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EURONEXT CASH MARKETS - OPTIQ® OEG CLIENT SPECIFICATIONS – FIX 5.0 INTERFACE

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Optiq® OEG Client Specifications – FIX 5.0 Interface

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PREFACE

PURPOSE

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.

Note: Euronext Block and Algomi are not in scope of this document.

ASSOCIATED DOCUMENTS

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 Cash Markets – Optiq OEG Client Specifications – SBE Interface
- Euronext Cash Markets – Optiq Kinematics Specifications
- Euronext Cash Markets – Optiq CCG to OEG Changes Highlight
- Euronext Cash Markets – Optiq & TCS Error List
- Euronext Cash and Derivatives Markets – Optiq MDG Client Specifications
- Euronext Cash and Derivatives Markets – Optiq File Specification

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 http://www.euronext.com/optiq

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WHAT'S NEW?

All the updates are listed at the end of this document; please refer to the Appendix.

Version	Change Description
1.7.1	Clarification in the *FRMARAMPLP (21801)* [Used In] description : FRMARAMPLP is present in ExecutionReport (8) message only for Drop Copy. Fixed lengrh of TradeQualifier field (21080) (15 instead of 13).
1.7.0	Added *UndisclosedIcebergType (200005)* in NewOrderSingle (D), ExecutionReport (8) and OrderCancelReplaceRequest (G). Added *FRMARAMPLP (21801)* indicator in NewOrderSingle (D), ExecutionReport (8) and OrderCancelReplaceRequest

Version	Change Description
	(G). Added OrderCategory (21041) in RFQNotification (U35).
1.6.3	*DarkExecutionInstruction* (20052) has been added in RFQNotification (U35) message.
1.6.2	*OrderCategory* (21041) has been removed from RFQNotification (U35) message. *DarkExecutionInstruction* (20052) has been removed from OrderCancelRequest (F) message. Clarification in the *DarkExecutionInstruction* (20052) [Used In] description : DarkExecutionInstruction is present in ExecutionReport (8) message only for Drop Copy. *MinQty* (110) and *DarkExecutionInstruction* (20052) have been added in QuoteRequest (R) message.
1.6.1	Correction in ExecutionReport (8) Message Signature Tags table for two cases: - Cancellation due to RFQ cancellation - Cancellation due to RFQ confirmation
1.6.0	**Please note that all the changes introduced with this release and listed below are applicable and used for Euronext Block only** **The following field has been created:** *ConditionalOrderFlag* (21800) is used to determine if an order is conditional or firm in NewOrderSingle (D), OrderCancelReplaceRequest (G) and ExecutionReport (8) messages. **Values have been updated for the following fields:** *AckPhase* (21013): addition of value 8 = Random Uncrossing Phase *ExecType* (150) : addition of the following value : c = Conditional Order cancelled due to Potential Matching **Formatting changes :** Tag BLK has been added in the whole document for each message on which Block Optiq Segment is applied on.

CONTENTS

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 markets migration to Optiq (Phase 2). Harmonization between Cash and Derivatives messages is in progress, but is not yet completed and Derivative functionalities are not yet fully covered. As such, functionalities, fields, values and indication of message availability for Derivatives are subject to change for the Phase 3 migration (Derivatives to Optiq).

1.2 MIFID II RELATED CHANGES

The following sections describe the changes introduced in the messages or system functionalities based on the MiFID II requirements and 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 *Parties, or NestedParties* and *OrderAttributeGrp* group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: ClientIdentificationShortCode	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) OrderCancelRequest (F) OrderCancelReplaceRequest (G) OwnershipRequest (U18) QuoteRequest (R) UserNotification (CB) PriceInput (UI) LiquidityProviderCommand (UZ) OrderMassStatusRequest (AF) OrderMassCancelRequest (q)
Investment decision within firm	Populated via combination of components in the *NestedParties* group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: InvestmentDecisionWFirmShortCode	NewOrderSingle (D) ExecutionReport (8) MassQuote (i)
Execution within firm	Populated via combination of components in the *Parties* group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: ExecutionWithinFirmShortCode	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) OrderCancelRequest (F) OrderCancelReplaceRequest (G) OwnershipRequest (U18) QuoteRequest (R) UserNotification (CB) PriceInput (UI) LiquidityProviderCommand (UZ) OrderMassStatusRequest (AF) OrderMassCancelRequest (q)
Non-executing broker	Populated via combination of components in the *NestedParties* group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: NonExecutingBrokerShortCode	NewOrderSingle (D) ExecutionReport (8) MassQuote (i)
Commodity derivatives indicator	Populated via combination of components in the *OrderAttributeGrp* group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: CommodityDerivativesIndicator	NewOrderSingle (D) ExecutionReport (8) MassQuote (i)
Investment algo indicator	Populated via combination of components in the *NestedParties* group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: InvestmentAlgoIndicator	NewOrderSingle (D) ExecutionReport (8) MassQuote (i)
Execution algo indicator	Populated via combination of components in the *Parties* group. Details of cases and values are contained in the message descriptions. The various cases are referred to as: ExecutionAlgoIndicator	NewOrderSingle (D) ExecutionReport (8) MassQuote (i)

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

– Clients will have access to the Customer Web portal where they will be 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 will be 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*) are:

♦ 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 this field with the ranges of values identified below. No 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 order is flagged as Liquidity Provider, Related Party or House. It does not apply if an order is flagged as DEA. It is optional in other cases.

– *ClientIdentificationShortCode* is mandatory when an order is flagged as Client or DEA. It is optional is other cases.

– *NonExecutingBrokerShortCode* is optional in all cases.

In order messages short codes are used for regulatory reporting. In most other messages these codes if identified are to be used for Kill command.

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 will provide an Approved Reporting Mechanism (ARM) service to its clients, which would allow them to comply with these requirements in a stream-lined manner.

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

1.3   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' and with Used For set to 'Derivatives' only.

Details of functionalities flagged in the specifications as for 'Future Use' and 'Derivatives' 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 on day 1 implementation of Optiq for the Cash markets. Submission of inbound messages that are flagged as 'Future Use' or 'Derivatives' will be rejected by the system. Such fields or values, if provided in supported inbound messages, will be ignored by the system.

This behaviour applies to:

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

If an inbound message contains a mandatory field having one of this flags, then the field must be sent with

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.
- **Simple Binary Encoding (SBE):** is the open source binary protocol used as the solution for market data and order entry messaging in Optiq. SBE was designed within the FIX Protocol Limited organization, with a focus on low-bandwidth utilization and the goal of producing a binary encoding solution for low-latency financial trading.
- **Symbol Index:** is a unique system-wide identifier (in private and public messages) assigned to a trading instrument in Optiq. Note that an instrument here represents either a single tradeable instrument, an index or a strategy. 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 instrument from a client or a response from the OEG, used to exchange order and trade related information, including requests and events that impact orders and trades, but do not directly represent them.
  - **Order:** An order is an electronic instruction from a firm to buy or sell an instrument via Optiq. Firms can send many types of buy, sell and cross orders that are matched upon arrival or placed in the order book to await a match. **Trade:** A trade is an electronic agreement between the client(s) that submitted the order(s) to exchange for a certain quantity of one or more instruments, for one of the various forms of reimbursements

(payment, exchange of goods, services, etc.). **Standing Data:** provides referential data characteristics of all trading instruments available on Euronext markets. The data is provided via files and messages.

- **Standing data files** contain referential data characteristics of the trading instruments 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.

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.

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

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

Illustration of two different segments:
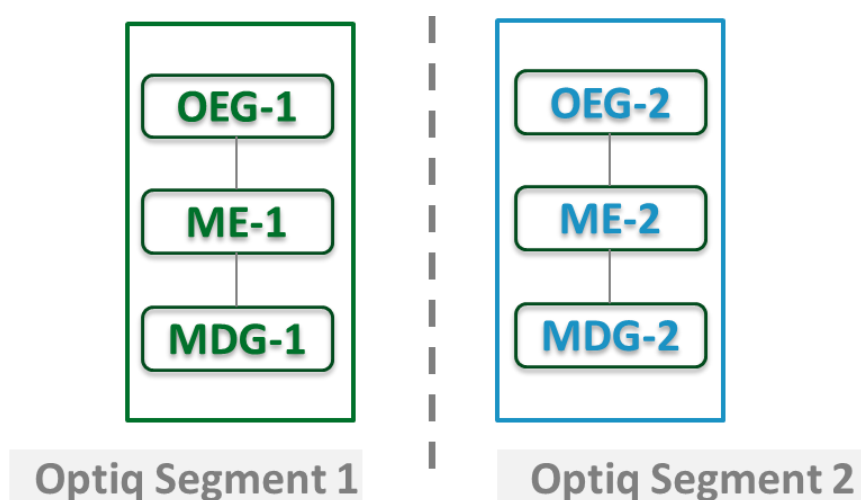
2.1.2   Partitions

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

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

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

■   Partitioning provides the following benefits:

–   Improved resiliency - failures on one partition impact only a fraction of the market / clients;

–   Improved scalability: simple and seamless scalability model based on horizontal scalability principles;

–   Ensured stable latency and high performance.

Illustration of segments divided into partitions:
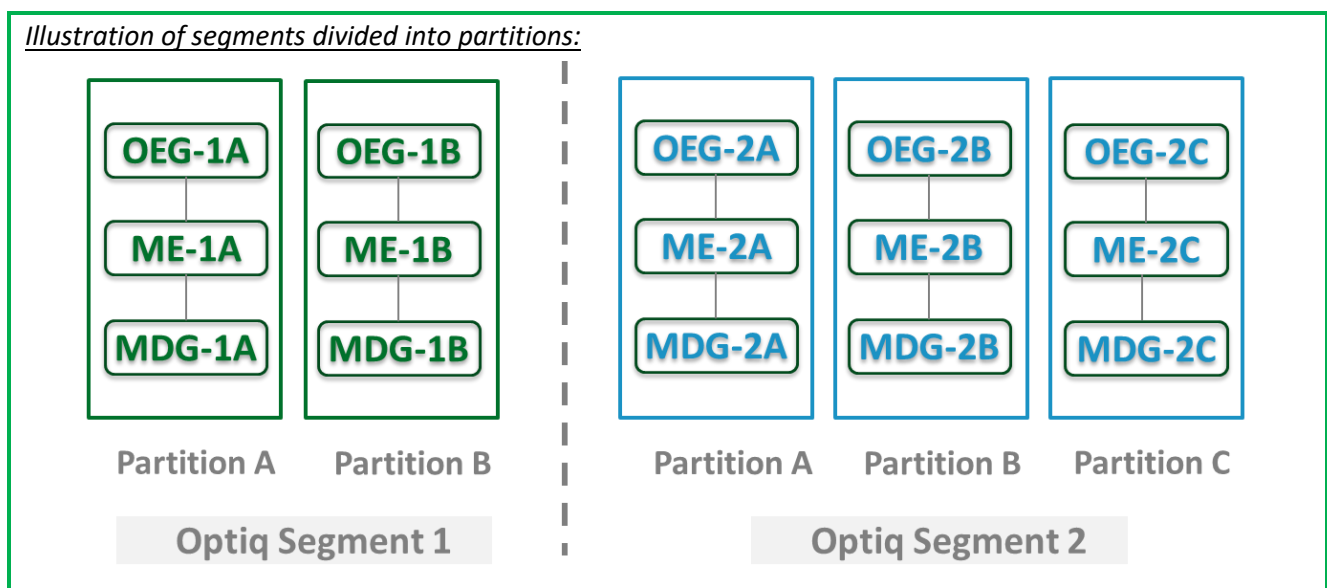
2.1.3   Logical Access and OE Sessions

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 will incur additional response times.

By default, the responses to the private response messages sent through a different partition will return to the OE session holding the ownership of the order (from which it was sent). However the corresponding MDG messages will be 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:
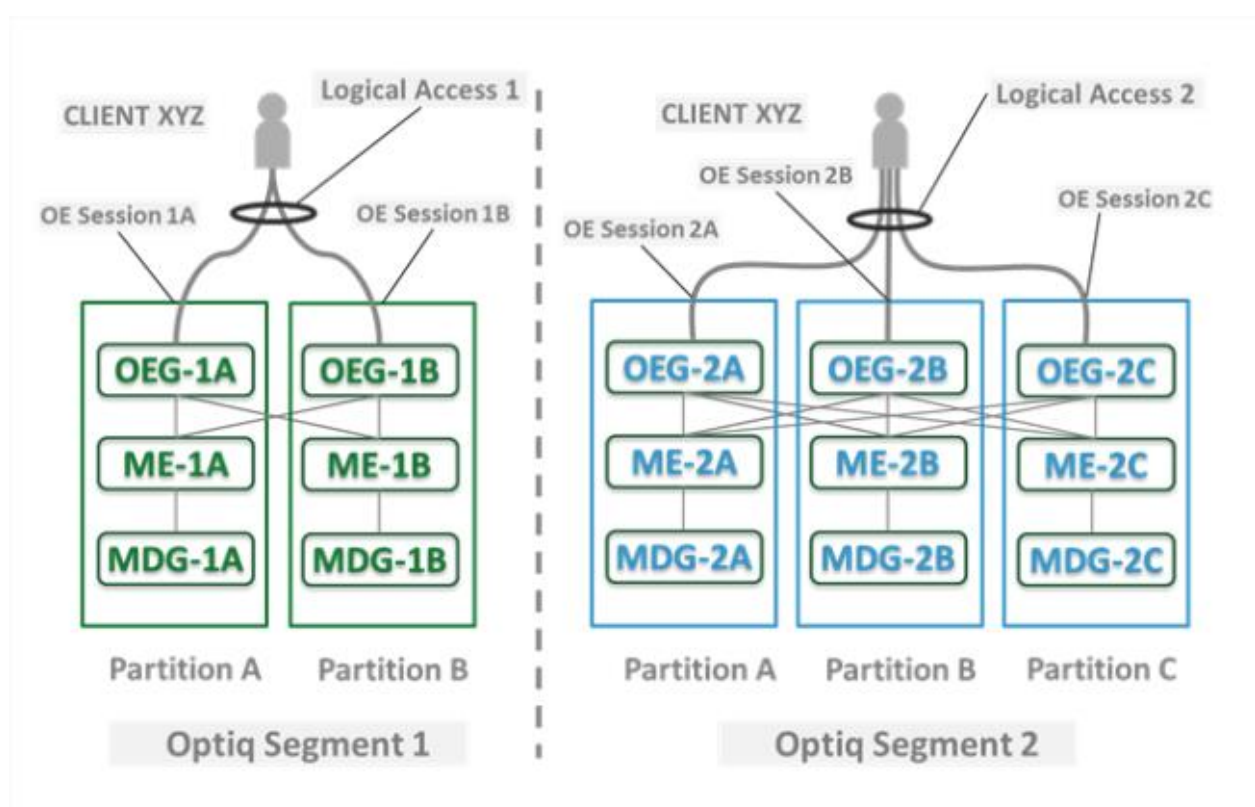
Illustration of the full mesh connectivity:
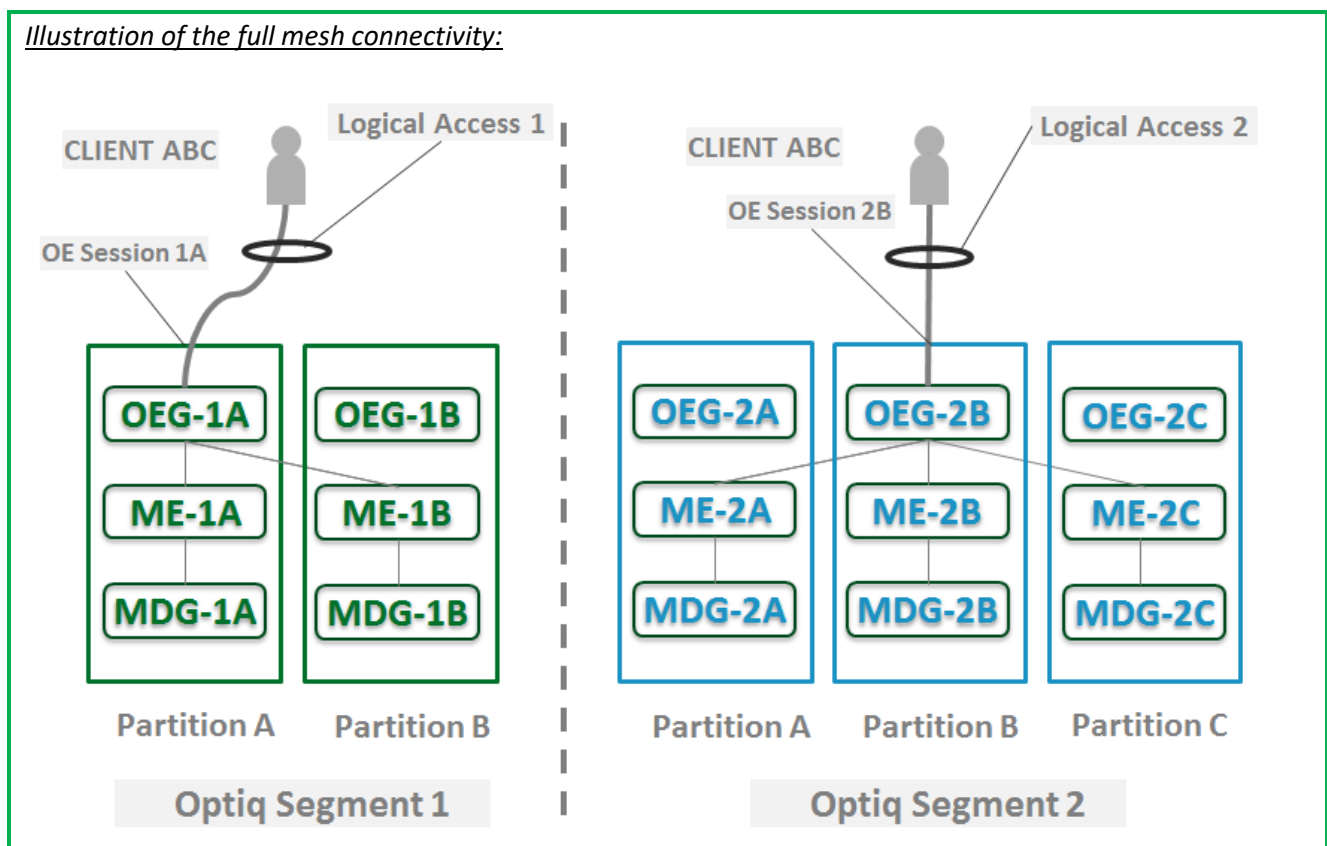
2.1.5   Determine the "shorter path"

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** (1007) market data messages, where details of the *Partition ID* assigned to each instrument are provided.

2.1.6   Setting Up Connectivity

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

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

In addition the relevant details for OEG and MDG connectivity per instrument will be communicated in the referential standing data files provided on a daily basis. For the details of the format in which this data is provided please refer to the Standing Data File specifications.

2.1.7   Overnight instrument migration between partitions

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

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

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

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

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

2.1.8   Added / Removed Partition

The partitioning of the Optiq Segments, and full-mesh connectivity, allows Euronext to add or remove a partition without impacting the clients' connectivity. Clients will still be able to access all the instruments belonging to an Optiq Segment by connecting to an already existing partition, as adding/removing a partition will not impact the other partitions, or the OE sessions.

In all cases the clients will always be notified 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:
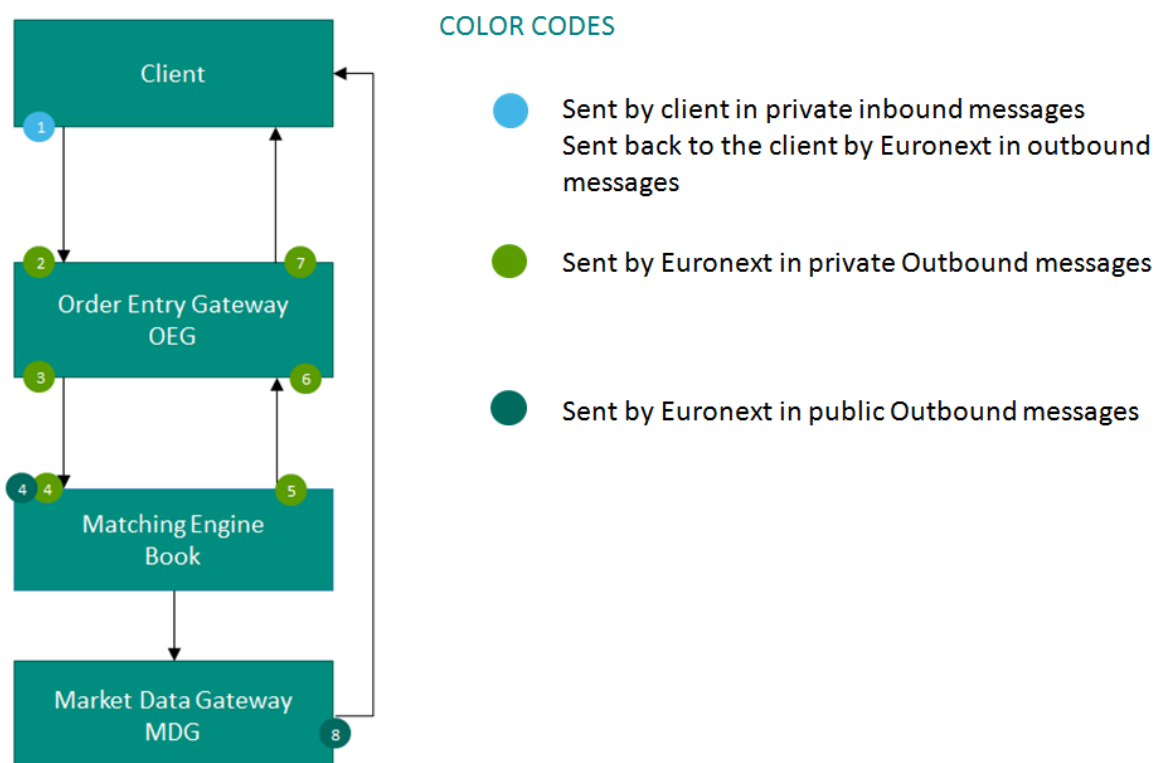
#	Field name	Description of data provided
1	*TransactTime*	is assigned by the Client in his inbound message.
2	*OEGINFromMember*	is assigned by the OEG after decoding the inbound message.
3	*OEGOUTToME*	is assigned by the OEG when sending the inbound message to the matching engine.
4	*BookINTime*	is assigned by the ME when receiving the inbound message from the OEG.
5	*BookOUTTime*	is assigned by the ME when sending the outbound message to the OEG.
6	*OEGINFromME*	is assigned by the OEG when receiving the outbound message from the ME.
7	*SendingTime*	is assigned by the OEG when sending the outbound message to the client. Corresponds to the OEG Out To Member timestamp in SBE.
8	*PacketTime*	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 will be available in FIX protocol only; further details will be provided in a dedicated document.

2.3   CLIENT ORDER ID MANAGEMENT

2.3.1   Client Order ID Overview

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

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[1], 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[2], the value is checked by the Exchange for possible duplicates, i.e. different live orders originally submitted with the same *ClOrdID*. In case of duplication, the inbound request is rejected with the associated error code.

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

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

[2] 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.

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.

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.

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.

2.3.3.1   For Regular "In House" Accesses

For Regular In-House accesses (i.e. non 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.

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.

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 –XXX999999999999999, 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.

Please note: The value received in this field is a string of up to 20 characters long, but may be shorter.

■ The value obtained from the field Order ID should be divided by 2^16 (or 65536)

■ The resulting value should be truncated to obtain just the whole part of the result, without any rounding.

The resulting value represents the Order ID that is communicated by the Exchange to the CCP

Example :

– Obtain the value in field OrderID (tag 37):   *33637557*

– Divide this value by 2^16:   *33637557 / 2^16 = 513.2683868*

– Truncate the result to the whole value without rounding: *513*

513 is the expected Order ID provided to the CCP

In case a FIX message is rejected for Technical reasons, it isn't 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 code table in the *Euronext Cash Markets - Optiq & TCS Error List document.*

3. ORDER ENTRY GATEWAY SPECIFICS

3.1 SESSION MANAGEMENT

3.1.1 Logon Overview

Clients initiate a TCP/IP session to the Order Entry Gateway, and then initiate a logon by sending the **Logon** (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 *Connectivity Detail specifications*.

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 hasn't 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 for any messages in scope).

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 Configuration Detail specifications document.

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) are sent to the OE Session for which the mechanism has been triggered for each order and instrument where orders were killed. 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.

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.sssssssss)

Alphanumerical 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 '.'.

