for Euronext Block  |
| 4.4.0        | 2 Nov 2020                                | IT Market Services – WMA | Introduction of SBE 304 – no impacts  |
| 4.3.0        | 25 Sep 2020                               | IT Market Services – WMA | Removal of mention indicating “Dark is for future use”.<br>Correction of the definition of the session 3 for the field <a href="#">Trading Session ID</a> |
| 4.2.1        | 10 Jun 2020                               | IT Solutions - FNA       | Adjusted section 4.2 Structure Representation.  |
| 4.2.0        | 2 Jun 2020                                | IT Solutions – FBO       | Integration of Oslo Fixed Incomes.<br>Added note on TVTIC trade ID in Execution Report (8).   |
| 4.0.2        | 23 Mar 2020                               | IT Solutions - IZE       | Document Improvements   |
| 4.0.1        | 13 Mar 2020                               | IT Solutions - IZE       | Document Improvements and Mege of TCS FIX specification into this document  |
| 4.0.0        | 28 Feb 2020                               | IT Solutions - IZE       | Oslo integration, ETF Access , Dublin, ETF Warrant projects updates and Document improvements   |
| 2.1.0        | 6 Sept 2019                               | IT Solutions - WMA       | Second update for migration of the Derivatives Markets to Optiq   |
| 2.0.0        | 21 May 2019                               | IT Solutions - WMA       | Major update for the migration of the Derivatives Markets to Optiq  |
| 1.6.3        | 24 Jan 2019                               | IT Solutions             | Third minor release for Euronext Block  |
| 1.6.2        | 19 Nov 2019                               | IT Solutions             | Second minor release for Euronext Block   |
| 1.6.1        | 20 Nov 2018                               | IT Solutions             | Minor release for Euronext Block  |
| 1.6.0        | 14 Nov 2018                               | IT Solutions – FLO       | Major release for Euronext Block  |
| 1.5.0        | 9 Nov 2018                                | IT Solutions – FLO       | Major Release for ETF Access and Dark Initiative  |
| 1.3.3        | 27 Mar 2018                               | IT Solutions – FLO       | Seventh Release   |
| 1.3.2        | 9 Mar 2018                                | IT Solutions – FLO       | Sixth Release   |
| 1.3.1        | 16 Jan 2018<br>16 Jan 2018<br>16 Jan 2018 | IT Solutions – FLO       | Fifth Release   |



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|-------|---|--------------------|---|
| 1.3.0 | 7 Dec 2017<br>Dec 2017<br>Dec 2017        | IT Solutions - DCO | Fourth Release                                  |
| 1.2.0 | 28 Jun 2017<br>28 Jun 2017<br>28 Jun 2017 | IT Solutions - DCO | Third Release                                   |
| 1.1.1 | 6 Sep 2017<br>6 Sep 2017<br>6 Sep 2017    | IT Solutions – DCO | Minor Release for Updated Account Number length |
| 1.1.0 | 16 Mar 2017<br>16 Mar 2017<br>16 Mar 2017 | IT Solutions - DCO | Second Release                                  |
| 1.0.0 | 31 Oct 2016                               | IT Solutions – DCO | First Release                                   |