 1.7.1

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 amout (typivally Price times Qty) without decimal places. The real amount value must be calculated as described in the section Price, Quantity, Ratio and Amounts Formats

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 the 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 [C]	0 (No) – Not a NAV trade expressed in basis points
13	6 = NAV Trade expressed in price currency [C]	0 (No) – Not a NAV trade expressed in currency

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 grey 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 dark gray background, and
- Wider left green outline
- In the tag column, tag number preceded by the symbol "**->**" for all fields that comprise the nested repeating 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.

<div align="center">…</div>

	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		
->							

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 isn't provided in FIX.

For more details please refere 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:

■ 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.sssssssss

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.
– "sssssssss" is the fraction of a second (nanoseconds).

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

4.5   PRICE, QUANTITY, RATIO AND AMOUNT FORMATS

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

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

All prices are processed using two values:

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

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

The prices must be calculated according to the following formula:

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

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.

■ 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).

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** message (1007), **Outright Standing Data** (1014), **Strategy Standing Data** (1012), **Contract Standing Data** (1013) 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) which is used in all messages, with other instrument characteristics present in the **Standing Data** (1007) message or file.

The Symbol Index (SecurityID [tag: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 Cash and Derivatives Markets – Optiq MDG Client Specifications.*

4.6.2   Order Priority

The *OrderPriority (21004)* is provided in private **ExecutionReport** (8) messages for orders shown to the Market. It is used to allow clients to reconcile with the Market Data feed as the *OrderPriority* is also provided in the **Order Update** (1002) message.

For Stop orders *OrderPriority (21004)* will be provided in the private **ExecutionReport** (8) acknoledgement 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) acknoledgement 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.

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

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 selection of 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 resend 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	Page
8	BeginString	Beginning of message identifier.	String	9	FIXT.1.1 (Always unencrypted, must be first field in message)	Mandatory	140
9	BodyLength	Message length including header, body and trailer.	Length	6	Integer	Mandatory	141

Tag	Field	Short Description	Format	Len	Values	Presence	Page
35	MsgType	Message type.	String	3	(See field description)	Mandatory	164
34	MsgSeqNum	The MsgSeqNum is mandatory for all inbound messages.	SeqNum	10	From 1 to 2^32-2	Mandatory	164
49	SenderCompID	Identifier of the member firm that sends the message.	String	8	Inbound: Firm ID Outbound: Exchange ID	Mandatory	191
56	TargetCompID	Message receptor ID.	String	8	Inbound: Exchange ID Outbound: Firm ID	Mandatory	194
115	OnBehalfOfCompID	ID of the issuing firm when the message is send through a third party.	String	8	Inbound: Firm ID Outbound: Not used	Conditional	173
128	DeliverToCompID	ID of the receiving firm when the message is sent through a third party.	String	8	Inbound: Not used Outbound: Firm ID	Conditional	149
43	PossDupFlag	Identifies if a message is being retransmitted or not.	Boolean	1	N = Original transmission (default) Y = Possible duplicate	Optional	182
97	PossResend	Indicates if the message contains information that was already sent under a different sequence number.	Boolean	1	N = Original transmission Y = Possible resend	Optional	182
52	SendingTime	Time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	UTCTimestamp	27	YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds)	Mandatory	191
122	OrigSendingTime	Original time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	UTCTimestamp	27	YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds)	Conditional	178
369	LastMsgSeqNumProcessed	Indicates to the Client which was the Message Sequence Number of the last message processed by the Exchange	SeqNum	27	From 1 to 2^32-2	Conditional	159

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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	Page
10	CheckSum	Simple checksum.	String	3	Numerical	Mandatory	144

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, in 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 either rejection of connection, or disconnection of the client disconnection from the OEG. The various cases are grouped by the field / tag.

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 *BeginString* (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 *BodyLength* (9) the message will be ignored by the OEG
CheckSum (10)		If the inbound message has a wrong *CheckSum* (10) the message will be ignored by the OEG
MsgSeqNum (34)	Missing	If this field is missing in the first **Logon** (A) message, OEG sends back a Logout (5) with *SessionStatus* (1409) = **104** (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 **Reject** (3) with fields set as *TargetCompID* (56) = **INCORRECT VALUE** and *SessionRejectReason (373)* = **9** (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

Field (tag)	Value	Behaviour
	Incorrect Value	If the **Logon** (A) message sent by the client has the *TargetCompID* (56) that exceeds the length of the field, OEG disconnects the client
		If the **Logon** (A) message has a value in *TargetCompID* (56) that doesn't correspond to the one set for the Logical Access, OEG sends back a **Reject** (3) with *SessionRejectReason* (373) = **9** (CompID problem)
PossResend (97)	=Y	If there is no session established and client send a message to the Exchange with *PossResend* (97)=Y, the tag is ignored and the message is processed
		If the connection is already established and a messages is sent with PossResend (97)=Y or if the PossResend (97)=Y is set in the **Logon** (A) message OEG sends a **Reject** (3) message with *SessionRejectReason* (373) = **5** (Value is incorrect (out of range) for this tag)
SendingTime (52)	Missing	If the field is missing in the first message that is a **Logon** (A), OEG sends back a **Reject** (3) with *SessionRejectReason* (373) = **1** (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 **Logon** (A), OEG sends back a **Reject** (3) with *SessionRejectReason* (373) = **5** (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 **Logon** (A), OEG sends back a **Reject** (3) with *SessionRejectReason* (373) = **6** (Incorrect data format for value)
		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 **Logon** (A) message with *HeartBtInt* (108) having an incorrect value, OEG sends back a **Reject** (3) with *SessionRejectReason* (373) = **5** (Value is Incorrect (out of range) for this tag)
EncryptMethod (98)	≠ 0	If the client sends a **Logon** (A) message with *EncryptMethod* (98) with a value different from **0** (zero), OEG sends back: • a **Reject** (3) message with *SessionRejectReason* (373) = **7** (Decryption problem), followed by • a **Logout** (5) message with *SessionStatus* (1409) = **104** (Invalid logon Value)
OEPartitionID (21019) LogicalAccess (21021)	Unknown combination	If the client sends a **Logon** (A) message with an unknown combination of values in fields *OEPartitionID* (21019) and *LogicalAccess* (21021), OEG sends back a **Logout** (5) message with *SessionStatus* (1409) = **5** (Invalid Username or Password)
NextExpectedMsgSeqNum (789)	> 1	If the client sends the first **Logon** (A) message of the day with *NextExpectedMsgSeqNum* (789) higher than 1, OEG sends back a **Logout** (5) message with *SessionStatus* (1409) = **10 (**Received NextExpectedMsgSeqNum(789) is too high)
	< 1	If the client sends the first **Logon** (A) message of the day with *NextExpectedMsgSeqNum* (789*)* equal to **0** (zero), OEG sends back a **Reject** (3) with *SessionRejectReason* (373) = **5** (Value is incorrect (out of range) for this tag)
DefaultApplVerID (1137)	≠ 9	If the client sends a **Logon** (A) message with *DefaultApplVerID* (1137) with a value different than **9** (nine), OEG sends back a **Reject** (3) message with *SessionRejectReason* (373) = **18** (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 it 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 **higher** than the expected one	Value received is the <u>expected</u> one	OEG will acknowledge the **Logon** (A) message and wait for the client to: • resend all the messages that are identified as missed by the gap **OR** • send a *SequenceReset* (4) message indicating the next correct sequence number to be processed by the Exchange
Value received is the <u>expected</u> one	Value received is **lower** than the expected one	OEG will acknowledge the **Logon** (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 *NextExpectedMsgSeqNum* (789) and up to the last known message
Value received is **higher** than the expected one	Value received is **lower** 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 **Logon** (A) and: • expect that the client will resend the missing inbound messages, <u>while</u> • resending to the client the message that outbound messages identified as missed

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 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 won't increment his 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 hasn't 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 won't 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 insure 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
ResendRequest (2) sent by the client has the *BeginSeqNo* (7) set to **zero '0'**	OEG issues a **Reject** (3) with *SessionRejectReason* (373) = **5** (Value is incorrect (out of range) for this tag)

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

    – <u>Functional Rejection</u>: which represents an error that is raised when the inbound message may have correct technical structure and content, but doesn't meet the functional rules defined for the system / market / functionality. All such rejections a replied with an error code, [field *ErrorCode* (9955)] that is identified as 'Functional' in the error list document.

    – <u>Technical rejection</u>: which represents an error that is raised when the inbound message may not have correct technical structure or content. All such rejections a 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, can't 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) ■ In All Other Cases: OrderCancelReject (9)	Reject (3)
OrderCancelRequest (F)	ExecutionReport (8)	OrderCancelReject (9)	Reject (3)
OrderCancelReplaceRequest (G)	ExecutionReport (8)	■ Collar Breach: ExecutionReport (8) ■ 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)

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	FUND
Fixed Income	FRM
Warrants and Certificates	SP
Options	OPT
Futures	FUT
Commodities	CMDT
Indices	IDX
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:

EQ　FUND　FRM　SP　BdL　OPT　FUT　CMDT　DC　BLK

5.2.1 Logon (A)

Client ◀▶OEG

Message Usage:

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.

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Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
108	HeartBtInt	Heartbeat interval (in seconds).	Int	3	Numerical	Mandatory	156
98	EncryptMethod	Method of encryption for the new FIX session	Int	1	Always set to 0 (No encryption)	Mandatory	152
21019	OEPartitionID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Int	5	From 0 to 2^16-2	Mandatory	171
21021	LogicalAccessID	Identifier of the Logical Access.	Int	10	From 0 to 2^32-2	Mandatory	161
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	From 1 to 2^32-2	Mandatory	167
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	0 = False 1 = True	Mandatory	185
1137	DefaultApplVerID	Specifies the service pack release being applied, by default, to the message at the session level	String	1	9 = FIX50SP2	Mandatory	149
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	193
	Message Trailer					**Mandatory**	

5.2.2   ResendRequest (2)

Client ◀▶OEG

Message Usage:

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.

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 'the 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 origins the gap detection – except if it is the **Logon** (A). The message that origins 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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
7	BeginSeqNo	Message sequence number for first message.	SeqNum	10	From 1 to 2^32-2	Mandatory	140
16	EndSeqNo	Message sequence number for last message	SeqNum	10	From 0 to 2^32-2	Mandatory	152
	Message Trailer					**Mandatory**	

5.2.3   Reject (3)

Client ◀OEG

Message Usage:

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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
45	RefSeqNum	Reference sequence number of the rejected message.	SeqNum	10	From 1 to 2^32-2	Mandatory	187
371	RefTagID	The tag number of the FIX field being referenced.	Int	6	Integer	Conditional	187
372	RefMsgType	The MsgType (35) of the FIX message being referenced.	String	3	Value received in the rejected inbound message, if any	Conditional	187
373	SessionRejectReason	Session reject reason code.	Int	2	(See field description)	Mandatory	192
	Message Trailer					**Mandatory**	

5.2.4   SequenceReset (4)

Client ◄►OEG

Message Usage:

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 trading engine issues a **Reject** (3) with field SessionRejectReason(373) set to 22 = MsgSeqNum(34) too high;
- send us a message with NewSeqNo lower or equal to the MsgSeqNum and MsgSeqNum equals to the expected sequence number, the trading 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 Trading Engine will never allow the use of the **SequenceReset** (4) - **Reset Mode**. If the Client send us this message he will receive a **Logout** (5) from OEG, with field SessionStatus (1409) set to 105 = SequenceReset - Reset Mode not allowed .

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
36	NewSeqNo	New sequence number.	SeqNum	10	From 1 to 2^32-2	Mandatory	167
123	GapFillFlag	Purpose of sequence reset.	Boolean	1	Y = Gap fill message N = Sequence reset	Optional	156
	Message Trailer					**Mandatory**	

5.2.5   Logout (5)

Client ◀▶OEG

Message Usage:

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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
1409	SessionStatus	Provides the code associated to the reason for the logout.	Int	3	(See field description)	Mandatory	192
	Message Trailer					**Mandatory**	

5.2.6   Heartbeat (0)

Client ◀▶OEG

Message Usage:

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.

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;

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
112	TestReqID	Test request ID to be returned in Heartbeat.	String	24	Numerical	Conditional	195
	Message Trailer					**Mandatory**	

5.2.7   TestRequest (1)

Client ◀▶OEG

Message Usage:

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 the responding **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 it 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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
112	TestReqID	Test request ID to be returned in Heartbeat.	String	24	Numerical	Mandatory	195
	Message Trailer					**Mandatory**	

5.3   APPLICATION MESSAGES

5.3.1   NewOrderSingle (D)

Client ▶OEG

Available for: EQ   FUND   FRM   SP   OPT   FUT   CMDT   BLK

Message Usage:

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 different than Limit Orders, Iceberg Orders and Stop Limit Orders (Market, Stop, Peg, and MTL) the *Price* must not be provided.

The following fields are used for clearing purposes: *ClearingInstruction*, *AccountCode*, *CustOrderCapacity*, *PartyID*, and *PartyRole*. Please note that *PartyID* and *PartyRole* 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*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier;*

■   The second component *OrderAttributeGrp* is composed of the fields: *NoOrderAttributes*, *OrderAttributeType*, *OrderAttributeValue;*

■   The third component *SideCrossOrdModGrp* is composed of the fields: *NoSides, Side, ClearingInstruction, Text, Account, AccountCode, LPRole, TechnicalOrdType, PostingAction, CustOrderCapacity* and of *nested repeating group;*

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

–   For Cross orders this section is repeated twice for each field that was provided by the client (e.g. fields required for ClientIdentificationShortCode, InvestmentDecisionWFirmShortCode, 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 Account Type = 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 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:

♦ *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

                                                       1.7.1

- ◆ *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**.
- ■ 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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
60	TransactTime	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	198
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
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	184
38	OrderQty	Total order quantity, per quantity unit (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-2	Mandatory	176
40	OrdType	Type of Order.	Char	1	(See field description)	Mandatory	177
59	TimeInForce	Specifies the maximum validity of an order.	Char	1	(See field description)	Mandatory	196
336	TradingSessionID	Trading session validity.	String	3	101 = Session 1 102 = Session 2 103 = Session 3 123 = All Sessions	Conditional	198
29	LastCapacity	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) 8 = Matched principal (MTCH) 9 = Any other capacity (AOTC)	Mandatory	158
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	Always set to 1	Mandatory	168

Tag	Field	Short Description	Format	Len	Values	Presence	Page
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
21015	STPAggressorIndicator	Field used as instruction for order handling.	Int	1	0 = Cancel resting order [C] 1 = Cancel incoming order [C] 9 = Disable STP [C]	Optional	194
21016	DisclosedQtyRandIndicator	Indicates whether the client requests or not a randomization for the disclosed quantity of his iceberg order.	Int	1	0 = No 1 = Yes	Conditional	150
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	0 = Per Default Configuration 1 = Order not in the scope of Cancel On Disconnect	Mandatory	143
1094	PegPriceType	Defines the type of the peg order.	Int	1	2 = Mid-price peg (midprice of inside quote), Pending Regulatory Approval) [C] 4 = Market peg [C] 5 = Primary peg (primary market - buy at bid or sell at offer) [C]	Conditional	182
211	PegOffsetValue	Tick offset for a pegged order.	Int	3	From -128 to 127	Conditional	181

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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	148
1724	OrderOrigination	Identifies the origin of the order.	Int	1	5 = Order received from a direct access or sponsored access customer	Conditional	175
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, from 1 to 2	Optional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
2362	SelfMatchPreventionID	For Future Use.	String	5	From 0 to 2^16-1	Optional	190
99	StopPx	Stop Trigger Price is mandatory for stop orders.	Price	20	From -2^63 to 2^63-1	Conditional	193
20004	UndisclosedPrice	Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)	Price	20	From -2^63 to 2^63-1	Optional	199
1138	DisplayQty	Maximum number of quantity units to be shown to market participants (Iceberg Order).	Qty	20	From 0 to 2^64-1	Conditional	150
110	MinQty	Minimum quantity to be executed upon order entry (else the order is rejected).	Qty	20	Value '0' by default and depending to a minimum value for the given instrument and/or market type	Optional	164
126	ExpireTime	Field used as time of order expiration for GTT orders (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	155

Tag	Field	Short Description	Format	Len	Values	Presence	Page
432	ExpireDate	Field used as date of order expiration (last day the order can trade) for GTD orders(Format: YYYYMMDD).	LocalMktDate	8	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31	Conditional	155
20005	UndisclosedIcebergType	Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.	Int	1	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Conditional	199
20175	TriggeredStopTimeInForce	Specifies the maximum validity of an triggered stop order.	Char	1	0 = Day 1 = Good Till Cancel 6 = Good till Date	Conditional	199
131	QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-1	Conditional	185
21037	RFQAnswerIndicator	Indicates whether the message is, or not, a quote sent as an answer to a QuoteRequest (R) message.	Int	1	0 = No 1 = Yes	Conditional	188
21038	RFQConfirmationIndicator	Indicates whether the message is, or not, an order sent as a confirmation of a QuoteRequest (R) message.	Int	1	0 = No 1 = Yes	Conditional	188
21800	ConditionalOrderFlag	Field used to specify if the order is a conditional or a firm order.	Char	1	0 = Firm (default) 1 = Conditional	Conditional	146
21801	FRMARAMPLP	Indicates whether the order is subject to French Market Abuse Regulation Accepted Market Practive Liquidity Provision or not.	Char	1	0 = Not subject to FR MAR AMP LP (default) 1 = Subject to FR MAR AMP LP	Optional	156
552	NoSides	Number of sides.	NumInGroup	1	From 1 to 2	Mandatory	170
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Mandatory	193
577	ClearingInstruction	Clearing Instruction.	Int	4	(See field description)	Optional	144
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	195
1	Account	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	String	12	Alphanumeric	Optional	138

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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	91
20021	LPRole	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	Int	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C] 12 = RFQ Liquidity Provider [C]	Conditional	90
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	195
7443	PostingAction	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	MultipleCharValue	17	(See field description)	Optional	183
582	CustOrderCapacity	Type of customer trading	Int	1	1 = For own account 2 = For clearing members house account 3 = For account of another member present 4 = For any other customer account	Conditional	148
539	NoNestedPartyIDs	Number of NestedPartyID entries.	NumInGroup	1	If provided, from 1 to 5	Conditional	168
524	NestedPartyID	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).	String	11	Alphanumeric	Conditional	165
525	NestedPartyIDSource	Source of NestedPartyID value.	Char	1	D = Proprietary / Custom code P = Short code identifier	Conditional	166
538	NestedPartyRole	Identifies the type or role of the NestedPartyID (524) specified.	Int	3	3 = Client ID 4 = Clearing Firm 26 = Correspondent Broker 122 = Investment decision maker	Conditional	166
2384	NestedPartyRoleQualifier	Used to further qualify the value of NestedPartyRole(538).	Int	2	(See field description)	Conditional	166

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Trailer					**Mandatory**	

5.3.2   ExecutionReport (8)

Client ◀OEG

Available for: EQ FUND FRM SP OPT FUT CMDT DC BLK

Message Usage:

The **ExecutionReport (8)** message is sent by the trading 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 and the 'Request For Quote' created as well as when it is rejected;

- Response to **OrderCancelReplaceRequest (G)** message in case of acceptation (an **OrderCancel Reject (9)** is returned instead in case of rejection); it indicates that the order modification/confirmation is done and holds information associated with the new order;

- Response to **OrderCancelRequest (F)** message in case of acceptation (an **OrderCancelReject (9)** is returned instead in case of rejection); it indicates that the order cancellation is done;

- Response to **OrderMassCancelRequest (q)** message in case of acceptation (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* is not filled in each Execution Report: the reference of the cancelled order is hold by the field *OrigClOrdID*;

- Response to **OrderMassStatusRequest (AF)** message.

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)
New Order Submission & Creation			
New Order or RFQ	*Message 8 sent:* in response to a **NewOrderSingle** (D) or a **QuoteRequest** (R) message, that is successfully received and accepted	0	0
Rejection of New Order or RFQ	*Message 8 sent:* in response to a **NewOrderSingle** (D) or a **QuoteRequest** (R) message, that is received and rejected	8	8
Iceberg Order Conversion	*Message 8 sent:* in response to a **NewOrderSingle** (D) message when the Iceberg order is transformed into a Limit order when it is below the minimum allowed size	h	0
FUTURE USE Order Creation	*FUTURE USE* *Message 8 sent:* to report an order creation by the Market Operations	i	0
Order Modification			
Modification of an Order	*Message 8 sent:* in response to an **OrderCancelReplaceRequest** (G), for an order that hasn't 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	*Message 8 sent:* when an Order enters the book following collar breach confirmation	d	5

Cases when ExecutionReport (8) is sent	Details of the Case	ExecType (Tag 150)	OrdStatus (Tag 39)
Individual Order Cancellation			
Individual Order Cancelled by User	*Message 8 sent:* to report cancellation of an Order in response to an **OrderCancelRequest** (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	*Message 8 sent:* 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	*Message 8 sent:* to report cancellation of an Order due to manual intervention from Market Operations	U	4
FUTURE USE Individual Order cancelled by Risk Manager	*FUTURE USE* *Message 8 sent:* to report cancellation of an Order when the cancel request is a request sent from a risk manager	P	4
Mass Cancellation of Orders			
Mass Cancellation of Orders by User	*Message 8 sent:* in response to an **OrderMassCancelRequest** (q) received and accepted, to report the cancellation of an order requested by the client	4	4
Mass Cancellation of Orders by Market Operations	*Message 8 sent:* when the mass cancel request is initiated by the Market Operations	U	4
Order Elimination & Automatic Cancellation			
Elimination on Reaching Time or Trading Phase of Expiration	*Message 8 sent:* 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	*Message 8 sent:* when IOC order is partially filled, and then the remaining unfilled quaintly is cancelled on entry	X	4
Elimination due to Corporate Event	*Message 8 sent:* when Order is eliminated by a Corporate Event	O	4
Expiration at the end of the Trading Session	*Message 8 sent:* 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	*Message 8 sent:* when Order is eliminated at the start of the PAKO phase	Y	4
Cancellation by STP	*Message 8 sent:* when a resting Order eliminated by the Self-Trade Prevention (STP)	a	4
Cancellation due to Knock-Out	*Message 8 sent:* when Order is cancelled due to Knock-Out of an instrument	g	4
Cancellation due to COD mechanism	*Message 8 sent:* when Order is cancelled due to triggering of the Cancel On Disconnect (COD) mechanism	b	4
Cancellation due to RFQ expiration	*Message 8 sent:* when Order is cancelled due to cancelled due to RFQ expiration	r	4
Cancellation due to RFQ cancellation	*Message 8 sent:* when Order is cancelled due to RFQ cancellation	f	4
Cancellation due to RFQ remaining quantity killed	*Message 8 sent:* when Order is cancelled due to RFQ remaining quantity killed	q	4
Cancellation due to RFQ confirmation	*Message 8 sent:* when Order is cancelled due to RFQ confirmation	s	4
Cancelled due to Potential Matching	*Message 8 sent:* when a Conditional Order is cancelled due to Potential Matching	c	4
Order Fill / Trade Execution			

Cases when ExecutionReport (8) is sent	Details of the Case	ExecType (Tag 150)	OrdStatus (Tag 39)
Partial Fill	*Message 8 sent:* to report partial execution of an Order, which results in a trade	F	1
Fill	*Message 8 sent:* to report full execution of an Order, which results in a trade	F	2
Trade Cancellation			
Trade Cancellation	*Message 8 sent:* 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 remains in the state it was after the trade.	H	H

System Triggered Events			
Stop order	*Message 8 sent:* As a notification of triggering of a Stop-Market / Stop-Limit order	L	S
Re-filled Iceberg order	*Message 8 sent:* As a notification of a refill of an Iceberg order	e	0
MTL order transformation	*Message 8 sent:* As a notification of a resting Market to Limit (MTL) order being transformed into a Limit order during uncrossing	L	T
VFU / VFC order	*Message 8 sent:* As a notification of a Valid for Uncrossing or Valid For Closing order reaching the Uncrossing phase where it is triggered	L	Q
Order Status & Ownership Request			
Order Status	*Message 8 sent:* in response to an **OrderMassStatusRequest** (AF) message	m	R
Ownership Request	*Message 8 sent:* in response to an **OwnershipRequest** (U18) message	k	I

Private & Public feed reconciliation:

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

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

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 ˈ1 = Confirmedˈ;
- 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;
- In the **ExecutionReport** (8) message as a notification of a triggered Valid For Uncrossing (VFU) or Valid For Closing (VFC) order;
- In the **ExecutionReport** (8) message for a refilled Iceberg Order.

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.

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

■ **Market Operations order creation report**: the **ExecutionReport** (8) message is used to relay the notification of an order creation by Market Operations.

■ **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.

Note

The situation where an order 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.

Components Usage within the Message:

This message contains three components and one nested component:

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

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

■ The third component **SideCrossOrdModGrp** is composed of the fields: *NoSides, Side, ClearingInstruction, Text, Account, AccountCode, LPRole, TechnicalOrdType, PostingAction, CustOrderCapacity* and of nested repeating group

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

   – For Cross orders this section is repeated twice for each field that was provided by the client (e.g. fields required for ClientIdentificationShortCode, InvestmentDecisionWFirmShortCode, 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**.**

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

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. Provided only for Drop Copy.

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. This field is required for DEA User in every inbound message, or when Account Type = 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:

♦ *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: 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:

■ The component *SideCrossOrdModGrp* repeating group is repeated **once for Buy and Sell orders and twice for Cross orders**.

■ The clearing Firm related fields, if provided, are sent back 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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
60	TransactTime	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	198

Tag	Field	Short Description	Format	Len	Values	Presence	Page
21005	ClientMessageSendingTime	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	145
5979	OEGINFromMember	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	170
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^{63} to $2^{63}-1$	Conditional	145

Tag	Field	Short Description	Format	Len	Values	Presence	Page
41	OrigClOrdID	Client order ID of the original order.	String	20	From -2^63 to 2^63-1	Conditional	178
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Conditional	151
37	OrderID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-2	Mandatory	174
39	OrdStatus	Order status.	Char	1	(See field description)	Mandatory	177
21004	OrderPriority	Rank giving the priority of the order. The order with the lowest value of OrderPriority has the highest priority.	Int	20	From 0 to 2^64-1	Conditional	176
20052	DarkExecutionInstruction	Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions.	MultipleChar Value	9	(See field description)	Conditional	148
44	Price	Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63 to 2^63-1	Conditional	184
38	OrderQty	Total order quantity, per quantity unit (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-1	Conditional	176
31	LastPx	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63 to 2^63-1	Conditional	158
32	LastQty	The LastQty indicates the quantity of the last fill on an instrument (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-1	Conditional	159
151	LeavesQty	Indicates the remaining quantity of an order, i.e. the quantity open for further execution (to be calculated with Quantity Decimals).	Qty	20	From -1 to 2^64-2	Mandatory	159

Tag	Field	Short Description	Format	Len	Values	Presence	Page
17	ExecID	The ExecID 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	152
150	ExecType	Describes the specific ExecutionReport while OrdStatus (39) will always identify the current order status (e.g. Partially Filled).	Char	1	(See field description)	Mandatory	154
99	StopPx	Stop Trigger Price is mandatory for stop orders.	Price	20	From -2^63+1 to 2^63-1	Conditional	193
20004	UndisclosedPrice	Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)	Price	20	From -2^63 to 2^63-1	Conditional	199
1138	DisplayQty	Maximum number of quantity units to be shown to market participants (Iceberg Order).	Qty	20	From 0 to 2^64-1	Conditional	150
20005	UndisclosedIcebergType	Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.	Int	1	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Conditional	199
20175	TriggeredStopTimeInForce	Specifies the maximum validity of an triggered stop order.	Char	1	0 = Day 1 = Good Till Cancel 6 = Good till Date	Conditional	199
131	QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-2	Conditional	185
584	MassStatusReqID	Client ID for the Order Mass Status Request.	String	20	From -2^63+1 to 2^63-1	Conditional	163
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	0 = GT corporate action 1 = GT renewal / restatement (no corporate action)	Optional	
21037	RFQAnswerIndicator	Indicates whether the message is, or not, a quote sent as an answer to a QuoteRequest (R) message.	Int	1	0 = No 1 = Yes	Conditional	188
21038	RFQConfirmationIndicator	Indicates whether the message is, or not, an order sent as a confirmation of a QuoteRequest (R) message.	Int	1	0 = No 1 = Yes	Conditional	188
21800	ConditionalOrderFlag	Field used to specify if the order is a conditional or a firm order.	Char	1	0 = Firm (default) 1 = Conditional	Conditional	146

Tag	Field	Short Description	Format	Len	Values	Presence	Page
21801	FRMARAMPLP	Indicates whether the order is subject to French Market Abuse Regulation Accepted Market Practive Liquidity Provision or not.	Char	1	0 = Not subject to FR MAR AMP LP (default) 1 = Subject to FR MAR AMP LP	Optional	156
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	Always set to 1	Conditional	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Conditional	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Conditional	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Conditional	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Conditional	181
1724	OrderOrigination	Identifies the origin of the order.	Int	1	5 = Order received from a direct access or sponsored access customer	Conditional	175
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, from 1 to 2	Conditional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Conditional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Conditional	174
29	LastCapacity	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) 8 = Matched principal (MTCH) 9 = Any other capacity (AOTC)	Conditional	158
110	MinQty	Minimum quantity to be executed upon order entry (else the order is rejected).	Qty	20	Value '0' by default and depending to a minimum value for the given instrument and/or market type	Conditional	164
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	139

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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 Value	3	(See field description)	Conditional	139
21010	TradeType	Type of trade.	Int	2	(See field description)	Conditional	197
21023	ExecPhase	Indicates the trading phase during which the trade has occurred.	Char	1	(See field description)	Conditional	153
21080	TradeQualifier	Trade Qualifier. This field can contain up to 8 values, space delimited, provided in different positions.	MultipleChar Value	15	(See field description)	Conditional	197
375	ContraBroker	ID of the clearing house in case of a CCP clearable transaction or ID of the Counterpart Firm in specific cases.	String	20	From 0 to 2^64-1	Conditional	147
651	UnderlyingLastPx	For Basis and Against Actual trades only: underlying cash leg price (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63 to 2^63-1	Conditional	199
5883	PackageID	ID used to link several Large in Scale (LiS) Package trades together.	String	12	Alphanumeric	Conditional	179
21019	OEPartitionID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Int	5	From 0 to 2^16-1	Conditional	171
21021	LogicalAccessID	Identifier of the Logical Access.	Int	10	From 0 to 2^32-1	Conditional	161
7773	OtherLegSecurityID	The commodity key for the other component leg of an asset allocation or the SecurityID for the underlying cash leg that is part of a Basis or Against Actuals trade.	Int	10	From 0 to 2^32-1	Conditional	179
555	NoLegs	Number of legs for the requested strategy.	NumInGroup	2	From 0 to 9	Conditional	168
603	LegSecurityIDSource	Gives the type of LegSecurityID.	String	1	8 = Symbol Index	Conditional	160
602	LegSecurityID	Numerical leg instrument identifier (SecurityID) valid for the life of the instrument.	String	10	From 0 to 2^32-1	Conditional	160
637	LegLastPx	Leg last traded price (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63 to 2^63-1	Conditional	159
1418	LegLastQty	Leg last traded quantity (to be calculated with Quantity Decimals).	Qty	20	For derivatives markets only	Conditional	160
624	LegSide	Indicates the side of the trade leg.	Char	1	1 = Buy 2 = Sell	Conditional	160

Tag	Field	Short Description	Format	Len	Values	Presence	Page
19	ExecRefID	The ExecRefID is an unique identifier of a trade per instrument. This field is provided in case of trade cancellation.	String	10	Sequential number. From 1 to 2^32-1	Conditional	153
432	ExpireDate	Field used as date of order expiration (last day the order can trade) for GTD orders(Format: YYYYMMDD).	LocalMktDate	8	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31	Conditional	155
14	CumQty	Cumulated quantity (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-2	Mandatory	147
336	TradingSessionID	Trading session validity.	String	3	101 = Session 1 102 = Session 2 103 = Session 3 123 = All Sessions	Conditional	198
40	OrdType	Type of Order.	Char	1	(See field description)	Conditional	177
59	TimeInForce	Specifies the maximum validity of an order.	Char	1	(See field description)	Conditional	196
8011	QtyDelta	Change in OrderQty as a result of an OrderCancelReplaceRequest (G).	Int	8	Positive in the OrderQty has increased, negative if it has decreased	Conditional	184
552	NoSides	Number of sides.	NumInGroup	1	From 1 to 2	Conditional	170
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Conditional	193
577	ClearingInstruction	Clearing Instruction.	Int	4	(See field description)	Conditional	144
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	195
1	Account	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	String	12	Alphanumeric	Conditional	138
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	91
20021	LPRole	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	Int	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C] 12 = RFQ Liquidity Provider [C]	Conditional	90

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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	195
7443	PostingAction	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	MultipleChar Value	17	(See field description)	Optional	183
582	CustOrderCapacity	Type of customer trading	Int	1	1 = For own account 2 = For clearing members house account 3 = For account of another member present 4 = For any other customer account	Conditional	148
539	NoNestedPartyIDs	Number of NestedPartyIDs entries.	NumInGroup	1	If provided, from 1 to 5	Conditional	168
524	NestedPartyID	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).	String	11	Alphanumeric	Conditional	165
525	NestedPartyIDSource	Source of NestedPartyID value.	Char	1	D = Proprietary / Custom code P = Short code identifier	Conditional	166
538	NestedPartyRole	Identifies the type or role of the NestedPartyID (524) specified.	Int	3	3 = Client ID 4 = Clearing Firm 26 = Correspondent Broker 122 = Investment decision maker	Conditional	166
2384	NestedPartyRoleQualifier	Used to further qualify the value of NestedPartyRole(538).	Int	2	(See field description)	Conditional	166
7489	OtherLegSecurityIDSource	Defines the value of the field OtherLegSecurityID.	Char	1	8 = Symbol Index	Conditional	179
7774	OtherLegReferenceNo	Free text providing an identifying reference for the cash leg.	String	14	Free text	Conditional	178
126	ExpireTime	Field used as time of order expiration for GTT orders (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	155

Tag	Field	Short Description	Format	Len	Values	Presence	Page
21015	STPAggressorIndicator	Field used as instruction for order handling.	Int	1	0 = Cancel resting order [C] 1 = Cancel incoming order [C] 9 = Disable STP [C]	Conditional	194
2362	SelfMatchPreventionID	For Future Use.	String	5	From 0 to 2^16-1	Conditional	190
21016	DisclosedQtyRandIndicator	Indicates whether the client requests or not a randomization for the disclosed quantity of his iceberg order.	Int	1	0 = No 1 = Yes	Conditional	150
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	0 = Per Default Configuration 1 = Order not in the scope of Cancel On Disconnect	Conditional	143
1094	PegPriceType	Defines the type of the peg order.	Int	1	2 = Mid-price peg (midprice of inside quote) [C] 4 = Market peg (For Future Use, Pending Regulatory Approval) [C] 5 = Primary peg (primary market - buy at bid or sell at offer) [C]	Conditional	182
211	PegOffsetValue	Tick offset for a pegged order.	Int	3	From -128 to 127	Conditional	181
9955	ErrorCode	Error code in case of rejection.	Int	5	From 0 to 2^16-1	Conditional	152
9962	CollarRejType	Hit collar type (high or low) in case of order rejection due to collar breach.	Char	1	1 = Low dynamic collar 2 = High dynamic collar	Conditional	146
21001	BreachedCollarPrice	Breached collar price in case of collar rejection (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63+1 to 2^63-1	Conditional	143
	Message Trailer					**Mandatory**	

5.3.3 MassQuote (i)

Client ▶ OEG

Available for: SP

Message Usage:

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.

A **MassQuote** (i) message can include from 1 to 150 quotes. As a consequence, the **Quotes** (08) 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 trading 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 trading 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:

          1.7.1

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 Account Type = 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 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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
117	QuoteID	Quote identifier.	String	20	From -2^63+1 to 2^63-1	Mandatory	185
29	LastCapacity	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) 8 = Matched principal (MTCH) 9 = Any other capacity (AOTC)	Mandatory	158

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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	91
20021	LPRole	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	Int	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C] 12 = RFQ Liquidity Provider [C]	Mandatory	90
1724	OrderOrigination	Identifies the origin of the order.	Int	1	5 = Order received from a direct access or sponsored access customer	Conditional	175
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, from 1 to 2	Optional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
20022	RFEAnswer	Indicate whether the MassQuote (i) message is an answer to a RequestForExecution (UM) message or not. (0: No [False] ; 1: Yes [True])	Int	1	0 = False 1 = True	Mandatory	188
577	ClearingInstruction	Clearing Instruction.	Int	4	(See field description)	Optional	144
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	195
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	Always set to 1	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180

Tag	Field	Short Description	Format	Len	Values	Presence	Page
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
539	NoNestedPartyIDs	Number of NestedPartyID entries.	NumInGroup	1	If provided, from 1 to 5	Conditional	168
524	NestedPartyID	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).	String	11	Alphanumeric	Conditional	165
525	NestedPartyIDSource	Source of NestedPartyID value.	Char	1	D = Proprietary / Custom code P = Short code identifier	Conditional	166
538	NestedPartyRole	Identifies the type or role of the NestedPartyID (524) specified.	Int	3	3 = Client ID 4 = Clearing Firm 26 = Correspondent Broker 122 = Investment decision maker	Conditional	166
2384	NestedPartyRoleQualifier	Used to further qualify the value of NestedPartyRole(538).	Int	2	(See field description)	Conditional	166
1	Account	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	String	12	Alphanumeric	Optional	138
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	195
7443	PostingAction	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	MultipleCharValue	17	(See field description)	Optional	183
296	NoQuoteSets	The number of sets of quotes in the message	NumInGroup	3	From 1 to 150	Mandatory	169

Tag	Field	Short Description	Format	Len	Values	Presence	Page
302	QuoteSetID	Unique ID for the Quote set	String	10	Sequential number for the Quote Set. For a given QuoteID - assumed to start at 1. Must be the first field in the repeating group. From 1 to 2^32-1	Mandatory	186
304	TotNoQuotEntries	Total number of quotes for the quote set across all messages. Should be the sum of all NoQuoteEntries in each message that has repeating quotes that are part of the same quote set.	Int	1	Always equal to NoQuoteEntries	Mandatory	196
295	NoQuoteEntries	Number of entries in Quotes repeating group.	NumInGroup	1	Always set to 1	Mandatory	169
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	185
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
134	BidSize	Quote bid quantity (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-1	Optional	141
132	BidPx	Quote bid price (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63 to 2^63-1	Optional	141
135	OfferSize	Quote offer quantity (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-1	Optional	173
133	OfferPx	Quote offer price (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63 to 2^63-1	Optional	172
	Message Trailer					**Mandatory**	

5.3.4   MassQuoteAck (b)

Client ◄OEG

Available for: ^{SP}

Message Usage:

This message is used by the Trading 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 trading engine rejects the **MassQuote** (i) request with an **OrderCancelReject** (9) message and the reason of the rejection provided in the *ErrorCode* field.

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* and *EMM* may be found in the **MassQuoteAck** (b) message. As a result, the **MassQuoteAck** (b) message has a variable size. (If there are some duplicates of *SecurityID* and *EMM* provided in the MassQuote message, only the last occurrence of this *SecurityID and EMM* is taken into account by the system and then only this one will be provided in the **MassQuoteAck** (b) message.)

The **MassQuoteAck** (b) aggregate includes the *SecurityID* and the *EMM*, a *BidErrorCode* and an *OfferErrorCode* 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* of the input Quotes aggregate, both the *BidErrorCode* and *OfferErrorCode* are provided in the associated **MassQuoteAck** (b) aggregate.

–   If an error is detected in the *BidQuantity* or *BidPrice* field, the error code is provided in the *BidErrorCode* field.

–   If an error is detected in *OfferQuantity* or *OfferPrice* field, the error code is provided in the *OfferErrorCode* field.

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

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
21005	ClientMessageSendingTime	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	145

Tag	Field	Short Description	Format	Len	Values	Presence	Page
5979	OEGINFromMember	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	170
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
117	QuoteID	Quote identifier.	String	20	From -2^63+1 to 2^63-1	Mandatory	185
297	QuoteStatus	Status of the mass quote acknowledgement.	Int	2	0 = Accepted 5 = Rejected	Mandatory	186

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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	91
20021	LPRole	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	Int	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C] 12 = RFQ Liquidity Provider [C]	Mandatory	90
577	ClearingInstruction	Clearing Instruction.	Int	4	(See field description)	Optional	144
1	Account	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	String	12	Alphanumeric	Optional	138
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	195
7443	PostingAction	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	MultipleCharValue	17	(See field description)	Optional	183
296	NoQuoteSets	The number of sets of quotes in the message	NumInGroup	3	From 1 to 150	Optional	169
302	QuoteSetID	Unique ID for the Quote set	String	10	Sequential number for the Quote Set. For a given QuoteID - assumed to start at 1. Must be the first field in the repeating group. From 1 to 2^32-1	Optional	186
304	TotNoQuotEntries	Total number of quotes for the quote set across all messages. Should be the sum of all NoQuoteEntries in each message that has repeating quotes that are part of the same quote set.	Int	1	Always equal to NoQuoteEntries	Optional	196
295	NoQuoteEntries	Number of entries in Quotes repeating group.	NumInGroup	1	Always set to 1	Optional	169

Tag	Field	Short Description	Format	Len	Values	Presence	Page
299	QuoteEntryID	Uniquely identifies the quote across the complete set of all quotes for a given quote provider.	String	10	From 0 to 2^32-1	Conditional	185
1747	BidQuoteID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-1	Conditional	141
1748	OfferQuoteID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-1	Conditional	172
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	3	(See field description)	Mandatory	151
9934	BidErrorCode	Error code returned when quote contains an invalid bid.	Int	6	Numerical	Conditional	140
9935	OfferErrorCode	Error code returned when a quote contains an invalid offer. See Error List for details of error codes.	Int	6	Numerical	Conditional	172
21008	BuyRevisionIndicator	Indicates whether the bid quote is a replacement of a previous quote, or not. (1: Replacement ; 0: New).	Int	1	0 = New 1 = Replacement 2 = Cancellation	Conditional	143
21009	SellRevisionIndicator	Indicates whether the offer quote is a new quote, a replacement of a previous quote or a cancellation.	Int	1	0 = New 1 = Replacement 2 = Cancellation	Conditional	191
	Message Trailer					**Mandatory**	

5.3.5   OrderCancelRequest (F)

Client ▶OEG

Available for: EQ FUND FRM SP OPT FUT CMDT BLK

Message Usage:

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* should contain the *QuoteReqID*.

An active order can be cancelled by specifying the *ClOrdID* of the original order:

– If the **OrderCancelRequest** (F) message contains both *OrderID* and *OrigClOrdID*, the matching engine uses the *OrderID* to cancel the order. If the *OrderID* specified in the message is not found in the active orders list, the order modification is rejected. If the *OrderID* specified in the message is found the matching engine does not check that the *OrigClOrdID* of the order found ("cancelled" order) matches with the *OrigClOrdID* 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* 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* 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 *DisabledCancelOnDisconnect* (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** which is composed of the fields: *NoPartyIDs*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier*.

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 Account Type = 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.

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**"

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
37	OrderID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-2	Conditional	174
41	OrigClOrdID	Client order ID of the original order.	String	20	From -2^63 to 2^63-1	Conditional	178
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Mandatory	193
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	From 1 to 2	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181

Tag	Field	Short Description	Format	Len	Values	Presence	Page
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, always set to 1	Optional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
60	TransactTime	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	198
40	OrdType	Type of Order.	Char	1	(See field description)	Mandatory	177
1094	PegPriceType	Defines the type of the peg order.	Int	1	2 = Mid-price peg (midprice of inside quote) [C] 4 = Market peg [C] 5 = Primary peg (primary market - buy at bid or sell at offer) [C]	Conditional	182
21041	OrderCategory	Field used as instruction for order handling. - Lit Order: indicates whether the client requests to cancel a Lit order. - LIS Order: indicates whether the client requests to cancel a LIS order. - Quote Request: indicates whether the client requests to cancel a Quote Request. - RFQ LP Answer: indicates whether the client requests to cancel an Lp Answer to a Quote Request.	Char	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Conditional	174
	Message Trailer					**Mandatory**	

5.3.6   OrderCancelReplaceRequest (G)

Client ▶ OEG

Available for: EQ FUND FRM SP OPT FUT CMDT BLK

Message Usage:

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

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

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

Please note that the field *ClOrdID* 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 on the MiFID short codes previously submitted and associated to the live order to be modified.

While fields *Side* and *OrdType* 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* and *OrdType* 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* must be equal to Limit, for Stop-limit, or Market for Stop-market order, corresponding to the type of stop order originally submitted.)

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

- 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 Account Type = 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 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)

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 int 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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
60	TransactTime	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	198
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
37	OrderID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-1	Conditional	174
41	OrigClOrdID	Client order ID of the original order.	String	20	From -2^63 to 2^63-1	Conditional	178
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	Always set to 1	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180

Tag	Field	Short Description	Format	Len	Values	Presence	Page
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
539	NoNestedPartyIDs	Number of NestedPartyID entries.	NumInGroup	1	If provided, from 1 to 5	Conditional	168
524	NestedPartyID	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).	String	11	Alphanumeric	Conditional	165
525	NestedPartyIDSource	Source of NestedPartyID value.	Char	1	D = Proprietary / Custom code P = Short code identifier	Conditional	166
538	NestedPartyRole	Identifies the type or role of the NestedPartyID (524) specified.	Int	3	3 = Client ID 4 = Clearing Firm 122 = Investment decision maker	Conditional	166
2384	NestedPartyRoleQualifier	Used to further qualify the value of NestedPartyRole(538).	Int	2	(See field description)	Conditional	166
44	Price	Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).	Price	20	From -2^{63} to $2^{63}-1$	Conditional	184
38	OrderQty	Total order quantity, per quantity unit (to be calculated with Quantity Decimals).	Qty	20	From 0 to $2^{64}-2$	Mandatory	176
40	OrdType	Type of Order.	Char	1	(See field description)	Mandatory	177
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Mandatory	193
59	TimeInForce	Specifies the maximum validity of an order.	Char	1	(See field description)	Mandatory	196
20021	LPRole	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	Int	1	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C] 12 = RFQ Liquidity Provider [C]	Optional	149

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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)	Optional	127
21015	STPAggressorIndicator	Field used as instruction for order handling.	Int	1	0 = Cancel resting order [C] 1 = Cancel incoming order [C] 9 = Disable STP [C]	Optional	194
21016	DisclosedQtyRandIndicator	Indicates whether the client requests or not a randomization for the disclosed quantity of his iceberg order.	Int	1	0 = No 1 = Yes	Optional	150
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	0 = Per Default Configuration 1 = Order not in the scope of Cancel On Disconnect	Mandatory	143
1094	PegPriceType	Defines the type of the peg order.	Int	1	2 = Mid-price peg (midprice of inside quote), Pending Regulatory Approval) [C] 4 = Market peg [C] 5 = Primary peg (primary market - buy at bid or sell at offer) [C]	Conditional	182
211	PegOffsetValue	Tick offset for a pegged order.	Int	3	From -127 to 127	Conditional	181
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	148
1724	OrderOrigination	Identifies the origin of the order.	Int	1	5 = Order received from a direct access or sponsored access customer	Conditional	175
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, from 1 to 2	Optional	168

Tag	Field	Short Description	Format	Len	Values	Presence	Page
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
2362	SelfMatchPreventionID	For Future Use.	String	5	From 0 to 2^16-2	Optional	190
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	195
99	StopPx	Stop Trigger Price is mandatory for stop orders.	Price	20	From -2^63 to 2^63-1	Conditional	193
20004	UndisclosedPrice	Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)	Price	20	From -2^63 to 2^63-1	Optional	199
1138	DisplayQty	Maximum number of quantity units to be shown to market participants (Iceberg Order).	Qty	20	From 0 to 2^64-1	Conditional	150
126	ExpireTime	Field used as time of order expiration for GTT orders (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	155
432	ExpireDate	Field used as date of order expiration (last day the order can trade) for GTD orders(Format: YYYYMMDD).	LocalMktDate	8	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31	Conditional	155
336	TradingSessionID	Trading session validity.	String	3	101 = Session 1 102 = Session 2 103 = Session 3 123 = All Sessions	Conditional	198
20175	TriggeredStopTimeInForce	Specifies the maximum validity of an triggered stop order.	Char	1	0 = Day 1 = Good Till Cancel 6 = Good till Date	Conditional	199
20005	UndisclosedIcebergType	Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.	Int	1	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Conditional	199

Tag	Field	Short Description	Format	Len	Values	Presence	Page
1	Account	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	String	12	Alphanumeric	Optional	138
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	195
7443	PostingAction	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	MultipleCharValue	17	(See field description)	Optional	183
577	ClearingInstruction	Clearing Instruction.	Int	4	(See field description)	Optional	144
9930	ConfirmFlag	Field used to confirm a collar pass-through in case of rejection due to collar breach.	Char	1	0 = Not confirmed (default) 1 = Confirmed	Optional	146
21800	ConditionalOrderFlag	Field used to specify if the order is a conditional or a firm order.	Char	1	0 = Firm (default) 1 = Conditional	Conditional	146
21801	FRMARAMPLP	Indicates whether the order is subject to French Market Abuse Regulation Accepted Market Practive Liquidity Provision or not.	Char	1	0 = Not subject to FR MAR AMP LP (default) 1 = Subject to FR MAR AMP LP	Optional	156
	Message Trailer					**Mandatory**	

5.3.7   OrderCancelReject (9)

Client ◄OEG

Available for: EQ FUND FRM SP OPT FUT CMDT BLK

Message Usage:

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* 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* field will refer to the targeted order. Hence in case of a rejection of an **OrderCancelRequest** (F) message, the *ClOrdID* field will refer to the *ClOrdID* 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*, *OrderId*, *OrigClOrdID*…) 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*, 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: *Order ID* (37) / *Original Client Order ID* (41), *Order Side* (54), *Order Type* (40) and *Firm ID* (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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
21005	ClientMessageSendingTime	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	145
5979	OEGINFromMember	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171

Tag	Field	Short Description	Format	Len	Values	Presence	Page
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	170
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63 to 2^63-1	Conditional	145
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 2^32-1	Conditional	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Conditional	190

Tag	Field	Short Description	Format	Len	Values	Presence	Page
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Conditional	151
37	OrderID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-1	Conditional	174
9955	ErrorCode	Error code in case of rejection.	Int	5	From 0 to 2^16-1	Conditional	152
434	CxlRejResponseTo	Origin of cancellation rejection	Char	1	(See field description)	Mandatory	148
9962	CollarRejType	Hit collar type (high or low) in case of order rejection due to collar breach.	Char	1	1 = Low dynamic collar 2 = High dynamic collar	Conditional	146
21001	BreachedCollarPrice	Breached collar price in case of collar rejection (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63+1 to 2^63-1	Conditional	143
39	OrdStatus	Order status.	Char	1	(See field description)	Mandatory	177
	Message Trailer					**Mandatory**	

5.3.8   RequestAckMessage (Uy)

Available for: EQ   FUND   FRM   SP   OPT   FUT   CMDT   DC

Client ◄OEG
Message Usage:

This message is used by the Trading Engine to acknowledge a **PriceInput** (UI) message request and a **LiquidityProviderCommand** (UZ) sent by Liquidity Providers 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:

- **PriceInput** (UI)
- **LiquidityProviderCommand** (UZ)
- **OwnershipRequest** (U18)
- **OrderMassStatusRequest** (AF)

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

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

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	

Tag	Field	Short Description	Format	Len	Values	Presence	Page
21005	ClientMessageSendingTime	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	145
5979	OEGINFromMember	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142

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Tag	Field	Short Description	Format	Len	Values	Presence	Page
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	170
21060	RequestID	Unique message identifier as assigned by the Client when submitting the message request.	String	20	From -2^63 to 2^63-1	Conditional	173
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 2^32-1	Conditional	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Conditional	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Conditional	151
372	RefMsgType	The MsgType (35) of the FIX message being referenced.	String	3	Value received in the rejected inbound message, if any	Conditional	187
9955	ErrorCode	Error code in case of rejection.	Int	5	From 0 to 2^16-1	Conditional	152
10076	LPActionCode	Action the LP wants to apply on the specified instrument of warrant type.	Char	1	(See field description)	Conditional	161
	Message Trailer					**Mandatory**	

5.3.9   OwnershipRequest (U18)

Client ▶ OEG

Available for: EQ FUND FRM SP OPT FUT CMDT BLK

Message Usage:

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* and *SecurityID* of the targeted order. It could also be all orders of the specified *SecurityID* belonging to the targeted Logical Access (*LogicalAccessID*).

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 trading engine responds with the **RequestAckMessage** (Uy) message and the associated error code.

Components Usage within the Message:

This message contains one component ***Parties*** which is composed of the fields: *NoPartyIDs*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier*.

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 Account Type = 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.

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**"

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
37	OrderID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-1	Conditional	174
41	OrigClOrdID	Client order ID of the original order.	String	20	From -2^63 to 2^63-1	Conditional	178

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	From 1 to 2	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, always set to 1	Optional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
21019	OEPartitionID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Int	5	From 0 to 2^16-2	Optional	171
21021	LogicalAccessID	Identifier of the Logical Access.	Int	10	From 0 to 2^32-1	Conditional	161

Tag	Field	Short Description	Format	Len	Values	Presence	Page
21041	OrderCategory	Field used as instruction for order handling. - Lit Order: indicates whether the client requests to cancel a Lit order. - LIS Order: indicates whether the client requests to cancel a LIS order. - Quote Request: indicates whether the client requests to cancel a Quote Request. - RFQ LP Answer: indicates whether the client requests to cancel an Lp Answer to a Quote Request.	Char	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Conditional	174
	Message Trailer					**Mandatory**	

5.3.10 OwnershipRequestAck (U29)

Client ◄OEG

Available for: EQ FUND FRM SP OPT FUT CMDT BLK

Message Usage:

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*.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63 to 2^63-1	Mandatory	145
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 2^32-1	Mandatory	189

Tag	Field	Short Description	Format	Len	Values	Presence	Page
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
37	OrderID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-1	Conditional	174
21019	OEPartitionID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Int	5	From 0 to 2^16-1	Conditional	171
21021	LogicalAccessID	Identifier of the Logical Access.	Int	10	From 0 to 2^32-1	Conditional	161
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 -2^31+1 to 2^31-1	Mandatory	196
21041	OrderCategory	Field used as instruction for order handling. - Lit Order: indicates whether the client requests to cancel a Lit order. - LIS Order: indicates whether the client requests to cancel a LIS order. - Quote Request: indicates whether the client requests to cancel a Quote Request. - RFQ LP Answer: indicates whether the client requests to cancel an Lp Answer to a Quote Request.	Char	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Conditional	174
	Message Trailer					**Mandatory**	

5.3.11 QuoteRequest (R)

Client ▶OEG

Available for: FUND

Message Usage:

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

This message is sent to the Liquidity Providers registered for the specified instrument and will not lead to a market data publication.

Fields *Side* and *EndClient* are optional as the client may or may not indicate those parameters depending of the nature of the request.

Components Usage within the Message:

This message contains one component ***Parties*** which is composed of the fields: *NoPartyIDs*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier*.

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 Account Type = 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.

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)

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
60	TransactTime	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	198
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	3	(See field description)	Mandatory	151
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Optional	193
38	OrderQty	Total order quantity, per quantity unit (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-2	Mandatory	176
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	148
110	MinQty	Minimum quantity to be executed upon order entry (else the order is rejected).	Qty	20	Value '0' by default and depending to a minimum value for the given instrument and/or market type	Optional	164
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	From 1 to 2	Mandatory	168

Tag	Field	Short Description	Format	Len	Values	Presence	Page
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
	Message Trailer					**Mandatory**	

5.3.12 QuoteRequestReject (AG)

Client ◄OEG

Available for: ᔆᴾ

Message Usage:

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

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
5979	OEGINFromMember	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	171
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	171
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	142
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	142

Tag	Field	Short Description	Format	Len	Values	Presence	Page
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	170
131	QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-2	Mandatory	185
658	QuoteRequestRejectReason	Reason the QuoteRequest (R) was rejected.	Int	2	99 = Other	Mandatory	186
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
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	195
146	NoRelatedSym	Number of related symbols (instruments) in QuotesRequest (R).	NumInGroup	1	Always set to 1	Mandatory	169
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
	Message Trailer					**Mandatory**	

5.3.13 AskForQuote (UL)

Client ◀OEG

Available for: SP

Message Usage:

This message is used only for the Warrants on the New Market Model and sent by the trading engine to the Liquidity Provider when a quote of the latter is required. *AFQReason (9939)* identifies the case that triggers this request.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**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 2^32-2	Mandatory	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
9939	AFQReason	Reason why the AskForQuote (UL) has been sent.	Char	1	(See field description)	Mandatory	139
	Message Trailer					**Mandatory**	

5.3.14 UserNotification (CB)

Client ◀OEG

Available for: EQ FUND FRM SP OPT FUT CMDT

Message Usage:

In 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.

In such cases, the **UserNotification** (CB) message is used to notify clients if they have been suspended/ killed or if their suspension/kill status has been lifted, and the scope (or granularity) 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 Execution Report (8) message with error code 2512 "Suspended by EMS".

The field *UserStatus* 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* associated to each value provides for the following possible actions and granularities.

Actions:

Action	Description
Suspended	access to the trading system has been suspended
Suspension Cleared	access to the trading system has been restored after a Suspension
Killed	access to the trading system has been suspended and all unexecuted orders submitted have been cancelled
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

Scope (for the Kill):

SenderCompID is always provided (in the header) but it represents the scope of the kill only in case the action has been taken only when specified by *UserStatus* as Firm.

Scope	Description	Identifier Field Provided
Trader-Algo	a trader or an algorithm will be in scope, applied based on the value specified in the field *ExecutionWithinFirmShortCode.* In this case the field *ExecutionWithinFirmShortCode* in the message will be populated with the stipulated value	*ExecutionWithinFirmShortCode*
Firm	member, including all of the physical connections and orders associated to the Firm ID will be in scope	*FirmID*
DEA	the sub-set of orders / messages flagged as being submitted via a Direct Electronic access (DEA) provided by members to their own clients either for Sponsored Access or Direct Market Access (DMA) In case of Kill command being done for Sponsored Access, the Status will identify "DEA" and the field *ClientIdentificationShortCode* will not be populated In case the Kill command is done for the DMA, the command is applied based on the value specified in the field *ClientIdentificationShortCode.* In this case the field *ClientIdentificationShortCode* in the message will be populated with the stipulated value	*ClientIdentificationShortCode*

Components Usage within the Message:

 1.7.1

This message contains one component **Parties** which is composed of the fields: *NoPartyIDs*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier*.

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)

Case 4: ExecutionwithinFirmShortCode for a Firm or DEA

- ♦ *PartyID (448)* = field in which the **short code** is provided
- ♦ *PartyIDSource (447)* = **P** (Short code identifier) *PartyRole (452)* = **1** (Executing Firm)
- ♦ *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 Account Type = 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.

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)* = **D** (Proprietary / Custom Code)
- *PartyRole (452)* = **3** (Client ID)
- *PartyRoleQualifier (2376)* = **23** (Firm or legal entity) OR **24** (Natural person)

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
926	UserStatus	Status of the user.	Int	3	(See field description)	Mandatory	200
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	From 1 to 2	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	D = Proprietary / Custom Code P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
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	195
20165	RiskFamily	Identifier of the family.	String	3	Alphanumeric	Conditional	189
1656	NoInstrumentScopes	Number of Instruments.	NumInGroup	3	If provided, always set to 1	Conditional	167
1538	InstrumentScopeSecurityID	Security ID.	String	10	From 0 to 2^32-2	Conditional	157

Tag	Field	Short Description	Format	Len	Values	Presence	Page
1539	InstrumentScopeSecurityIDSource	Used to limit instrument scope.	String	1	8 = Symbol Index	Conditional	157
	Message Trailer					**Mandatory**	

5.3.15 PriceInput (UI)

Client ▶OEG

Available for: EQ FUND FRM SP

Message Usage:

The trading 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 one component **Parties** which is composed of the fields: *NoPartyIDs*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier*.

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: 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 Account Type = 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.

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**"

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	From 1 to 2	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, always set to 1	Optional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
44	Price	Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).	Price	20	From -2^63 to 2^63-1	Conditional	184

Tag	Field	Short Description	Format	Len	Values	Presence	Page
9950	InputPxType	Type of input price.	Char	1	1 = Valuation Price 2 = Alternative Indicative Price (AIP)	Mandatory	157
	Message Trailer					**Mandatory**	

5.3.16 LiquidityProviderCommand (UZ)

Client ▶OEG

Available for: ^{SP}

Message Usage:

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 one component *Parties* which is composed of the fields: *NoPartyIDs*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier*.

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)* = **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 Account Type = 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.

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**"

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	From 1 to 2	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, always set to 1	Optional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
10076	LPActionCode	Action the LP wants to apply on the specified instrument of warrant type.	Char	1	(See field description)	Mandatory	161

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Trailer					**Mandatory**	

5.3.17 OrderMassStatusRequest (AF)

Client ▶OEG

Available for: EQ FUND FRM SP OPT FUT CMDT BLK

Message Usage:

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

- 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 trading engine responds with the **RequestAckMessage** (Uy) message and the associated error code.

Components Usage within the Message:

This message contains one component **Parties** which is composed of the fields: *NoPartyIDs*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier*.

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: 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 Account Type = 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.

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**"

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	

Tag	Field	Short Description	Format	Len	Values	Presence	Page
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
37	OrderID	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-1	Conditional	174
41	OrigClOrdID	Client order ID of the original order.	String	20	From -2^63 to 2^63-1	Conditional	178
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	From 1 to 2	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, always set to 1	Optional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
584	MassStatusReqID	Client ID for the Order Mass Status Request.	String	20	From -2^63+1 to 2^63-1	Mandatory	163
585	MassStatusReqType	Mass status request type.	Int	3	101 = Status of a single order	Mandatory	163

Tag	Field	Short Description	Format	Len	Values	Presence	Page
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
21041	OrderCategory	Field used as instruction for order handling. - Lit Order: indicates whether the client requests to cancel a Lit order. - LIS Order: indicates whether the client requests to cancel a LIS order. - Quote Request: indicates whether the client requests to cancel a Quote Request. - RFQ LP Answer: indicates whether the client requests to cancel an Lp Answer to a Quote Request.	Char	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Conditional	174
	Message Trailer					**Mandatory**	

5.3.18 OrderMassCancelRequest (q)

Client ▶OEG

Available for: EQ FRM SP OPT FUT CMDT FUND BLK

Message Usage :

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).

If the value 1 is specified in the *MassCancelRequestType (530)* the *SecurityID (48)* field must be specified. If the value A is specified in the *MassCancelRequestType (530)* the *ClassID (9945)* field must be specified. (Note that if both *SecurityID* and *ClassID* are populated, the granularity of the **OrderMassCancelRequest** will be set depending on the value of the field *MassCancelRequestType)*.

Optional additional criteria can be specified: *EMM*, *Side*, *AccountCode*, *LogicalAccessID*, and *OEPartitionID* (*MaturityMonthYear*, *DerivativeSymbol*, and *DerivativePutOrCall* are only used for derivatives markets). Those filters are used to restrict the scope of the Mass Cancel request. (Please note that *OEPartitionID* is not taken into account if *LogicalAccessID* is not populated).

When an error is detected in any field of the message, the trading engine responds with the **OrderCancelReject** (9) message and the associated error code.

Components Usage within the Message:

This message contains one component **Parties** which is composed of the fields: *NoPartyIDs*, *PartyID*, *PartyIDSource*, *PartyRole* and *PartyRoleQualifier*.

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

<u>Presence Condition</u>: 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

<u>Presence Condition</u>: 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 Account Type = 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.

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**"

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
60	TransactTime	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	198
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
530	MassCancelRequestType	Scope of orders already in COB to be cancelled only for them having the selected maturity.	Char	1	1 = Cancel orders for a security A = Cancel orders for a security group	Mandatory	162
9945	ClassID	Instrument Trading Group / Class Identifier.	String	2	Alphanumeric	Conditional	144
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 2^32-1	Conditional	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Conditional	190

Tag	Field	Short Description	Format	Len	Values	Presence	Page
453	NoPartyIDs	Number of PartyID entries.	NumInGroup	1	From 1 to 2	Mandatory	168
448	PartyID	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	String	11	Alphanumeric	Mandatory	179
447	PartyIDSource	Source of PartyID value.	Char	1	P = Short code identifier	Mandatory	180
452	PartyRole	Identifies the type or role of the PartyID (448) specified.	Int	3	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Mandatory	180
2376	PartyRoleQualifier	Used to further qualify the value of PartyRole(452).	Int	2	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Mandatory	181
2593	NoOrderAttributes	Number of order attribute entries.	NumInGroup	1	If provided, always set to 1	Optional	168
2594	OrderAttributeType	The type of order attribute.	Int	1	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	Optional	173
2595	OrderAttributeValue	The value associated with the order attribute type specified in OrderAttributeType (2594).	String	1	Y = Yes	Optional	174
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Optional	151
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Optional	193
21019	OEPartitionID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Int	5	From 0 to 2^16-1	Optional	171
21021	LogicalAccessID	Identifier of the Logical Access.	Int	10	From 0 to 2^32-1	Optional	161
1214	*DerivativeSymbol*	*Identifier of a derivatives contract (Symbol Index).*	*String*	*10*	*From 0 to 2^32-1*	*Conditional*	*150*
1323	*DerivativePutOrCall*	*Type of the option.*	*Int*	*1*	*1 = Call* *2 = Put*	*Optional*	*150*
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)	Optional	91
1303	*MaturityMonthYear Format*	*Defines the format of MaturityMonthYear.*	*Int*	*1*	*0 = YearMonth (only default)*	*Optional*	*164*

Tag	Field	Short Description	Format	Len	Values	Presence	Page
200	*MaturityMonthYear*	*Scope of active orders to be cancelled according to the selected maturity, expressed in YYYYMMDD format.*	*MonthYear*	*6*	*Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31*	*Optional*	*163*
21041	OrderCategory	Field used as instruction for order handling. - Lit Order: indicates whether the client requests to cancel a Lit order. - LIS Order: indicates whether the client requests to cancel a LIS order. - Quote Request: indicates whether the client requests to cancel a Quote Request. - RFQ LP Answer: indicates whether the client requests to cancel an Lp Answer to a Quote Request.	Char	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Conditional	174
	Message Trailer					**Mandatory**	

5.3.19 OrderMassCancelReport (r)

Client ◀OEG

Available for: EQ FRM SP OPT FUT CMDT FUND BLK

Message Usage:

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* 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)

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	

Tag	Field	Short Description	Format	Len	Values	Presence	Page
21005	ClientMessageSendingTime	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	145
5979	OEGINFromMember	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	171
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	142
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	142

Tag	Field	Short Description	Format	Len	Values	Presence	Page
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	170
11	ClOrdID	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	String	20	From -2^63+1 to 2^63-1	Mandatory	145
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 -2^31+1 to 2^31-1	Mandatory	196
9945	ClassID	Instrument Trading Group / Class Identifier.	String	2	Alphanumeric	Conditional	144
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 2^32-1	Conditional	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Conditional	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Conditional	151
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Conditional	193
21019	OEPartitionID	Identifies uniquely an OE Optiq partition by which the engine is reached.	Int	5	From 0 to 2^16-1	Conditional	171
21021	LogicalAccessID	Identifier of the Logical Access.	Int	10	From 0 to 2^32-1	Conditional	161
1214	*DerivativeSymbol*	*Identifier of a derivatives contract (Symbol Index).*	*String*	*10*	*From 0 to 2^32-1*	*Conditional*	*150*
1323	*DerivativePutOrCall*	*Type of the option.*	*Int*	*1*	*1 = Call* *2 = Put*	*Conditional*	*150*
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	91

Tag	Field	Short Description	Format	Len	Values	Presence	Page
1303	*MaturityMonthYear Format*	*Defines the format of MaturityMonthYear.*	*Int*	*1*	*0 = YearMonth (only default)*	*Optional*	*164*
200	*MaturityMonthYear*	*Scope of active orders to be cancelled according to the selected maturity, expressed in YYYYMMDD format.*	*MonthYear*	*6*	*Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31*	*Conditional*	*163*
1369	MassActionReportID	Exchange allocated order mass cancel report ID.	String	20	Value provided by the Trading Engine	Mandatory	162
530	MassCancelRequest Type	Scope of orders already in COB to be cancelled only for them having the selected maturity.	Char	1	1 = Cancel orders for a security A = Cancel orders for a security group	Mandatory	162
531	MassCancelResponse	Specifies the action taken by counterparty order handling system as a result of the OrderMassCancelRequest (AF).	Char	1	1 = Cancel orders for a security A = Cancel orders for a security group	Mandatory	163
21041	OrderCategory	Field used as instruction for order handling. - Lit Order: indicates whether the client requests to cancel a Lit order. - LIS Order: indicates whether the client requests to cancel a LIS order. - Quote Request: indicates whether the client requests to cancel a Quote Request. - RFQ LP Answer: indicates whether the client requests to cancel an Lp Answer to a Quote Request.	Char	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Conditional	174
	Message Trailer					**Mandatory**	

5.3.20 RFQNotification (U35)

Client ◄OEG

Available for: ^{FUND}

Message Usage:

The **RFQNotification** (U35) message is sent by the trading 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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	142
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	170
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	171
131	QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to $2^{64}-2$	Mandatory	185
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	189

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Tag	Field	Short Description	Format	Len	Values	Presence	Page
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
38	OrderQty	Total order quantity, per quantity unit (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-2	Mandatory	176
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Optional	193
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	148
110	MinQty	Minimum quantity to be executed upon order entry (else the order is rejected).	Qty	20	Value '0' by default and depending to a minimum value for the given instrument and/or market type	Optional	164
21041	OrderCategory	Field used as instruction for order handling. - Lit Order: indicates whether the client requests to cancel a Lit order. - LIS Order: indicates whether the client requests to cancel a LIS order. - Quote Request: indicates whether the client requests to cancel a Quote Request. - RFQ LP Answer: indicates whether the client requests to cancel an Lp Answer to a Quote Request.	Char	1	1 = Lit Order 2 = LIS Order 3 = Quote Request 4 = RFQ LP Answer	Conditional	174
	Message Trailer					**Mandatory**	

5.3.21 RFQMatchingStatus (U36)

Client ◄ OEG

Available for: **FUND**

Message Usage:

The **RFQMatchingStatus** (U36) message is sent by the trading engine to inform the RFQ issuer about the potential matching situation (potential matching price, potential matching quantity, and number of Liquidity Providers) at the time the message is sent.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	142
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	170
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	171
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151

Tag	Field	Short Description	Format	Len	Values	Presence	Page
131	QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-2	Mandatory	185
21030	PotentialMatchingPrice	The PotentialMatchingPrice indicates to the RFQ issuer the matching price (to be calculated with Price/Index Level Decimals) for the PotentialMatchingQuantity.	Price	20	From -2^63+1 to 2^63-1	Conditional	183
21031	PotentialMatchingQuantity	The PotentialMatchingQuantity indicates the maximum volume that would be matched in case of an RFQ validation (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-2	Mandatory	183
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Mandatory	193
21034	NumberOfLPs	Indicates the number of LPs who sent an answer to a specific RFQ.	Int	2	Numerical	Conditional	170
	Message Trailer					**Mandatory**	

5.3.22 RFQLPMatchingStatus (U37)

Client ◄OEG

Available for: ^{FUND}

Message Usage:

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

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
21002	BookINTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	142

Tag	Field	Short Description	Format	Len	Values	Presence	Page
21003	BookOUTTime	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	142
7765	OEGINFromME	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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	170
7764	OEGOUTToME	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	171
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
131	QuoteReqID	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.	String	20	From 0 to 2^64-2	Mandatory	185
21031	PotentialMatchingQuantity	The PotentialMatchingQuantity indicates the maximum volume that would be matched in case of an RFQ validation (to be calculated with Quantity Decimals).	Qty	20	From 0 to 2^64-2	Mandatory	183

Tag	Field	Short Description	Format	Len	Values	Presence	Page
54	Side	Indicates the side of the order.	Char	1	1 = Buy 2 = Sell	Mandatory	193
	Message Trailer					**Mandatory**	

5.3.23 RequestForExecution (UM)

Client ◄OEG

Available for: SP

Message Usage:

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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**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 2^32-2	Mandatory	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
	Message Trailer					**Mandatory**	

5.3.24 InstrumentSynchronizationList (U50)

Client ◄OEG

Available for: EQ FUND FRM SP OPT FUT CMDT BLK

Message Usage:

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.

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Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
20030	ResynchronizationID	Each Instrument is assigned to a Recovery ID that is used in case of failover.	Int	5	From 0 to 2^16-2	Mandatory	177
146	NoRelatedSym	Number of SecurityID entries.	NumInGroup	3	From 1 to 254	Mandatory	160
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	189
22	SecurityIDSource	Gives the type of SecurityID.	String	1	8 = Symbol Index	Mandatory	190
20020	EMM	Defines the Exchange Market Mechanism applied on each platform.	Int	2	(See field description)	Mandatory	151
	Message Trailer					**Mandatory**	

5.3.25 SynchronizationTime (U51)

Client ◀OEG

Available for: EQ FUND FRM SP OPT FUT CMDT BLK

Message Usage:

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.

Tag	Field	Short Description	Format	Len	Values	Presence	Page
	Message Header					**Mandatory**	
20030	ResynchronizationID	Each Instrument is assigned to a Recovery ID that is used in case of failover.	Int	5	From 0 to 2^16-2	Mandatory	177
20031	LastBookInTime	Last Matching Engine In Time (in ns) processed on the associated ResynchronizationID. (Format: YYYYMMDD-HH:MM:SS.sssssssss).	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)	Mandatory	149
	Message Trailer					**Mandatory**	

6. FIELD DESCRIPTION

A

Account

Field Name	Account
Tag	1
Description	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.
Used For	Cash and Derivatives
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	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	MassQuoteAck (b)
	OrderCancelReplaceRequest (G)

AccountCode

Field Name	AccountCode
Tag	6399
Description	Indicates the account type for which the order is entered. For example, an order can be entered for a client account, a house account or a liquidity provider account.
	For Cross orders it specifies the account type for which the buy side of a cross order is entered.
	- Non-LP clients are not allowed to use the type '6' (Liquidity Provider).
	- Only members acting as Retail Member Organizations (RMO) can send '4' (RO) orders on behalf of their retail clients.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	1 = Client
	2 = House
	4 = RO [C]
	6 = Liquidity Provider
	7 = Related Party [C]
	8 = Structured Product Market Maker [C]
Conditions	It is mandatory for every NewOrderSingle (D).
	In OrderCancelReplaceRequest (G) message, if provided the field is ignored.
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	MassQuoteAck (b)
	OrderCancelReplaceRequest (G)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)

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.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	1 = Continuous Trading Phase 2 = Call Phase 3 = Halt Phase [C] 4 = Closed Phase 5 = Trading At Last Phase 6 = Reserved 7 = Suspended 8 = Random Uncrossing Phase
Conditions	It is provided only as response to NewOrderSingle (D) and OrderCancelReplaceRequest (G) message.
Used In	ExecutionReport (8)

AckQualifiers

Field Name	AckQualifiers
Tag	21014
Description	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. - Dark Indicator: Indicates whether the corresponding order was entered as a dark order or not. (0: LIT ; 1: Dark). For Iceberg Order it indicates whether its undisclosed part is eligible to the Dark pool of liquidity or not. - Queue Indicator: indicates whether the corresponding inbound message was queued because of throttling or not. (0: No ; 1: Yes).
Used For	Cash and Derivatives
Format	MultipleCharValue
Length	3
Possible Values	0 = Dark Indicator 1 = Queue Indicator
Conditions	Provided only as a response to a NewOrderSingle (D) and to OrderCancelReplaceRequest (G).
Used In	ExecutionReport (8)

AFQReason

Field Name	AFQReason
Tag	9939
Description	Reason why the AskForQuote (UL) has been sent. Indicates the reason why the AskForQuote (UL) message has been sent to the Liquidity Provider.
Used For	Cash
Format	Char
Length	1
Possible Values	1 = Quote cancelled by the Liquidity Provider 2 = Quote cancelled by Market Control

	3 = No quote M minutes before an uncrossing
	4 = No quote S seconds before an uncrossing
	5 = Quote completely matched
Conditions	Always provided.
Used In	AskForQuote (UL)

B

BeginSeqNo

Field Name	BeginSeqNo
Tag	7
Description	Message sequence number for first message.
Used For	Cash and Derivatives
Format	SeqNum
Length	10
Possible Values	From 1 to 2^32-2
Used In	ResendRequest (2)

BeginString

Field Name	BeginString
Tag	8
Description	Beginning of message identifier.
	Identifies the beginning of message and the protocol version. Must be the first field in message.
	Always unencrypted.
Used For	Cash and Derivatives
Format	String
Length	9
Possible Values	FIXT.1.1 (Always unencrypted, must be first field in message)
Conditions	Inbound messages: Mandatory.
	Outbound messages: Always Provided.
Used In	Message Header

BidErrorCode

Field Name	BidErrorCode
Tag	9934
Description	Error code returned when quote contains an invalid bid.
	See Error List for details of error codes.
Used For	Cash and Derivatives
Format	Int
Length	6
Possible Values	From 0 to 2^16-1
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 field.
Used In	MassQuoteAck (b)

BidPx

Field Name	BidPx
Tag	132
Description	Quote bid price (to be calculated with Price/Index Level Decimals).
Used For	Cash and Derivatives
Format	Price
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	Either the field *BidPx (132),* or the field *OfferPx (133),* or both, must be populated.
Used In	MassQuote (i)

BidQuoteID

Field Name	BidQuoteID
Tag	1747
Description	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.
Used For	Cash and Derivatives
Format	String
Length	20
Possible Values	From 0 to 2^64-1
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 MassQuote, is filled with value in *BidQuoteID* (1747) corresponding to the Bid quote that participated in the trade.
Used In	MassQuoteAck (b)

BidSize

Field Name	BidSize
Tag	134
Description	Quote bid quantity (to be calculated with Quantity Decimals). Cancels a quote if set to zero '0'.
Used For	Cash and Derivatives
Format	Qty
Length	20
Possible Values	From 0 to 2^64-1
Conditions	Mandatory if the field *OfferSize (135)* is provided.
Used In	MassQuote (i)

BodyLength

Field Name	BodyLength
Tag	9
Description	Message length including header, body and trailer. Message length, in bytes, forward to checksum field. Must be second field in message. Always unencrypted.
Used For	Cash and Derivatives
Format	Length

Length	6
Possible Values	Integer
Conditions	Inbound messages: Mandatory.
	Outbound messages: Always Provided.
Used In	Message Header

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.sssssssss).
Used For	Cash and Derivatives
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, sssssssss = 000000000-999999999 (nanoseconds)
Conditions	In ExecutionReport (8) message:
	- it corresponds to the order creation/modification time or to the cancellation time, according to the fields *ExecType* (150) and *OrdStatus* (39).
	- in case of an acknowledgement message, it corresponds to the time at which the event generating the ExecutionReport (8) entered the matching engine.
	- in case of a kill message it corresponds to the time at which the corresponding order has been killed
	- in case of trade cancellation, it corresponds to the trade cancellation time.
	In Message **RequestAckMessage** (Uy) field populated when sent to provide positive acknowledgement of message **PriceInput** (UI) or **LiquidityProviderCommand** (UZ). Not populated when communicating rejection of **PriceInput** (UI), **LiquidityProviderCommand** (UZ), **OwnershipRequest** (U18), **OrderMassStatusRequest** (AF) messages
Used In	ExecutionReport (8)
	MassQuoteAck (b)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	QuoteRequestReject (AG)
	OrderMassCancelReport (r)
	RFQNotification (U35)
	RFQMatchingStatus (U36)

BookOUTTime

Field Name	BookOUTTime
Tag	21003
Description	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.sssssssss).
Used For	Cash and Derivatives
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, sssssssss = 000000000-999999999 (nanoseconds)
Used In	ExecutionReport (8)

	MassQuoteAck (b)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	QuoteRequestReject (AG)
	OrderMassCancelReport (r)
	RFQNotification (U35)
	RFQMatchingStatus (U36)

BreachedCollarPrice

Field Name	BreachedCollarPrice
Tag	21001
Description	Breached collar price in case of collar rejection (to be calculated with Price/Index Level Decimals).
Used For	Cash
Format	Price
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	Provided only in case of a rejection due to a collar breach.
Used In	ExecutionReport (8)
	OrderCancelReject (9)

BuyRevisionIndicator

Field Name	BuyRevisionIndicator
Tag	21008
Description	Indicates whether the bid quote is a replacement of a previous quote, or not. (1: Replacement ; 0: New).
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = New
	1 = Replacement
	2 = Cancellation
Conditions	Provided only if the MassQuote (i) message contains a bid quote.
Used In	MassQuoteAck (b)

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)
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = Per Default Configuration
	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	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelReplaceRequest (G)

CheckSum

Field Name	CheckSum
Tag	10
Description	Simple checksum.
	Always 3 bytes, always unencrypted, always last field in message.
Used For	Cash and Derivatives
Format	String
Length	3
Possible Values	Numerical
Conditions	Inbound messages: Mandatory.
	Outbound messages: Always Provided.
Used In	Message Trailer

ClassID

Field Name	ClassID
Tag	9945
Description	Instrument Trading Group / Class Identifier.
Used For	Cash
Format	String
Length	2
Possible Values	Alphanumeric
Conditions	In OrderMassCancelRequest (q): mutually exclusive with SecurityID.
	In OrderMassCancelRequestReport (r), provided with the value held by the OrderMassCancelRequest (q), if any; else, not provided.
Used In	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)

ClearingInstruction

Field Name	ClearingInstruction
Tag	577
Description	Clearing Instruction.
	Indicates the pre-posting and give-up action to be taken by the clearing system when a trade has occurred:
	- Process normally
	- Manual mode (pre-posting and/or pre-giveup)
	- Automatic posting mode (trade posting to the position account number specified)
	- Automatic give-up mode (trade give-up to the give-up destination number specified) [C]
	- Automatic and account authorization [D]
	- Manual and account authorization [D]
	- Give-up to single firm [D]
Used For	Cash and Derivatives
Format	Int

Length	4
Possible Values	0 = Process normally (formerly Systematic posting) [C]
	8 = Manual mode
	9 = Automatic posting mode
	10 = Automatic give-up mode [C]
	4008 = Automatic and account authorization [D]
	4009 = Manual and account authorization [D]
	4010 = Give-up to single firm [D]
Conditions	In ExecutionReport (8) message, this field is provided only for Drop Copy. Conditions for Drop Copy will be provided at a later date.
	In Drop Copy provided in Ack and Fill messages, if provided on order entry by the client.
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	MassQuoteAck (b)
	OrderCancelReplaceRequest (G)

ClientMessageSendingTime

Field Name	ClientMessageSendingTime
Tag	21005
Description	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).
Used For	Cash and Derivatives
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, sssssssss = 000000000-999999999 (nanoseconds)
Conditions	This field is provided only if the ExecutionReport (8) is a response to a requested inbound message.
Used In	ExecutionReport (8)
	MassQuoteAck (b)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	OrderMassCancelReport (r)

ClOrdID

Field Name	ClOrdID
Tag	11
Description	An identifier of an Order assigned by the Client when submitting an order to the Exchange.
	Clients must provide a ClOrdID in every inbound application message, otherwise the message will be immediately rejected by the OEG.
	Clients may provide any value that respects the ClOrdID format, which is a string of 20 characters, and the ranges as defined according to their access. The Exchange recommends setting an unique ID per order, Firm and SecurityID.
	For order entry, the ClOrdID value is not checked by the Exchange (besides the format), 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, the value is checked by the Exchange for possible duplicates, i.e. different orders submitted with the same ClOrdID. In case of duplication, the inbound request is rejected with the according error code.
Used For	Cash and Derivatives

Format	String
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	When used in inbound application messages, this field is always mandatory.
	In outbound application messages, this field is provided for solicited messages and not provided for unsolicited messages.
	In outbound ExecutionReport (8) messages if MassStatusReqID (584) is filled ClOrdID (11) is not provided.
	If message is sent due to breach of collars, as in that case there is an order acknowledgement ExecutionReport (8) before (the exchange "OrderID" is provided), the ClOrdID is not sent for the rejection message
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OrderCancelReject (9)
	OwnershipRequest (U18)
	OwnershipRequestAck (U29)
	QuoteRequest (R)
	QuoteRequestReject (AG)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)

CollarRejType

Field Name	CollarRejType
Tag	9962
Description	Hit collar type (high or low) in case of order rejection due to collar breach.
Used For	Cash
Format	Char
Length	1
Possible Values	1 = Low dynamic collar
	2 = High dynamic collar
Conditions	Provided only in case of a rejection due to a collar breach.
Used In	ExecutionReport (8)
	OrderCancelReject (9)

ConditionalOrderFlag

Field Name	ConditionalOrderFlag
Tag	21800
Description	Field used to specify if the order is a conditional or a firm order.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	0 = Firm (default)
	1 = Conditional
Used In	NewOrderSingle (D)
	OrderCancelReplaceRequest (G)
	ExecutionReport (8)

ConfirmFlag

Field Name	ConfirmFlag
Tag	9930
Description	Field used in cancel/replace request to confirm a collar pass-through in case of rejection due to collar breach. ConfirmFlag is not applicable for Dark orders.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	0 = Not confirmed (default) 1 = Confirmed
Used In	OrderCancelReplaceRequest (G)

ContraBroker

Field Name	ContraBroker
Tag	375
Description	ID of the clearing house in case of a CCP clearable transaction – also in the specific case of Internal Matching Service (IMS) with clearing : '1 ' : LCH SA '6 ' : EuroCCP ID of the Counterpart Firm in specific cases described below. The counterpart identifier is provided in the ExecutionReport (8) message in case the notified trade is the result of : - the Internal Matching Service (IMS) without clearing, - the Internal Clearing Service (ICS), - a transaction performed on the Public Auctions Market (VPU), - a transaction performed on a non-clearable or non-guaranteed instrument. The counterpart identifier is provided in the RFQ Notification (35) when the RFQ issuer agrees to send its Firm ID to Liquidity providers (field Firm ID Publication = Yes).
Used For	Cash
Format	String
Length	20
Possible Values	From 0 to 2^64-2
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	ExecutionReport (8)

CumQty

Field Name	CumQty
Tag	14
Description	Cumulated quantity (to be calculated with Quantity Decimals). Total number of shares filled. If an order is partially filled for a quantity q1, then partially filled for a quantity q2, in the first execution report, CumQty = q1 and in the second execution report, CumQty = q1 + q2.
Used For	Cash and Derivatives
Format	Qty

Length	20
Possible Values	From -1 to 2^64-2
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))
Used In	ExecutionReport (8)

CustOrderCapacity

Field Name	CustOrderCapacity
Tag	582
Description	Type of customer trading
Used For	Derivatives
Format	Int
Length	1
Possible Values	1 = For own account 2 = For clearing members house account 3 = For account of another member present 4 = For any other customer account
Used In	NewOrderSingle (D) ExecutionReport (8)

CxlRejResponseTo

Field Name	CxlRejResponseTo
Tag	434
Description	Origin of cancellation rejection
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	1 = OrderCancelRequest (F) 2 = OrderCancelReplaceRequest (G) 3 = MassQuote (i) 4 = OrderMassCancelRequest (q)
Used In	OrderCancelReject (9)

D

DarkExecutionInstruction

Field Name	DarkExecutionInstruction
Tag	20052
Description	Field used as instruction for dark order handling. This field can contain up to 8 values, space delimited, provided in different positions. - Dark Indicator: indicates whether the client requests its order to benefit from a Large In Scale Pre-Transparency waiver to match the order in the Dark. (0: No ; 1: Yes) - Sweep Order Indicator: indicates whether the client requests a sweep to his order between both LIT and the hidden pool of liquidity (Dark). (0: No ; 1: Yes) - Minimum Quantity Type: indicates whether the Minimum Quantity for a dark order is MES or MAQ. (0: MAQ ; 1: MES)
Used For	Cash

Format	MultipleCharValue
Length	9
Possible Values	First Position = Dark Indicator (0: No ; 1: Yes)
	Forfth Position = Sweep Order Indicator (0: No ; 1: Yes)
	Fifth Position = Minimum Quantity Type (0: MAQ ; 1: MES)
Conditions	On ETF MTF: Value 0: No is mandatory for the position 3 (Sweep Order Indicator) for any type of LIT order sent by the client.
	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D)
	ExecutionReport (8) (present only in Drop Copy Execution Report, otherwise not provided)
	OrderCancelReplaceRequest (G)
	QuoteRequest (R)
	RFQNotification (U35)

DefaultApplVerID

Field Name	DefaultApplVerID
Tag	1137
Description	Specifies the service pack release being applied, by default, to the message at the session level
Used For	Cash and Derivatives
Format	String
Length	1
Possible Values	9 = FIX50SP2
Used In	Logon (A)

DeliverToCompID

Field Name	DeliverToCompID
Tag	128
Description	ID of the receiving firm when the message is sent through a third party.
	This field holds the same information as the one held by OnBehalfOfCompID in inbound messages.
Used For	Cash and Derivatives
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:
	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.
	List of selected outbound messages: **ExecutionReport** (8), **OrderCancelReject** (9), **MassQuoteAck** (b), **QuoteRequestReject** (AG), **OrderMassCancelReport** (r), **RequestAckMessage** (Uy), **OwnershipRequestAck** (U29)
Used In	Message Header

DerivativePutOrCall

Field Name	DerivativePutOrCall
Tag	1323
Description	Type of the option.
Used For	Derivatives
Format	Int
Length	1
Possible Values	1 = Call 2 = Put
Conditions	Only for Derivative Markets.
Used In	OrderMassCancelRequest (q) OrderMassCancelReport (r)

DerivativeSymbol

Field Name	DerivativeSymbol
Tag	1214
Description	Identifier of a derivatives contract (Symbol Index).
Used For	Derivatives
Format	String
Length	10
Possible Values	From 0 to 2^32-1
Conditions	Only for Derivative Markets.
Used In	OrderMassCancelRequest (q) OrderMassCancelReport (r)

DisclosedQtyRandIndicator

Field Name	DisclosedQtyRandIndicator
Tag	21016
Description	Indicates whether the client requests or not a randomization for the disclosed quantity of his iceberg order.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = No 1 = Yes
Conditions	Mandatory if OrdType = X (Iceberg).
Used In	NewOrderSingle (D) ExecutionReport (8) OrderCancelReplaceRequest (G)

DisplayQty

Field Name	DisplayQty
Tag	1138
Description	Maximum number of quantity units to be shown to market participants (Iceberg Order). DisplayQty is to be calculated with Quantity Decimals.

Used For	Cash
Format	Qty
Length	20
Possible Values	From 1 to 2^64-1
Conditions	The DisplayQty is provided only if OrdType = X (Iceberg) and ExecType is '0' (New) or 'e' (Refilled Iceberg Ack).
	Disclosed quantity should be multiple of the instrument's lot size, otherwise the order will be rejected
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelReplaceRequest (G)

E

EMM

Field Name	EMM
Tag	20020
Description	Defines the Exchange Market Mechanism applied on each platform.
Used For	Cash and Derivatives
Format	Int
Length	2
Possible Values	1 = Cash and Derivative Central Order Book (COB)
	2 = NAV Trading Facility [C]
	4 = Derivative Wholesales [D]
	5 = Cash On Exchange Off book [C]
	6 = Euronext off-exchange trade reports
	7 = Derivative On Exchange Off book [D]
	8 = ETF MTF - NAV Central Order Book [C]
	9 = Listed-not traded [C]
	99 = Not Applicable (For indices and iNAV) [C]
Conditions	If the EMM present in the inbound message is unknown (i.e. the value is not one of the authorized values), it is sent back at Null value in the outbound Reject (07) message.
	If the EMM 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 at as it is in the outbound Reject (07) message.
	In TCS messages, the only possible values is'5' = Cash On Exchange Off book.
	In Message RequestAckMessage (Uy) field populated when sent to provide positive acknowledgement of message PriceInput (UI) or LiquidityProviderCommand (UZ), and populated by the client.
	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	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	MassQuoteAck (b)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	OwnershipRequest (U18)
	QuoteRequest (R)
	AskForQuote (UL)

	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)
	RFQNotification (U35)
	RFQMatchingStatus (U36)
	RequestForExecution (UM)
	InstrumentSynchronisationList (U50)

EncryptMethod

Field Name	EncryptMethod
Tag	98
Description	Method of encryption for the new FIX session
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	Always set to 0 (No encryption)
Used In	Logon (A)

EndSeqNo

Field Name	EndSeqNo
Tag	16
Description	Message sequence number for last message
Used For	Cash and Derivatives
Format	SeqNum
Length	10
Possible Values	From 0 to 2^32-2
Used In	ResendRequest (2)

ErrorCode

Field Name	ErrorCode
Tag	9955
Description	Error code in case of rejection. Provides the return error code when a request is rejected for a functional or a technical reason.
Used For	Cash and Derivatives
Format	Int
Length	5
Possible Values	From 0 to 2^16-1
Conditions	In ExecutionReport (8) message this field is provided when OrdStatus = '8' (Rejected).
Used In	ExecutionReport (8)
	OrderCancelReject (9)
	RequestAckMessage (Uy)

ExecID

Field Name	ExecID

Tag	17
Description	The ExecID is unique per instrument and per day. It is the unique identifier of a trade per instrument. This field is provided in case of fill, partial fill or trade cancellation.
	For example, let x be the reference identifier of a given trade, x is reported in the two 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.
	And if this trade is cancelled, x is again reported in the ExecutionReport (8) messages sent for the 2 sides of the trade.
Used For	Cash and Derivatives
Format	String
Length	10
Possible Values	From 0 to 2^32-1
Conditions	In Order Information reports and Market Operations Trade Cancellation reports, this field is provided with the reference ID of the current execution, during the current day and for the concerned instrument.
	This field is populated with 'NA' for all Ack type messages (New order, Refilled and Transformation of Iceberg order, Modification of an order, Triggering of MTL, Stop, VFU / VFC, Order Status and Ownership request), Kill and Reject.
Used In	ExecutionReport (8)

ExecPhase

Field Name	ExecPhase
Tag	21023
Description	Indicates the trading phase during which the trade has occurred.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	1 = Continuous Trading Phase
	2 = Uncrossing Phase
	3 = Trading At Last Phase
	4 = Continuous Uncrossing Phase
	5 = IPO
Conditions	Provided only in case of Fill or Partial Fill.
Used In	ExecutionReport (8)

ExecRefID

Field Name	ExecRefID
Tag	19
Description	The ExecRefID is an unique identifier of a trade per instrument. This field is provided in case of trade cancellation.
Used For	Cash and Derivatives
Format	String
Length	10
Possible Values	Sequential number. From 1 to 2^32-2
Conditions	Provided only in case of Trade Cancellation. When provided filled with the ExecID (17) of the Trade being cancelled.
Used In	ExecutionReport (8)

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.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = GT corporate action
	1 = GT renewal / restatement (no corporate action)
Used In	ExecutionReport (8)

ExecType

Field Name	ExecType
Tag	150
Description	Describes the specific ExecutionReport while OrdStatus (39) will always identify the current order status (e.g. Partially Filled).
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	0 = New
	3 = Done for Day
	4 = Cancelled
	5 = Replaced
	8 = Rejected
	a = Cancelled by STP
	b = Order Cancelled due to Cancel On Disconnect Mechanism
	d = Collar Confirmation Ack [C]
	e = Refilled Iceberg Ack [C]
	g = Quote cancelled due to Knock-Out [C]
	h = Iceberg Transformed to Limit due to Minimum size [C]
	i = Order Creation By Market Operations
	j = RFQ Ack [C]
	k = OwnershipRequest Ack [C]
	m = OrderMassStatusRequest Ack [C]
	C = Expired
	D = Restated
	F = Trade
	G = Trade Creation by Market Operation
	H = Cancel Trade
	I = Order Status
	L = Triggered or Activated by System
	O = Eliminated by corporate event
	P = Cancelled by Member Risk Manager (For Future Use)
	Q = RFQ expired [C]
	S = RFQ cancelled by the issuer [C]
	U = Order Cancelled by Market Operations
	V = Cancelled due to a Kill command
	W = Cancelled MTL in an empty Order Book [C]

	X = Remaining quantity killed (IOC)
	Y = Beginning of PAKO Period [C]
	Z = Too many collar breach attempts
	c = Conditional Order cancelled due to Potential Matching [C]
	r = LP Order cancelled due to RFQ expiration [C]
	f = LP Order cancelled due to RFQ cancellation [C]
	q = RFQ Remaining quantity killed [C]
	s = LP Order cancelled due to RFQ confirmation [C]
Conditions	Values Q; S; r; f;q; s will be used only on ETF MTF platform.
	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	ExecutionReport (8)

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).
Used For	Cash and Derivatives
Format	LocalMktDate
Length	8
Possible Values	Valid values:
	YYYY = 0000-9999, MM = 01-12, DD = 01-31
Conditions	*ExpireDate* is mandatory in the Inbound NewOrderSingle (D) messages for GTD orders.
	This field is not provided in the Outbound messages in trading OEG.
	This field is populated in order related messages in Drop Copy.
	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelReplaceRequest (G)

ExpireTime

Field Name	ExpireTime
Tag	126
Description	Field used as time of order expiration for GTT orders (Format: YYYYMMDD-HH:MM:SS.sssssssss).
	(This field is for Future Use)
Used For	Cash
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, sssssssss = 000000000-999999999 (nanoseconds)
Conditions	*ExpireTime* 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.
	This field is not provided in the Outbound messages in trading OEG.
	This field is populated in order related messages in Drop Copy.

	In OrderCancelReplaceRequest (G) message: - (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 - (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D) ExecutionReport (8) OrderCancelReplaceRequest (G)

F

FRMARAMPLP

Field Name	FRMARAMPLP
Tag	21801
Description	Indicates whether the order is subject to French Market Abuse Regulation Accepted Market Practive Liquidity provision or not.
Used For	Cash
Format	Char
Length	1
Possible Values	0 = Not subject to FR MAR AMP LP (default) 1 = Subject to FR MAR AMP LP
Used In	NewOrderSingle (D) ExecutionReport (8) (present only in Drop Copy Execution Report, otherwise not provided) OrderCancelReplaceRequest (G) QuoteRequest (R)

G

GapFillFlag

Field Name	GapFillFlag
Tag	123
Description	Purpose of sequence reset.
Used For	Cash and Derivatives
Format	Boolean
Length	1
Possible Values	Y = Gap fill message N = Sequence reset
Used In	SequenceReset (4)

H

HeartBtInt

Field Name	HeartBtInt
Tag	108

Description	Heartbeat interval (in seconds).
Used For	Cash and Derivatives
Format	Int
Length	3
Possible Values	Numerical
Used In	Logon (A)

InputPxType

Field Name	InputPxType
Tag	9950
Description	Type of input price.
Used For	Cash
Format	Char
Length	1
Possible Values	1 = Valuation Price
	2 = Alternative Indicative Price (AIP)
Used In	PriceInput (UI)

InstrumentScopeSecurityID

Field Name	InstrumentScopeSecurityID
Tag	1538
Description	Security ID.
Used For	Cash and Derivatives
Format	String
Length	10
Possible Values	From 0 to 2^32-2
Conditions	Mandatory if NoInstrumentScopes > 0.
	If provided in the UserNotification (CB) message, it specifies the scope of the action specified in *UserStatus (926)*.
Used In	UserNotification (CB)

InstrumentScopeSecurityIDSource

Field Name	InstrumentScopeSecurityIDSource
Tag	1539
Description	Used to limit instrument scope.
Used For	Cash and Derivatives
Format	String
Length	1
Possible Values	8 = Symbol Index
Conditions	Mandatory if NoInstrumentScopes > 0.
	If provided in the UserNotification (CB) message, is always set to value '8' = Symbol Index.
Used In	UserNotification (CB)

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.sssssssss).
Used For	Cash and Derivatives
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, sssssssss = 000000000-999999999 (nanoseconds)
Used In	SynchronisationTime (U51)

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.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	7 = Dealing on own account (DEAL) 8 = Matched principal (MTCH) 9 = Any other capacity (AOTC)
Conditions	In outbound messages this field is populated only in Drop Copy
Used In	NewOrderSingle (D) ExecutionReport (8) MassQuote (i)

LastPx

Field Name	LastPx
Tag	31
Description	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with Price/Index Level Decimals).
Used For	Cash and Derivatives
Format	Price
Length	20
Possible Values	From -2^63+1 to 2^63-1
Conditions	Provided only in case of a Fill, Partial Fill and Trade Cancellation. For a trade cancellation the LastPx refers to price of the cancelled trade.
Used In	ExecutionReport (8)

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
Used For	Cash and Derivatives
Format	SeqNum
Length	10
Conditions	Provided to clients in outbound messages
Possible Values	From 1 to 2^32-2
Used In	Message Header

LastQty

Field Name	LastQty
Tag	32
Description	The LastQty indicates the quantity of the last fill on an instrument (to be calculated with Quantity Decimals).
Used For	Cash and Derivatives
Format	Qty
Length	20
Possible Values	From 0 to 2^64-1
Conditions	Provided only in case of a Fill, Partial Fill and Trade Cancellation. For a trade cancellation the LastQty refers to quantity of the cancelled trade.
Used In	ExecutionReport (8)

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).
Used For	Cash and Derivatives
Format	Qty
Length	20
Possible Values	From -1 to 2^64-2
Conditions	LeavesQty (151) is set to '0' when the order is no longer active (i.e. OrdStatus (39) is = '4' (Canceled), '3' (Done For Day), 'C' (Expired) or '8' (Rejected)). LeavesQty (151) is set to '-1' in case of Trade Cancellation (i.e. OrdStatus(39) is equal to 'H' (Cancel Trade)).
Used In	ExecutionReport (8)

LegLastPx

Field Name	LegLastPx
Tag	637
Description	Leg last traded price (to be calculated with Price/Index Level Decimals).
Used For	Derivatives

Format	Price
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	For derivatives markets only.
Used In	ExecutionReport (8)

LegLastQty

Field Name	LegLastQty
Tag	1418
Description	Leg last traded quantity (to be calculated with Quantity Decimals).
Used For	Derivatives
Format	Qty
Length	20
Possible Values	For derivatives markets only
Conditions	From 0 to 2^64-1
Used In	ExecutionReport (8)

LegSecurityID

Field Name	LegSecurityID
Tag	602
Description	Numerical leg instrument identifier (SecurityID) valid for the life of the instrument.
Used For	Derivatives
Format	String
Length	10
Possible Values	From 0 to 2^32-1
Conditions	For derivatives markets only.
Used In	ExecutionReport (8)

LegSecurityIDSource

Field Name	LegSecurityIDSource
Tag	603
Description	Gives the type of LegSecurityID.
Used For	Derivatives
Format	String
Length	1
Possible Values	8 = Symbol Index
Conditions	For derivatives markets only.
Used In	ExecutionReport (8)

LegSide

Field Name	LegSide
Tag	624
Description	Indicates the side of the trade leg.
Used For	Derivatives

Format	Char
Length	1
Possible Values	1 = Buy
	2 = Sell
Conditions	For derivatives markets only.
Used In	ExecutionReport (8)

LogicalAccessID

Field Name	LogicalAccessID
Tag	21021
Description	Identifier of the Logical Access.
Used For	Cash and Derivatives
Format	Int
Length	10
Possible Values	From 0 to 2^32-1
Conditions	It is required in Logon (A) message.
	It is required in the OwnershipRequest (U18) message when the OrderID is not provided.
	In the ExecutionReport (8) message, when combined to the OEPartitionID, it provides the OE Session that owns the order.
	In the OrderMassCancelRequest (q) message it can be used as filter to cancel orders belonging to this Logical Access.
Used In	Logon (A)
	ExecutionReport (8)
	OwnershipRequest (U18)
	OwnershipRequestAck (U29)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)

LPActionCode

Field Name	LPActionCode
Tag	10076
Description	Action the LP wants to apply on the specified instrument of warrant type.
Used For	Cash
Format	Char
Length	1
Possible Values	1 = Knock-In By Issuer (KIBI)
	2 = Knock-Out By Issuer (KOBI)
	3 = Payment After Knock-Out (PAKO)
	4 = Bid Only
	5 = Offer Only
	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	RequestAckMessage (Uy)
	LiquidityProviderCommand (UZ)

LPRole

Field Name	LPRole
Tag	20021
Description	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to 'Liquidity Provider'.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C] 12 = RFQ Liquidity Provider [C]
Conditions	Liquidity Provider Role is mandatory when AccountCode is equal to 'Liquidity Provider'. In OrderCancelReplaceRequest (G) message, if provided the value is ignored.
Used In	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) MassQuoteAck (b) OrderCancelReplaceRequest (G)

M

MassActionReportID

Field Name	MassActionReportID
Tag	1369
Description	Exchange allocated order mass cancel report ID.
Used For	Cash and Derivatives
Format	String
Length	20
Possible Values	Value provided by the Trading Engine
Used In	OrderMassCancelReport (r)

MassCancelRequestType

Field Name	MassCancelRequestType
Tag	530
Description	Scope of orders already in COB to be cancelled only for them having the selected maturity.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	1 = Cancel orders for a security A = Cancel orders for a security group
Used In	OrderMassCancelRequest (q) OrderMassCancelReport (r)

MassCancelResponse

Field Name	MassCancelResponse
Tag	531
Description	Specifies the action taken by counterparty order handling system as a result of the OrderMassCancelRequest (AF).
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	1 = Cancel orders for a security A = Cancel orders for a security group
Used In	OrderMassCancelReport (r)

MassStatusReqID

Field Name	MassStatusReqID
Tag	584
Description	Client ID for the Order Mass Status Request.
Used For	Cash and Derivatives
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. In outbound ExecutionReport (8) messages if MassStatusReqID (584) is filled ClOrdID (11) is not provided.
Used In	ExecutionReport (8) OrderMassStatusRequest (AF)

MassStatusReqType

Field Name	MassStatusReqType
Tag	585
Description	Mass status request type.
Used For	Cash and Derivatives
Format	Int
Length	3
Possible Values	101 = Status of a single order
Used In	OrderMassStatusRequest (AF)

MaturityMonthYear

Field Name	MaturityMonthYear
Tag	200
Description	Scope of active orders to be cancelled according to the selected maturity, expressed in YYYYMMDD format. For monthly DD must be set to '00'. To identify weeklies and dailies DD must be set to the last trading day.
Used For	Derivatives
Format	MonthYear

Length	6
Possible Values	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31
Used In	OrderMassCancelRequest (q) OrderMassCancelReport (r)

MaturityMonthYearFormat

Field Name	MaturityMonthYearFormat
Tag	1303
Description	Defines the format of MaturityMonthYear.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = YearMonth (only default)
Used In	OrderMassCancelRequest (q) OrderMassCancelReport (r)

MinQty

Field Name	MinQty
Tag	110
Description	Minimum quantity to be executed upon order entry (else the order is rejected). MinQty is to be calculated with Quantity Decimals.
Used For	Cash and Derivatives
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). Provided as is (if previously entered by client) in ExecutionReport (8).
Used In	NewOrderSingle (D) ExecutionReport (8) RFQNotification (U35) QuoteRequest (R)

MsgSeqNum

Field Name	MsgSeqNum
Tag	34
Description	The MsgSeqNum is mandatory for all inbound messages.
Used For	Cash and Derivatives
Format	SeqNum
Length	10
Possible Values	From 1 to 2^32-2
Used In	Message Header

MsgType

Field Name	MsgType

Tag	35
Description	Message type.
Used For	Cash and Derivatives
Format	String
Length	3
Possible Values	0 = Heartbeat
	1 = TestRequest
	2 = ResendRequest
	3 = Reject
	4 = SequenceReset
	5 = Logout
	8 = ExecutionReport
	9 = OrderCancelReject
	A = Logon
	D = NewOrderSingle
	F = OrderCancelRequest
	G = OrderCancelReplaceRequest
	R = QuoteRequest
	b = MassQuoteAckowledgement
	i = MassQuote
	q = OrderMassCancelRequest
	r = OrderMassCancelReport
	AF = OrderMassStatusRequest
	AG = QuoteRequestReject
	CB = UserNotification
	U18 = OwnershipRequest
	U29 = OwnershipRequestAck
	U35 = RFQNotification
	U36 = RFQMatchingStatus
	UI = PriceInput
	UM = RequestForExecution
	UL = AskForQuote
	UZ = LiquidityProviderCommand
	Uy = RequestAckMessage
	U50 = InstrumentSynchronizationList
	U51 = SynchronizationTime
Used In	Message Header

N

NestedPartyID

Field Name	NestedPartyID
Tag	524
Description	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).
Used For	Cash and Derivatives
Format	String
Length	11
Possible Values	Alphanumeric
Conditions	Mandatory if NoNestedPartyIDs >= 1.

	When used for MiFID short codes, the field's characters are restricted to numerical values ('0'.. '9'), with possible value range from -2^31 to 2^31-1.
	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.
Used In	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) OrderCancelReplaceRequest (G)

NestedPartyIDSource

Field Name	NestedPartyIDSource
Tag	525
Description	Source of NestedPartyID value.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	D = Proprietary / Custom code P = Short code identifier
Conditions	Mandatory if NoNestedPartyIDs >= 1
Used In	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) OrderCancelReplaceRequest (G)

NestedPartyRole

Field Name	NestedPartyRole
Tag	538
Description	Identifies the type or role of the NestedPartyID (524) specified.
Used For	Cash and Derivatives
Format	Int
Length	3
Possible Values	3 = Client ID 4 = Clearing Firm 26 = Correspondent Broker 122 = Investment decision maker
Conditions	Mandatory if NoNestedPartyIDs >= 1
Used In	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) OrderCancelReplaceRequest (G)

NestedPartyRoleQualifier

Field Name	NestedPartyRoleQualifier
Tag	2384
Description	Used to further qualify the value of NestedPartyRole(538).
Used For	Cash and Derivatives
Format	Int

Length	2
Possible Values	3 = General clearing member 4 = Individual clearing member 22 = Algorithm 23 = Firm or legal entity 24 = Natural person
Conditions	In Inbound messages Mandatory if NoNestedPartyIDs >= 1 In Outbound messages, with exception of case listed below - if submitted by the client, filled in with this information. Exception case: in messages from TCS when the repeating group is used to provide the Clearing Firm ID. In this case, where PartyIdSource is set to D (Proprietary / Custom Code) AND NestedPartyRole (538) = 4 (Clearing Firm), this field is not provided.
Used In	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) OrderCancelReplaceRequest (G)

NewSeqNo

Field Name	NewSeqNo
Tag	36
Description	New sequence number.
Used For	Cash and Derivatives
Format	SeqNum
Length	10
Possible Values	From 1 to 2^32-2
Used In	SequenceReset (4)

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.
Used For	Cash and Derivatives
Format	SeqNum
Length	10
Possible Values	From 1 to 2^32-2
Used In	Logon (A)

NoInstrumentScopes

Field Name	NoInstrumentScopes
Tag	1656
Description	Number of Instruments.
Used For	Cash and Derivatives
Format	NumInGroup
Length	1
Possible Values	If provided, always set to 1
Used In	UserNotification (CB)

NoLegs

Field Name	NoLegs
Tag	555
Description	Number of legs for the requested strategy.
Used For	Cash and Derivatives
Format	NumInGroup
Length	2
Possible Values	From 0 to 9
Conditions	Provided as is (if previously entered by client) in ExecutionReport (8).
Used In	ExecutionReport (8)

NoNestedPartyIDs

Field Name	NoNestedPartyIDs
Tag	539
Description	Number of NestedPartyID entries.
Used For	Cash and Derivatives
Format	NumInGroup
Length	1
Possible Values	If provided, from 1 to 5
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelReplaceRequest (G)

NoOrderAttributes

Field Name	NoOrderAttributes
Tag	2593
Description	Number of order attribute entries.
Used For	Cash and Derivatives
Format	NumInGroup
Length	1
Possible Values	If provided, from 1 to 2
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	UserNotification (CB)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)

NoPartyIDs

Field Name	NoPartyIDs

Tag	453
Description	Number of PartyID entries.
Used For	Cash and Derivatives
Format	NumInGroup
Length	1
Possible Values	From 1 to 2
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	QuoteRequest (R)
	UserNotification (CB)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)

NoQuoteEntries

Field Name	NoQuoteEntries
Tag	295
Description	Number of entries in Quotes repeating group.
Used For	Cash and Derivatives
Format	NumInGroup
Length	1
Possible Values	Always set to 1
Used In	MassQuote (i)
	MassQuoteAck (b)

NoQuoteSets

Field Name	NoQuoteSets
Tag	296
Description	The number of sets of quotes in the message
Used For	Cash and Derivatives
Format	NumInGroup
Length	3
Possible Values	From 1 to 150
Used In	MassQuote (i)
	MassQuoteAck (b)

NoRelatedSym

Field Name	NoRelatedSym
Tag	146
Description	Number of related symbols (instruments) in QuotesRequest (R).
Used For	Cash and Derivatives

Format	NumInGroup
Length	1
Possible Values	Always set to 1
Used In	QuoteRequestReject (AG)
	InstrumentSynchronisationList (U50)

NoSides

Field Name	NoSides
Tag	552
Description	Number of sides.
Used For	Cash and Derivatives
Format	NumInGroup
Length	1
Possible Values	From 1 to 2
Used In	NewOrderSingle (D)
	ExecutionReport (8)

NumberOfLPs

Field Name	NumberOfLPs
Tag	21034
Description	Indicates the number of LPs who sent an answer to a specific RFQ.
Used For	Cash
Format	Int
Length	2
Possible Values	From 0 to 2^8-1
Used In	RFQMatchingStatus (U36)

O

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.sssssssss).
Used For	Cash and Derivatives
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, sssssssss = 000000000-999999999 (nanoseconds)
Used In	ExecutionReport (8)
	MassQuoteAck (b)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	QuoteRequestReject (AG)

	OrderMassCancelReport (r)
	RFQNotification (U35)
	RFQMatchingStatus (U36)

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.sssssssss).
Used For	Cash and Derivatives
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, sssssssss = 000000000-999999999 (nanoseconds)
Used In	ExecutionReport (8)
	MassQuoteAck (b)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	QuoteRequestReject (AG)
	OrderMassCancelReport (r)

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.sssssssss).
Used For	Cash and Derivatives
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, sssssssss = 000000000-999999999 (nanoseconds)
Used In	ExecutionReport (8)
	MassQuoteAck (b)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	QuoteRequestReject (AG)
	OrderMassCancelReport (r)
	RFQNotification (U35)
	RFQMatchingStatus (U36)

OEPartitionID

Field Name	OEPartitionID
Tag	21019
Description	Identifies uniquely an OE Optiq partition by which the engine is reached.
Used For	Cash and Derivatives
Format	Int

Length	5
Possible Values	From 0 to 2^16-1
Conditions	In Logon (A) message it must be set according to the partition to which the messages are sent.
	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 and entered through this partition.
	In the OrderMassCancelRequest (q) message it is optional, but if populated the LogicalAccessID field is mandatory. If populated it is used as a filter to cancel PotentialMatchingPriceorders entered through this partition (it can be combined with other criteria).
	In the ExecutionReport (8) message it indicates to which OE Session the orders belong to (in response to OrderMassStatusRequest (AF) and OwnershipRequest (U18)) .
Used In	Logon (A)
	ExecutionReport (8)
	OwnershipRequest (U18)
	OwnershipRequestAck (U29)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)

OfferErrorCode

Field Name	OfferErrorCode
Tag	9935
Description	Error code returned when a quote contains an invalid offer. See Error List for details of error codes.
Used For	Cash and Derivatives
Format	Int
Length	6
Possible Values	From 0 to 2^16-1
Conditions	If an error is detected in the field *OfferSize (135)* or in the field *OfferPx (133)*, the error code is provided in the BidErrorCode field.
Used In	MassQuoteAck (b)

OfferPx

Field Name	OfferPx
Tag	133
Description	Quote offer price (to be calculated with Price/Index Level Decimals).
Used For	Cash and Derivatives
Format	Price
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	Either the field *OfferPx (133),* or the field *BidPx (132),* or both, must be populated.
Used In	MassQuote (i)

OfferQuoteID

Field Name	OfferQuoteID
Tag	1748
Description	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.
Used For	Cash and Derivatives
Format	String
Length	20

Possible Values	From 0 to 2^64-1
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 MassQuote, is filled with value in *OfferQuoteID* (1748) corresponding to the Offer quote that participated in the trade.
Used In	MassQuoteAck (b)

OfferSize

Field Name	OfferSize
Tag	135
Description	Quote offer quantity (to be calculated with Quantity Decimals).
	Cancels a quote if set to zero '0'.
Used For	Cash and Derivatives
Format	Qty
Length	20
Possible Values	From 0 to 2^64-1
Conditions	Mandatory if the field *BidSize (134)* is provided.
Used In	MassQuote (i)

OnBehalfOfCompID

Field Name	OnBehalfOfCompID
Tag	115
Description	ID of the issuing firm when the message is send through a third party.
Used For	Cash and Derivatives
Format	String
Length	8
Possible Values	Inbound: Firm ID
	Outbound: Not used
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:
	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	Message Header

OrderAttributeType

Field Name	OrderAttributeType
Tag	2594
Description	The type of order attribute.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = Aggregated order
	1 = Pending allocation
	3 = Risk reduction order
Conditions	Mandatory if NoOrderAttributes > 0.

Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	UserNotification (CB)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)

OrderAttributeValue

Field Name	OrderAttributeValue
Tag	2595
Description	The value associated with the order attribute type specified in *OrderAttributeType (2594)*.
Used For	Cash and Derivatives
Format	String
Length	1
Possible Values	Y = Yes
Conditions	Mandatory if NoOrderAttributes > 0.
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	UserNotification (CB)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)

OrderCategory

Field Name	OrderCategory
Tag	21041
Description	Field used as instruction for order handling.
	- Lit Order: indicates whether the client requests to cancel a Lit order.
	- LIS Order: indicates whether the client requests to cancel a LIS order.
	- Quote Request: indicates whether the client requests to cancel a Quote Request.
	- RFQ LP Answer: indicates whether the client requests to cancel an Lp Answer to a Quote Request.
Used For	Cash
Format	Char
Length	1
Possible Values	1 = Lit Order
	2 = LIS Order
	3 = Quote Request
	4 = RFQ LP Answer
Conditions	When not provided or provided at the Null Value, it is assumed to be set at value 1 "Lit Order".

Used In	OrderCancelRequest (F)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)
	RFQNotification (U35)
	OwnershipRequest (U18)
	OwnershipRequestAck (U29)

OrderID

Field Name	OrderID
Tag	37
Description	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.
Used For	Cash and Derivatives
Format	String
Length	20
Possible Values	From 0 to 2^64-2
Conditions	In case a message is rejected for Technical reasons, it isn't processed by the trading engine and the Order ID is not 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 code table in the Euronext Cash Markets - Optiq & TCS Error List document.
	If a client sends an *OrderId* which, however, can be decoded by the system, this value is provided back to the client in the **OrderCancelRequest** (F), exactly as entered.
	The field *OrderID* (37) in **ExecutionReport** (8) message sent in case of Trade resulting from a matching against a MassQuote, is filled with value either in *BidQuoteID* (1747) or *OfferQuoteID* (1748), corresponding to the side of the quote that participated in the trade.
	On ETF MTF platform:
	- In case of an ExecutionReport (8) message sent as a response to a QuoteRequest (R), the OrderID field will contains the "RFQ Identifier" information.
	- In case the client uses OrderCancelRequest (F) to cancel an RFQ sent through the QuoteRequest (R), the OrderID field should contain the "RFQ Identifier" information previously received in the ExecutionReport (8) message.
	- In case of an OrderCancelReject (9) message sent as a response to an OrderCancelRequest (F) previously sent about an RFQ, the OrderID field will contains the "RFE Identifier" information.
Used In	ExecutionReport (8)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OrderCancelReject (9)
	OwnershipRequest (U18)
	OwnershipRequestAck (U29)
	OrderMassStatusRequest (AF)

OrderOrigination

Field Name	OrderOrigination
Tag	1724
Description	Identifies the origin of the order.
Used For	Cash and Derivatives
Format	Int
Length	1

Possible Values	5 = Order received from a direct access or sponsored access customer
Conditions	Mandatory in case of a DEA access. In OrderCancelReplaceRequest (G) message: - (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 - (ii) when sent to modify an order, value will be modified to the one provided In outbound messages this field is populated only in Drop Copy.
Used In	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) OrderCancelReplaceRequest (G)

OrderPriority

Field Name	OrderPriority
Tag	21004
Description	Rank giving the priority of the order. The order with the lowest value of OrderPriority has the highest priority. OrderPriority is unique per SecurityID and EMM, therefore, it is also used as the unique order identifier in the market data feed. Order Priority should then allow clients to reconcile their orders between private order entry and market data feed. Also assigned for newly entered Stop orders. When Stop orders are triggered they will be assigned a new OrderPriority. Used in conjunction with Previous Priority, for market data only.
Used For	Cash
Format	Int
Length	20
Possible Values	From 0 to 2^64-1
Used In	ExecutionReport (8)

OrderQty

Field Name	OrderQty
Tag	38
Description	Total order quantity, per quantity unit (to be calculated with Quantity Decimals).
Used For	Cash and Derivatives
Format	Qty
Length	20
Possible Values	From 0 to 2^64-1
Conditions	In OrderCancelReplaceRequest (G) message: - (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 - (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D) ExecutionReport (8) OrderCancelReplaceRequest (G) QuoteRequest (R) RFQNotification (U35)

OrdStatus

Field Name	OrdStatus
Tag	39
Description	Order status.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	0 = New
	1 = Partially filled
	2 = Filled
	3 = Done for Day
	4 = Cancelled
	5 = Replaced
	8 = Rejected
	C = Expired
	H = Cancel Trade
	I = Order Status
	M = RFQ expired [C]
	O = RFQ cancelled by the issuer [C]
	P = RFQ Not matched due to issuer order's features [C]
	Q = VFU/VFC Triggered Ack [C]
	R = OrderMassStatusRequest Ack [C]
	S = Stop Triggered Ack [C]
	T = MTL Second Ack [C]
	Z = Message Rejected
Used In	ExecutionReport (8)
	OrderCancelReject (9)

OrdType

Field Name	OrdType
Tag	40
Description	Type of Order.
	Please note that the values Stop-market/Stop-market-on-Quote, Stop limit/Stop-limit-on-quote, Average Price, Iceberg and Mid-Point Peg are used only for the Order Entry, they will never be populated in the Market Data feed.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	1 = Market
	2 = Limit
	3 = Stop-Market / Stop-Market on quote [C]
	4 = Stop limit / Stop on quote limit [C]
	K = Market to limit
	P = Peg [C]
	T = Average Price [C]
	X = Iceberg [C]
Conditions	Value 'T' is used only for RFQ validation on ETF MTF platform only.
	For OrderCancelReplaceRequest (G) and OrderCancelRequest (F) messages if the OrdType is different than the Order Type of the targeted order, the request will be rejected with the reason "Unknown Order".

	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)

OrigClOrdID

Field Name	OrigClOrdID
Tag	41
Description	Client order ID of the original order.
Used For	Cash and Derivatives
Format	String
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	It is provided in the ExecutionReport (8) message only as response of a modification or cancellation done on OrigClOrdID.
Used In	ExecutionReport (8)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	OrderMassStatusRequest (AF)

OrigSendingTime

Field Name	OrigSendingTime
Tag	122
Description	Time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).
Used For	Cash and Derivatives
Format	UTCTimestamp
Length	27
Possible Values	YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds)
Conditions	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.
Used In	Message Header

OtherLegReferenceNo

Field Name	OtherLegReferenceNo
Tag	7774
Description	Free text providing an identifying reference for the cash leg.
Used For	Cash and Derivatives
Format	String
Length	14
Possible Values	Free text

Conditions	For derivatives markets only.
Used In	ExecutionReport (8)

OtherLegSecurityID

Field Name	OtherLegSecurityID
Tag	7773
Description	The commodity key for the other component leg of an asset allocation or the SecurityID for the underlying cash leg that is part of a Basis or Against Actuals trade.
Used For	Derivatives
Format	Int
Length	10
Possible Values	From 0 to 2^32-1
Conditions	For derivatives markets only.
Used In	ExecutionReport (8)

OtherLegSecurityIDSource

Field Name	OtherLegSecurityIDSource
Tag	7489
Description	Defines the value of the field OtherLegSecurityID.
Used For	Derivatives
Format	Char
Length	1
Possible Values	8 = Symbol Index
Conditions	For derivatives markets only.
Used In	ExecutionReport (8)

P

PackageID

Field Name	PackageID
Tag	5883
Description	ID used to link several Large in Scale (LiS) Package trades together.
Used For	Derivatives
Format	String
Length	12
Possible Values	Alphanumeric
Used In	ExecutionReport (8)

PartyID

Field Name	PartyID
Tag	448
Description	Party identifier/code. See PartyIDSource (447) and PartyRole (452).
Used For	Cash and Derivatives
Format	String

Length	11
Possible Values	Alphanumeric
Conditions	Mandatory if NoPartyIDs >= 1.
	When used for MiFID short codes, the field's characters are restricted to numerical values ('0'.. '9'), with possible value range from -2^31 to 2^31-1.
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	QuoteRequest (R)
	UserNotification (CB)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)

PartyIDSource

Field Name	PartyIDSource
Tag	447
Description	Source of PartyID value.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	D = Proprietary / Custom Code
	P = Short code identifier
Conditions	Mandatory if NoPartyIDs >= 1
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	QuoteRequest (R)
	UserNotification (CB)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)

PartyRole

Field Name	PartyRole
Tag	452
Description	Identifies the type or role of the PartyID (448) specified.
Used For	Cash and Derivatives
Format	Int
Length	3
Possible Values	1 = Executing Firm

	3 = Client ID
	12 = Executing Trader
Conditions	Mandatory if NoPartyIDs >= 1.
	For every inbound message the value '12' is mandatory.
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	QuoteRequest (R)
	UserNotification (CB)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)

PartyRoleQualifier

Field Name	PartyRoleQualifier
Tag	2376
Description	Used to further qualify the value of PartyRole(452).
Used For	Cash and Derivatives
Format	Int
Length	2
Possible Values	22 = Algorithm
	23 = Firm or legal entity
	24 = Natural person
Conditions	Mandatory if NoPartyIDs >= 1
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OwnershipRequest (U18)
	QuoteRequest (R)
	UserNotification (CB)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)

PegOffsetValue

Field Name	PegOffsetValue
Tag	211
Description	Tick offset for a pegged order.
	Used to indicate the signed tick added to the peg reference for a pegged order.
Used For	Cash
Format	Int
Length	3

Possible Values	From -128 to 127
Conditions	Mandatory for Primary and Market Peg Orders.
	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	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelReplaceRequest (G)

PegPriceType

Field Name	PegPriceType
Tag	1094
Description	Defines the type of the peg order.
Used For	Cash
Format	Int
Length	1
Possible Values	2 = Mid-price peg (midprice of inside quote) [C]
	4 = Market peg [C]
	5 = Primary peg (primary market - buy at bid or sell at offer) [C]
Conditions	Mandatory if OrdType = P (Peg).
	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)

PossDupFlag

Field Name	PossDupFlag
Tag	43
Description	Identifies if a message is being retransmitted or not.
Used For	Cash and Derivatives
Format	Boolean
Length	1
Possible Values	N = Original transmission (default)
	Y = Possible duplicate
Conditions	Field provided in all cases when the message is being resent
Used In	Message Header

PossResend

Field Name	PossResend
Tag	97
Description	Indicates if the message contains information that was already sent under a different sequence number.
Used For	Cash and Derivatives
Format	Boolean
Length	1

Possible Values	N = Original transmission
	Y = Possible resend
Used In	Message Header

PostingAction

Field Name	PostingAction
Tag	7443
Description	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.
	This field can contain up to 9 values, space delimited, provided in different positions.
	The first character will be used to indicate whether this field is being actively used or not (1 = Actively Used; 0 = Field Not Used).
	For each Leg, 0 means Open and 1 means Close.
	Leg 2 to Leg 9 are not applicable for cash instruments.
Used For	Derivatives
Format	MultipleCharValue
Length	17
Possible Values	1 = Leg 1
	2 = Leg 2 [D]
	3 = Leg 3 [D]
	4 = Leg 4 [D]
	5 = Leg 5 [D]
	6 = Leg 6 [D]
	7 = Leg 7 [D]
	8 = Leg 8 [D]
	9 = Leg 9 [D]
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	MassQuoteAck (b)
	OrderCancelReplaceRequest (G)

PotentialMatchingPrice

Field Name	PotentialMatchingPrice
Tag	21030
Description	The PotentialMatchingPrice indicates to the RFQ issuer the matching price (to be calculated with Price/Index Level Decimals) for the PotentialMatchingQuantity.
	The PotentialMatchingPrice is recalculated and resend to the RFQ issuer through the RFQMatchingStatus (U36) message each time the order book is updated.
Used For	Cash
Format	Price
Length	20
Possible Values	From -2^{63} 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	RFQMatchingStatus (U36)

PotentialMatchingQuantity

Field Name	PotentialMatchingQuantity
Tag	21031

Description	The PotentialMatchingQuantity indicates the maximum volume that would be matched in case of an RFQ validation (to be calculated with Quantity Decimals).
	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.
	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.
Used For	Cash
Format	Qty
Length	20
Possible Values	From 0 to 2^64-1
Used In	RFQMatchingStatus (U36)

Price

Field Name	Price
Tag	44
Description	Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).
	It is mandatory for priced orders (Limit, Stop-limit) and must not be sent when the price is irrelevant (Market, Stop-market, Peg, MTL).
Used For	Cash and Derivatives
Format	Price
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	In NewOrderSingle (D) and OrderCancelReplaceRequest (G) requests:
	Mandatory if: OrdType = 2 (Limit), OrdType = 4 (Stop Limit) or OrdType = X (Iceberg).
	Negative values authorized on ETF MTF when the order is sent on the NAV trading Order Book (EMM = '8').
	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelReplaceRequest (G)
	PriceInput (UI)

Q

QtyDelta

Field Name	QtyDelta
Tag	8011
Description	Change in OrderQty as a result of an OrderCancelReplaceRequest (G).
Used For	Derivatives
Format	Int
Length	8
Possible Values	Positive if the OrderQty has increased, negative if it has decreased
Used In	ExecutionReport (8)

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).
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = False 1 = True
Used In	Logon (A)

QuoteEntryID

Field Name	QuoteEntryID
Tag	299
Description	Uniquely identifies the quote across the complete set of all quotes for a given quote provider.
Used For	Cash and Derivatives
Format	String
Length	10
Possible Values	From 0 to 2^32-2
Used In	MassQuote (i) MassQuoteAck (b)

QuoteID

Field Name	QuoteID
Tag	117
Description	Quote identifier.
Used For	Cash and Derivatives
Format	String
Length	20
Possible Values	From -2^63+1 to 2^63-1
Used In	MassQuote (i) MassQuoteAck (b)

QuoteReqID

Field Name	QuoteReqID
Tag	131
Description	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM.
Used For	Cash
Format	String
Length	20
Possible Values	From 0 to 2^64-1
Conditions	Mandatory if the fields RFQAnswerIndicator and RFQConfirmationIndicator are set to 'Yes'.
Used In	NewOrderSingle (D)

	ExecutionReport (8)
	QuoteRequestReject (AG)
	RFQNotification (U35)
	RFQMatchingStatus (U36)

QuoteRequestRejectReason

Field Name	QuoteRequestRejectReason
Tag	658
Description	Reason the QuoteRequest (R) was rejected.
Used For	Cash and Derivatives
Format	Int
Length	2
Possible Values	99 = Other
Used In	QuoteRequestReject (AG)

QuoteSetID

Field Name	QuoteSetID
Tag	302
Description	Unique ID for the Quote set
Used For	Cash and Derivatives
Format	String
Length	10
Possible Values	Sequential number for the Quote Set. For a given QuoteID - assumed to start at 1. Must be the first field in the repeating group. From 1 to 2^32-1
Used In	MassQuote (i) MassQuoteAck (b)

QuoteStatus

Field Name	QuoteStatus
Tag	297
Description	Status of the mass quote acknowledgement.
Used For	Cash and Derivatives
Format	Int
Length	2
Possible Values	0 = Accepted 5 = Rejected
Used In	MassQuoteAck (b)

R

RequestID

Field Name	RequestID
Tag	21060
Description	Unique message identifier as assigned by the Client when submitting the message request.

Used For	Cash and Derivatives
Format	String
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	In case the RequestAckMessage (Uy) message is an acknowledgement or rejection sent in response to a PriceInput (UI), LiquidityProviderCommand (UZ) or OwnershipRequest (U18), this field is filled with the *ClOrdID (11).*
	In case the RequestAckMessage (Uy) message is an acknowledgement or rejection sent in response to an OrderMassStatusRequest (AF) message, this field is filled with the *MassStatusReqID (584).*
Used In	RequestAckMessage (Uy)

RefMsgType

Field Name	RefMsgType
Tag	372
Description	The MsgType (35) of the FIX message being referenced.
Used For	Cash and Derivatives
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	Reject (3)
	RequestAckMessage (Uy)

RefSeqNum

Field Name	RefSeqNum
Tag	45
Description	Reference sequence number of the rejected message.
Used For	Cash and Derivatives
Format	SeqNum
Length	10
Possible Values	From 1 to 2^32-2
Used In	Reject (3)

RefTagID

Field Name	RefTagID
Tag	371
Description	The tag number of the FIX field being referenced.
Used For	Cash and Derivatives
Format	Int
Length	6
Possible Values	From 1 to 999 999
Conditions	This field is provided only if the tag number is referenced in the rejection.
Used In	Reject (3)

ResynchronizationID

Field Name	ResynchronizationID
Tag	20030
Description	Each Instrument is assigned to a Recovery ID that is used in case of failover.
Used For	Cash and Derivatives
Format	Int
Length	5
Possible Values	From 0 to 2^16-2
Used In	InstrumentSynchronisationList (U50) SynchronisationTime (U51)

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])
Used For	Cash
Format	Int
Length	1
Possible Values	0 = False 1 = True
Used In	MassQuote (i)

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.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = No 1 = Yes
Conditions	Mandatory if the field *QuoteReqID (131)* is provided.
Used In	NewOrderSingle (D) ExecutionReport (8)

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.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = No 1 = Yes

Conditions	Mandatory if the field *QuoteReqID (131)* is provided and if the Client is the RFQ issuer.
Used In	NewOrderSingle (D)
	ExecutionReport (8)

RiskFamily

Field Name	RiskFamily
Tag	20165
Description	Identifier of the family.
Used For	Cash and Derivatives
Format	String
Length	3
Possible Values	Alphanumeric
Conditions	If provided in the UserNotification (CB) message, it specifies the scope of the action specified in UserStatus.
Used In	UserNotification (CB)

S

SecurityID

Field Name	SecurityID
Tag	48
Description	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.
Used For	Cash and Derivatives
Format	String
Length	10
Possible Values	From 0 to 2^32-1
Conditions	If provided in the UserNotification (CB) message, it specifies the scope of the action specified in UserStatus.
	In Message RequestAckMessage (Uy) field populated when sent to provide positive acknowledgement of message PriceInput (UI) or LiquidityProviderCommand (UZ), and populated by the client.
	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	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	MassQuoteAck (b)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	OwnershipRequest (U18)
	OwnershipRequestAck (U29)
	QuoteRequest (R)
	QuoteRequestReject (AG)
	AskForQuote (UL)
	PriceInput (UI)

	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)
	RFQNotification (U35)
	RFQMatchingStatus (U36)
	RequestForExecution (UM)
	InstrumentSynchronisationList (U50)

SecurityIDSource

Field Name	SecurityIDSource
Tag	22
Description	Gives the type of SecurityID.
Used For	Cash and Derivatives
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), and populated by the client.
	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	NewOrderSingle (D)
	ExecutionReport (8)
	MassQuote (i)
	MassQuoteAck (b)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	OrderCancelReject (9)
	RequestAckMessage (Uy)
	OwnershipRequest (U18)
	OwnershipRequestAck (U29)
	QuoteRequest (R)
	QuoteRequestReject (AG)
	AskForQuote (UL)
	PriceInput (UI)
	LiquidityProviderCommand (UZ)
	OrderMassStatusRequest (AF)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)
	RFQNotification (U35)
	RFQMatchingStatus (U36)
	RequestForExecution (UM)
	InstrumentSynchronisationList (U50)

SelfMatchPreventionID

Field Name	SelfMatchPreventionID
Tag	2362
Description	For Future Use.
Used For	Cash and Derivatives

Format	String
Length	5
Possible Values	From 0 to 2^16-1
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	NewOrderSingle (D) ExecutionReport (8) OrderCancelReplaceRequest (G)

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.
Used For	Cash
Format	Int
Length	1
Possible Values	0 = New 1 = Replacement 2 = Cancellation
Conditions	Provided only if the MassQuote (i) message contains an offer quote.
Used In	MassQuoteAck (b)

SenderCompID

Field Name	SenderCompID
Tag	49
Description	Identifier of the member firm that sends the message. It is provided by the Exchange upon the registration of the Firm by the Membership department..
Used For	Cash and Derivatives
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. In outbound messages it is the ID of the Exchange.
Used In	Message Header

SendingTime

Field Name	SendingTime
Tag	52
Description	Time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).
Used For	Cash and Derivatives
Format	UTCTimestamp
Length	27
Possible Values	YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, sssssssss = 000000000-999999999 (nanoseconds)
Used In	Message Header

SessionRejectReason

Field Name	SessionRejectReason
Tag	373
Description	Session reject reason code. Code to identify the reason for a session-level rejection message.
Used For	Cash and Derivatives
Format	Int
Length	2
Possible Values	0 = Invalid Tag Number 1 = Required Tag Missing 2 = Tag not defined for this message type 3 = Undefined tag 4 = Tag specified without a value 5 = Value is incorrect (out of range) for this tag 6 = Incorrect data format for value 7 = Decryption problem 8 = Signature problem 9 = CompID problem 11 = Invalid MsgType 13 = Tag appears more than once 14 = Tag specified out of required order 15 = Repeating group fields out of order 16 = Incorrect NumInGroup count for repeating group 18 = Invalid/Unsupported Application Version 19 = NewSeqNo too low 20 = Requested MsgSeqNum is higher than last known MsgSeqNum 21 = EndSeqNo is lower than BeginSeqNo 22 = MsgSeqNum too high 23 = Invalid MsgType while waiting for Gap fill 24 = PossDupFlag set to 'Y' while OEG is not in Gap Fill Mode 25 = Throttling queue full 26 = Throttling Rate exceeded 27 = System busy 99 = Other
Used In	Reject (3)

SessionStatus

Field Name	SessionStatus
Tag	1409
Description	Provides the code associated to the reason for the logout.
Used For	Cash and Derivatives
Format	Int
Length	3
Possible Values	4 = Session logout complete 5 = Invalid username or password 9 = Received MsgSeqNum(34) is too low 10 = Received NextExpectedMsgSeqNum(789) is too high 100 = Regular Logout By Client 101 = End Of Day

	102 = System unavailable
	103 = Client session already logged on
	104 = Invalid Logon Value
	105 = SequenceReset - Reset Mode not allowed
	106 = Excessive Number of Messages
	107 = Excessive Amount of Data in Bytes
	108 = Excessive Number of Messages & Amount of Data in Bytes
Used In	Logout (5)

Side

Field Name	Side
Tag	54
Description	Indicates the side of the order.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	1 = Buy
	2 = Sell
Conditions	In ExecutionReport (8) messages this field is provided in case of Order acknowledgement or Fill.
	For OrderCancelReplace (G) and OrderCancelRequest (F) messages if the Side is different than the Side of the targeted order, the request will be rejected with the reason "Unknown Order".
	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	QuoteRequest (R)
	OrderMassCancelRequest (q)
	OrderMassCancelReport (r)
	RFQNotification (U35)
	RFQMatchingStatus (U36)

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.
Used For	Cash and Derivatives
Format	String
Length	8
Possible Values	Free text field
Used In	Logon (A)

StopPx

Field Name	StopPx

Tag	99
Description	Stop Trigger Price is mandatory for stop orders.
Used For	Cash
Format	Price
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	This field is mandatory for incoming Stop order messages. In OrderCancelReplaceRequest (G) message: - (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 - (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.
Used In	NewOrderSingle (D) ExecutionReport (8) OrderCancelReplaceRequest (G)

STPAggressorIndicator

Field Name	STPAggressorIndicator
Tag	21015
Description	Field used as instruction for order handling. - STP resting order: indicates whether the STP rule is "cancel resting order" or not. (0: STP Resting Order deactivated; 1: Cancel Resting Order) - STP incoming order: indicates whether the STP rule is "cancel incoming order" or not. (0: STP Incoming Order deactivated; 1: Cancel Incoming Order) STP is not applicable for Dark orders.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	0 = Cancel resting order [C] 1 = Cancel incoming order [C] 9 = Disable STP [C]
Used In	NewOrderSingle (D) ExecutionReport (8) OrderCancelReplaceRequest (G)

T

TargetCompID

Field Name	TargetCompID
Tag	56
Description	Message receptor ID.
Used For	Cash and Derivatives
Format	String
Length	8
Possible Values	Inbound: Exchange ID Outbound: Firm ID
Conditions	In inbound messages it is the ID of the Exchange.

	In outbound messages it is the ID of the firm to which the message is sent.
Used In	Message Header

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.
Used For	Cash
Format	Char
Length	1
Possible Values	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 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	NewOrderSingle (D) ExecutionReport (8) MassQuote (i) MassQuoteAck (b) OrderCancelReplaceRequest (G)

TestReqID

Field Name	TestReqID
Tag	112
Description	Test request ID to be returned in Heartbeat.
Used For	Cash and Derivatives
Format	String
Length	24
Possible Values	Numerical
Conditions	Required when the HeartBeat message is the result of a TestRequest Message.
Used In	Heartbeat (0) TestRequest (1)

Text

Field Name	Text
Tag	58
Description	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.
Used For	Cash and Derivatives
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	NewOrderSingle (D)

	ExecutionReport (8)
	MassQuote (i)
	OrderCancelReplaceRequest (G)
	QuoteRequestReject (AG)
	UserNotification (CB)

TimeInForce

Field Name	TimeInForce
Tag	59
Description	Specifies the maximum validity of an order.
	For Stop orders it provides the maximum validity when not triggered.
	(Value 'A' GTT is for Future Use)
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	0 = Day
	1 = Good Till Cancel (GTC)
	3 = Immediate or Cancel (IOC)
	4 = Fill or Kill (FOK) [C]
	6 = Good till Date (GTD)
	7 = At the Close [C]
	A = Good for Time (GTT) [C]
	B = Good for auction (GFA) [C]
	S = Valid for Session [D]
Conditions	In ExecutionReport (8) message, this field is provided only for Drop Copy. Absence of this field is NOT interpreted as a DAY order.
	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelReplaceRequest (G)

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.
Used For	Cash and Derivatives
Format	Int
Length	10
Possible Values	From -2^31 to 2^31-1
Used In	OwnershipRequestAck (U29)
	OrderMassCancelReport (r)

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 in each message that has repeating quotes that are part of the same quote set.
Used For	Cash and Derivatives
Format	Int
Length	1
Possible Values	Always equal to NoQuoteEntries
Used In	MassQuote (i) MassQuoteAck (b)

TradeQualifier

Field Name	TradeQualifier
Tag	21080
Description	Trade Qualifier. This field can contain up to 8 values, space delimited, provided in different positions. - Uncrossing Trade: indicates whether the trade occurred during an Uncrossing, or not. (0: No ; 1: Yes) - 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. - Passive Order: indicates whether the corresponding order was passive, or not. (0: No ; 1: Yes) - Aggressive Order: indicates whether the corresponding order was aggressive, or not. (0: No ; 1: Yes) - Trade Creation by Market Operations: indicates whether the trade results from a creation by Market Operations, or not. (0: No ; 1: Yes) - NAV Trade expressed in bps: indicates whether the trade results from a NAV trade expressed in basis point on the ETF MTF platform. (0: No ; 1: Yes) - 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 MTF platform. (0: No ; 1: Yes) - Deferred Publication: indicates whether the trade publication is deferred or immediate. (0: Immediate Publication ; 1: Deferred Publication) For the Market Data feed: - The values Passive Order and Aggressive Order always qualify the Buy order.
Used For	Cash and Derivatives
Format	MultipleCharValue
Length	15
Possible Values	0 = Uncrossing Trade 1 = First Trade Price 2 = Passive Order 3 = Aggressive Order 4 = Trade Creation by Market Operations 5 = NAV Trade expressed in bps [C] 6 = NAV Trade expressed in price currency [C] 7 = Deferred Publication
Conditions	Provided only in case of Fill or Partial Fill. Values '5' and '6' will be used only for the NAV trading on the ETF MTF platform.
Used In	ExecutionReport (8)

TradeType

Field Name	TradeType
Tag	21010
Description	Type of trade.

Used For	Cash and Derivatives
Format	Int
Length	2
Possible Values	1 = Conventional Trade (Cash and Derivatives)
	5 = Guaranteed Cross Trade (Cash and Derivatives)
	20 = BoB Trade (Cash Only)
	33 = Dark Trade (Cash Only)
	39 = Guaranteed Cross – Negotiated deal NLIQ (Liquid)
	40 = Guaranteed Cross – Negotiated deal OILQ (illiquid)
	41 = Large in Scale (LIS) Trade (Cash)
Conditions	Mandatory in ExecutionReport (8) message following a trade execution (Fill or Partial Fill)
Used In	ExecutionReport (8)

TradingSessionID

Field Name	TradingSessionID
Tag	336
Description	Trading session validity.
Used For	Derivatives
Format	String
Length	3
Possible Values	101 = Session 1
	102 = Session 2
	103 = Session 3
	123 = All Sessions
Conditions	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelReplaceRequest (G)

TransactTime

Field Name	TransactTime
Tag	60
Description	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.sssssssss).
Used For	Cash and Derivatives
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, sssssssss = 000000000-999999999 (nanoseconds)
Conditions	In ExecutionReport (8) it is provided only in case of Fill or Partial Fill.
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelRequest (F)
	OrderCancelReplaceRequest (G)
	QuoteRequest (R)

	OrderMassCancelRequest (q)

TriggeredStopTimeInForce

Field Name	TriggeredStopTimeInForce
Tag	20175
Description	Specifies the maximum validity of an triggered stop order.
	If both Time In Force and Triggered Stop Time In Force are Good till Date they will both refer to the same Order Expiration Date (or Order Expiration Time) provided in the order. If Order Expiration Date is modified it will be for both untriggered stop and triggered stop, or only for the triggered stop if the order was previously triggered.
Used For	Cash and Derivatives
Format	Char
Length	1
Possible Values	0 = Day
	1 = Good Till Cancel
	6 = Good till Date
Conditions	In Inbound messages this field is mandatory for stop orders.
	In OrderCancelReplaceRequest (G) message:
	- (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
	- (ii) when sent to modify an order, value will be modified to the one provided
	In outbound messages, this field is provided only in Drop Copy
Used In	NewOrderSingle (D)
	ExecutionReport (8)
	OrderCancelReplaceRequest (G)

U

UnderlyingLastPx

Field Name	UnderlyingLastPx
Tag	651
Description	For Basis and Against Actual trades only: underlying cash leg price (to be calculated with Price/Index Level Decimals).
Used For	Derivatives
Format	Price
Length	20
Possible Values	From -2^63 to 2^63-1
Conditions	For derivatives markets only
Used In	ExecutionReport (8)

UndisclosedIcebergType

Field Name	UndisclosedIcebergPType
Tag	20005
Description	Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.
Used For	Cash
Format	Int

Length	1
Possible Values	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market
Used In	NewOrderSingle (D) ExecutionReport (8) OrderCancelReplaceRequest (G)

UndisclosedPrice

Field Name	UndisclosedPrice
Tag	20004
Description	Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)
Used For	Cash
Format	Price
Length	20
Possible Values	From -2^63 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	NewOrderSingle (D) ExecutionReport (8) OrderCancelReplaceRequest (G)

UserStatus

Field Name	UserStatus
Tag	926
Description	Status of the user.
Used For	Cash and Derivatives
Format	Int
Length	3
Possible Values	101 = Trader-Algo Suspended 102 = Trader-Algo Suspension Cleared 103 = Trader-Algo Killed 104 = Trader-Algo Kill Cleared 105 = Firm Suspended 106 = Firm Suspension Cleared 107 = Firm Killed 108 = Firm Kill Cleared 109 = DEA Suspended 110 = DEA Suspension Cleared 111 = DEA Killed 112 = DEA Kill Cleared
Used In	UserNotification (CB)

7.   EXAMPLES

Example 1: For 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		
	Logon (A) *MsgSeqNum* (34) = **1** *NextExpectedMsgSeqNum* (789) = **1**	>	
		<	**Logon** (A) *MsgSeqNum* (34) = **1** *NextExpectedMsgSeqNum* (789) = **2**
2	Following a successful logon the exchange of application messages proceeds during the session		
	NewOrderSingle (D) order #1 *MsgSeqNum* (34) = **2** *Side* (54) = 1 (Buy)	>	
		<	**ExecutionReport** (8) *MsgSeqNum* (34) = **2** *OrdStatus* (39) = 0 (New) / *ExecType* (150) = 0 (New)
	NewOrderSingle (D) order #2 *MsgSeqNum* (34) = **3** *Side* (54) = 1 (Buy)	>	
		<	**ExecutionReport** (8) *MsgSeqNum* (34) = **3** *OrdStatus* (39) = 0 (New) / *ExecType* (150) = 0 (New)
3	Following a period of inactivity Exchange sends a TestRequest (1) message to check the status of the connection		
		<	**TestRequest** (1) *MsgSeqNum* (34) = **4**
4	In the meantime client is sending messages for new orders, that do not appear to be reaching the exchange		
	NewOrderSingle (D) order #3 *MsgSeqNum* (34) = **4** *Side* (54) = 1 (Buy)	>	
	NewOrderSingle (D) order #4 *MsgSeqNum* (34) = **5** *Side* (54) = 1 (Buy)	>	
	NewOrderSingle (D) order #5 *MsgSeqNum* (34) = **6** *Side* (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		
	HeartBeat (0) *MsgSeqNum* (34) = **7**	>	
6	Exchange detects a gap in the HeartBeat (0) message from client, and issues a ResendRequest (2) to fill the gap.		
		<	**ResendRequest** (2) *MsgSeqNum* (34) = **5** *BeginSeqNo* (7) = **4** *EndSeqNo* (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		
	NewOrderSingle (D) order #3 *MsgSeqNum* (34) = **4** *Side* (54) = 1 (Buy) *PossDupFlag* (43) = Y (Possible duplicate) *OrgSendingTime* (122) = set to time of original sending	>	
		<	**ExecutionReport** (8) *MsgSeqNum* (34) = **6** *OrdStatus* (39) = 0 (New) / *ExecType* (150) = 0 (New)
	NewOrderSingle (D) order #4 *MsgSeqNum* (34) = **5** *Side* (54) = 1 (Buy) *PossDupFlag* (43) = Y (Possible duplicate) *OrgSendingTime* (122) = set to time of original sending	>	

#	Received From Client		Sent by Exchange
		<	**ExecutionReport** (8) *MsgSeqNum* (34) = **7** *OrdStatus* (39) = 0 (New) / *ExecType* (150) = 0 (New)
	NewOrderSingle (D) order #5 *MsgSeqNum* (34) = **6** *Side* (54) = 1 (Buy) *PossDupFlag* (43) = Y (Possible duplicate) *OrgSendingTime* (122) = set to time of original sending	>	
		<	**ExecutionReport** (8) *MsgSeqNum* (34) = **8** *OrdStatus* (39) = 0 (New) / *ExecType* (150) = 0 (New)
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		
	SequenceReset (4) *MsgSeqNum* (34) = **7** *PossDupFlag* (43) = Y (Possible duplicate) *OrgSendingTime* (122) = set to current time *NewSeqNo* (36) = **8**	>	
	HeartBeat (0) *MsgSeqNum* (34) = **8**	>	
	…		

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		
	Logon (A) *MsgSeqNum* (34) = **1** *NextExpectedMsgSeqNum* (789) = **1**	>	
		<	**Logon** (A) *MsgSeqNum* (34) = **1** *NextExpectedMsgSeqNum* (789) = **2**
2	Following a successful logon the exchange of application messages proceeds during the session		
	NewOrderSingle (D) order #1 *MsgSeqNum* (34) = **2** *Side* (54) = 1 (Buy)	>	
		<	**ExecutionReport** (8) *MsgSeqNum* (34) = **2** *OrdStatus* (39) = 0 (New) / *ExecType* (150) = 0 (New)
	NewOrderSingle (D) order #2 *MsgSeqNum* (34) = **3** *Side* (54) = 1 (Buy)	>	
		<	**ExecutionReport** (8) *MsgSeqNum* (34) = **3** *OrdStatus* (39) = 0 (New) / *ExecType* (150) = 0 (New)
3	Client sends three (3) messages for new orders that do not appear to be reaching the exchange		
	NewOrderSingle (D) order #3 *MsgSeqNum* (34) = **4** *Side* (54) = 1 (Buy)	>	
	NewOrderSingle (D) order #4 *MsgSeqNum* (34) = **5** *Side* (54) = 1 (Buy)	>	
	NewOrderSingle (D) order #5 *MsgSeqNum* (34) = **6** *Side* (54) = 1 (Buy)	>	
4	Client sends one more order message that reaches the exchange, that indicates the gap of the previously missed messages		
	NewOrderSingle (D) order #6 *MsgSeqNum* (34) = **7** *Side* (54) = 1 (Buy)	>	
6	Exchange detects a gap in sequence numbers in the NewOrderSingle (D) message sent by the client, which reaches the exchange, and issues a ResendRequest (2) to fill the gap. The message for order #6 is ignored by the exchange		
		<	**ResendRequest** (2) *MsgSeqNum* (34) = **4**

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#	Received From Client		Sent by Exchange
			BeginSeqNo (7) = **4**
			EndSeqNo (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		
	NewOrderSingle (D) order #3	>	
	MsgSeqNum (34) = **4**		
	Side (54) = 1 (Buy)		
	PossDupFlag (43) = Y (Possible duplicate)		
	OrgSendingTime (122) = set to time of original sending		
		<	**ExecutionReport** (8)
			MsgSeqNum (34) = **5**
			OrdStatus (39) = 0 (New) / *ExecType* (150) = 0 (New)
	NewOrderSingle (D) order #4	>	
	MsgSeqNum (34) = **5**		
	Side (54) = 1 (Buy)		
	PossDupFlag (43) = Y (Possible duplicate)		
	OrgSendingTime (122) = set to time of original sending		
		<	**ExecutionReport** (8)
			MsgSeqNum (34) = **6**
			OrdStatus (39) = 0 (New) / *ExecType* (150) = 0 (New)
	NewOrderSingle (D) order #5	>	
	MsgSeqNum (34) = **6**		
	Side (54) = 1 (Buy)		
	PossDupFlag (43) = Y (Possible duplicate)		
	OrgSendingTime (122) = set to time of original sending		
		<	**ExecutionReport** (8)
			MsgSeqNum (34) = **7**
			OrdStatus (39) = 0 (New) / *ExecType* (150) = 0 (New)
	NewOrderSingle (D) order #6	>	
	MsgSeqNum (34) = **7**		
	Side (54) = 1 (Buy)		
	PossDupFlag (43) = Y (Possible duplicate)		
	OrgSendingTime (122) = set to time of original sending		
		<	**ExecutionReport** (8)
			MsgSeqNum (34) = **8**
			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		
	Logon (A)	>	
	MsgSeqNum (34) = **1**		
	NextExpectedMsgSeqNum (789) = **1**		
		<	**Logon** (A)
			MsgSeqNum (34) = **1**
			NextExpectedMsgSeqNum (789) = **2**
2	Following a successful logon the exchange of application messages proceeds during the session		
	NewOrderSingle (D) order #1	>	
	MsgSeqNum (34) = **2**		
	Side (54) = 1 (Buy)		
		<	**ExecutionReport** (8)
			MsgSeqNum (34) = **2**
			OrdStatus (39) = 0 (New) / *ExecType* (150) = 0 (New)
3	Client sends two (2) messages for new orders that do not appear to be reaching the exchange		
	NewOrderSingle (D) order #2	>	
	MsgSeqNum (34) = **3**		
	Side (54) = 1 (Buy)		
	NewOrderSingle (D) order #3	>	
	MsgSeqNum (34) = **4**		
	Side (54) = 1 (Buy)		
4	Client chooses to close connection, and send a Logout (5) message		
	Logout (5)	>	
	MsgSeqNum (34) = **5**		
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		
		<	**ResendRequest** (2)

#	Received From Client		Sent by Exchange
			MsgSeqNum (34) = **3**
			BeginSeqNo (7) = **3**
			EndSeqNo (16) = **5**
6	Client resends the two orders with Exchange acknowledging the orders		
	NewOrderSingle (D) order #2	>	
	MsgSeqNum (34) = **3**		
	Side (54) = 1 (Buy)		
	PossDupFlag (43) = Y (Possible duplicate)		
	OrgSendingTime (122) = set to time of original sending		
		<	**ExecutionReport** (8)
			MsgSeqNum (34) = **4**
			OrdStatus (39) = 0 (New) / *ExecType* (150) = 0 (New)
	NewOrderSingle (D) order #3	>	
	MsgSeqNum (34) = **4**		
	Side (54) = 1 (Buy)		
	PossDupFlag (43) = Y (Possible duplicate)		
	OrgSendingTime (122) = set to time of original sending		
		<	**ExecutionReport** (8)
			MsgSeqNum (34) = **5**
			OrdStatus (39) = 0 (New) / *ExecType* (150) = 0 (New)
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		
	SequenceReset (4)	>	
	MsgSeqNum (34) = **5**		
	PossDupFlag (43) = Y (Possible duplicate)		
	OrgSendingTime (122) = set to current time		
	NewSeqNo (36) = **6**		
		<	**Logout** (5)
			MsgSeqNum (34) = **6**

APPENDIX A: REVISION HISTORY

Version	Change Description
1.7.1	Clarification in the *FRMARAMPLP (21801)* [Used In] description : FRMARAMPLP is present in ExecutionReport (8) message only for Drop Copy. Fixed lengrh of TradeQualifier field (21080) (15 instead of 13).
1.7.0	Added UndisclosedIcebergType (200005) in NewOrderSingle (D), ExecutionReport (8) and OrderCancelReplaceRequest (G). Added FRMARAMPLP (21801) indicator in NewOrderSingle (D), ExecutionReport (8) and OrderCancelReplaceRequest (G). Added OrderCategory (21041) in RFQNotification (U35).
1.6.3	*DarkExecutionInstruction* (20052) has been added in RFQNotification (U35) message.
1.6.2	*OrderCategory* (21041) has been removed from RFQNotification (U35) message. *DarkExecutionInstruction* (20052) has been removed from OrderCancelRequest (F) message. Clarification in the *DarkExecutionInstruction* (20052) [Used In] description : DarkExecutionInstruction is present in ExecutionReport (8) message only for Drop Copy. *MinQty* (110) and *DarkExecutionInstruction* (20052) have been added in QuoteRequest (R) message.
1.6.1	Correction in ExecutionReport (8) Message Signature Tags table for two cases: - Cancellation due to RFQ cancellation - Cancellation due to RFQ confirmation
1.6.0	**Please note that all the changes introduced with this release and listed below are applicable and used for Euronext Block only** **The following field has been created:** *ConditionalOrderFlag* (21800) is used to determine if an order is conditional or firm in NewOrderSingle (D), OrderCancelReplaceRequest (G) and ExecutionReport (8) messages. **Values have been updated for the following fields:** *AckPhase* (21013): addition of value 8 = Random Uncrossing Phase *ExecType* (150) : addition of the following value : c = Conditional Order cancelled due to Potential Matching **Formatting changes :** Tag 🔴BLK has been added in the whole document for each message on which Block Optiq Segment is applied on.
1.5.0	**The following message has been created:** - **RFQLPMatchingStatus (U37)**. **The following messages have been been updated:** - **NewOrderSingle (D):** *QuoteReqID, Dark Execution Instruction, Peg Offset:* 'For Future Use' has been removed from field description - **OrderCancelReplaceRequest (G):** *Dark Execution Instruction, Peg Offset:* 'For Future Use' has been removed from field description - **QuoteRequest (R):** fields *QuoteReqID, EndClient* and *SenderCompIDPublication* have been removed - **OrderCancelRequest (F):** field *OrderCategory* has been added - **OrderMassStatusRequest (AF):** field *OrderCategory* has been added - **OrderMassCancelRequest (q):** field *OrderCategory* has been added - **OrderMassCancelReport (r):** field *OrderCategory* has been added - **OwnershipRequest (U18):** field *OrderCategory* has been added

Version	Change Description
	- **OwnershipRequestAck (U29):** field *OrderCategory* has been added - **RFQNotification (U35):** fields *OrderCategory* and *MinQty* have been added. Fields *EndClient, ContraBroker* and *RFQUpdateType* have been removed - **RFQMatchingStatus (U36):** field *RecipientType* has been removed; 'For Future Use' has been removed from message description **The following field has been created: Order Category** **The following field has been removed: Undisclosed Iceberg Type** **Values have been updated for the following fields:** *TradeQualifier* (21080): addition of value 7 = Deferred Publication *EMM* (20020): addition of value 9 (= Listed-not traded) *ExecType* (150) : addition of the following values : r = LP Order cancelled due to RFQ expiration f = LP Order cancelled due to RFQ cancellation q = RFQ Remaining quantity killed s = LP Order cancelled due to RFQ confirmation *DarkExecutionInstruction* (20052): First Position = Dark Indicator (0: No ; 1: Yes) Forfth Position = Sweep Order Indicator (0: No ; 1: Yes) Fifth Position = Minimum Quantity Type (0: MAQ ; 1: MES) **Descriptions have been updated for the following fields:** *STPAggressorIndicator* (21015): STP is not applicable for Dark orders **Formatting changes :** In OrderMassCancelRequest (q) and OrderMassCancelReport (r) messages: - Fields *DerivativeSymbol* (1214)*, DerivativePutOrCall* (1323)*, MaturityMonthYearFormat* (1303)*, MaturityMonthYear* (200) have been greyed and set to italic. - Tag **FUND** has been added
1.4.1	**The following messages have been been updated:** - **ExecutionReport (8):** field *IDCCP* has been removed. **The following field description has been updated:** - *ContraBroker* (375)
1.4.0	**The following field description has been updated:** - *ContraBroker* (375)
1.3.2	**Conditions have been updated for the following fields:** *OrigSendingTime* (122) ; *LastMsgSeqNumProcessed* (369) ; *LastCapacity* (29) ; *OrderOrigination* (1724) ; *DisplayQty* (1138) ; *SecurityID* (48) ; *SecurityIDSource* (22) ; *EMM* (20020) ; *LPActionCode* (10076), *OrderID* (37) ; *OnBehalfOfCompID* (115) ; *DeliverToCompID* (128). **Description have been updated for the following fields:** *IDCCP* (21040) ; *ConfirmFlag* (9930) **Presence Rule has been updated for the following fields:** - In **Message Header** *LastMsgSeqNumProcessed* (369) is Conditional - In **RequestAckMessage (Uy),** *BookINTime* (21002), *SecurityID* (48), *SecurityIDSource* (22), *EMM* (20020) are Conditional.

Version	Change Description
	Values have been updated for the following fields:
	- *SessionRejectReason* (373): addition of values values identified for rejection in case of throttling :
	25 = Throttling queue full; **26** = Throttling Rate exceeded; **27** = System busy.
	- *DisplayQty* (1138) : Value starts from 1.
	- *RefSeqNum* (45)*, NextExpectedMsgSeqNum* (789)*, MsgSeqNum* (34)*, LastMsgSeqNumProcessed* (369) : Values go from 1 to 2^32-2.
	The following sections have been updated:
	- "2.4 Order ID" paragraph revamping for clarification.
	- "4.7.1 Message Header": Values indicated for field *LastMsgSeqNumProcessed* (369) are incorrect and are changed to "From 1 to 2^32-2". Clarification regarding OnBehalfOfCompID (115) and DeliverToCompID (128) fields.
	- "4.8 Rejection and Disconnection when handling missing mandatory tags or incorrect values in tags": addition of a clarification regarding unknown tags in messages.
	- "4.9.1.4 Gap Fill Processing – Rejection Cases": clarification in the case when message resent by the client does not have the *OrigSendingTime* (122).
	- "5.2.4 SequenceReset (4)" : Removal of this case : While a ResendRequest (2) is pending, if the Client sends a **SequenceReset – Gap Fill Mode** message with MsgSeqNum lower than the expected sequence number and PossDupFlag (43) set to 'Y', the trading engine ignores the message;
	- "5.3.2 Execution Report": Correction in the table "ExecutionReport (8) Message Signature Tags",
	For Order Status case value of ExecType (150) is "m",
	For Ownership Request case, the value of ExecType (150) is "k".
	- "5.3.17 OrderMassStatusRequest (AF)" : correction of ExecType="m".
	- "5.3.14 UserNotification (CB)" : add clarification on notification of suspension. In "Case 4: ExecutionwithinFirmShortCode for a Firm or DEA change the value of PartyIDSource (447) is P (Short code identifier).
	- "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 *Components Usage within the message* section for *ClientIdentificationShortcode* : if the information in the repeating group is not identical, the message is rejected.
	- "5.3.7 OrderCancelReject (9)" addition of Rejection Behaviour paragraph
	The following section has been added:
	- "4.10 Direct Responses to Application Messages"
1.3.1	**The following messages have been updated:**
	- **Header:** Added field *LastMsgSeqNumProcessed* (369).
	- **UserNotification (CB):** The fields *NoOrderAttributes* (2593), *OrderAttributeType* (2594), *OrderAttributeValue* (2595) have been removed.
	The following values have been removed:
	- In field *OrdStatus* (39): values 'F' (Trade) and 'N' (RFQ partially or fully matched with other counterparts (Future Use) have been removed.
	- In field *ExecType* (150): values '1' (Partially filled) and '2' (Filled) have been removed.
	- In field *TradeType* (21010): values not supported by OEG have been removed.
	The values for the following field were updated:
	- *SessionStatus* (1409): new values are added for the excessive breaches of rate (throttling limits):
	106 = Excessive Number of Messages; **107** = Excessive Amount of Data in Bytes; **108** = Excessive Number of Messages & Amount of Data in Bytes
	- Value*s* 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: *NoOrderAttributes* (2593); *NoNestedPartyIDs* (539); *NoPartyIDs* (453).
	Conditions updated for the following fields:

Version	Change Description
	ClOrdID (11); *CumQty* (14) ; *ExecID* (17); *ExecRefID* (19); *LastCapacity* (29); *OrderID* (37); *PossDupFlag* (43); *Side* (54); *ExpireTime* (126); *LeavesQty* (151); *ExpireDate* (432); *NestedPartyRoleQualifier* (2384); *NestedPartyID* (524); *ClearingInstruction* (577); *MassStatusReqID* (584); *OrderAttributeType* (2594); *OrderAttributeValue* (2595); *TriggeredStopTimeInForce* (20175); *TradeType* (21010) ; *StopPx* (99) **Description of the following messages has been updated with clarifications and corrections:** - **ResendRequest** (2) / [Section 5.2.2]: Simplified description, and removed repeating text - **Reject** (3) / [Section 5.2.3]: Simplified description. Rejection cases moved to new sections on rejection and disconnection, add use of message for throttling. - **SequenceReset** (4) / [Section 5.2.4]: Added clarification on fields and codes used - **ExecutionReport** (8) / [Section 5.3.2]: Added clarification for use of repeating group to provide Clearing Firm ID and the Client ID data - **UserNotification** (CB) / [Section 5.3.14]: Added identifiers used in various cases of Kill scope **The following field description has been updated:** - *DarkExecutionInstruction* (20052) : Label of values "LiS Indicator" updated **The following sections have been added:** - "4.8 Rejection and Disconnection when Handling Missing Mandatory Tags or Incorrect Values" - "4.9 Sequence Number Gap Management & Rejection" - "7 Examples" **The following sections have been updated:** - "2.4 Order ID": Added notes on cases where Order Id is not provided and how to identify them. - "4.3 FIX Optional Fields": Added further clarification - "4.5 Price, Quantity, Ratio and Amount Formats": Updated intra-document link references - "4.6.1 Symbol Index": added the tag for field *SymbolIndex* (48) in the description **The following section has been removed:** "1.2.3 Short Codes management before January 2018"
1.3.0	**The following messages have been updated:** - **Header:** Added field *OrigSendingTime* - **Logon (A):** Update description for *NextExpectedMsgSeqNum* management, update presence of the field *NextExpectedMsgSeqNum* from Conditional to Mandatory - **Reject (3):** Update description for special cases - **ResendRequest (2):** Update description for gap fill management - **SequenceReset (4):** Update global description - **Heartbeat (0):** Update description for message rejection cases - **NewOrderSingle (D):** Update presence of the field *DisclosedQtyRandIndicator* from Optional to Conditional, Update presence of the field *DarkExecutionInstruction* from Mandatory to Conditional - **ExecutionReport (8):** Updated description for VFU/VFC Ack, update Message Signature Tags table following the updates of the fields *ExecType* and *OrdStatus*, updated presence of the field *LastCapacity* from Mandatory to Conditional, removed field *TradeTime,* added fields *ExecRestatementReason, IDCCP, MassStatusReqID* and *ClientMessageSendingTime* - **MassQuote (i)**: Updated description for rejection message and for Clearing Data and Short Codes management, removed fields *ClOrdID* and *TransactTime* - **MassQuoteAck (b):** Added field *ClientMessageSendingTime,* updated presences of the following fields from Mandatory to Conditional: *OEGINFromMember* and *OEGOUTToME,* removed repeating groups *Parties* and *NestedParties,* removed field *TransactTime,* updated description following the removal of repeating groups and for rejection message - **OrderCancelRequest (F)**: Updated description and added repeating group *OrderAttributeGrp* for particular client short code management (AGGR and PNAL) - **OrderCancelReplaceRequest (G):** Updated description, removed field *AccountCode,* Update presence of

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	the field *DarkExecutionInstruction* from Mandatory to Conditional
	- **OrderCancelReject (9)**: Updated description for rejection in case of invalid values, added field *ClientMessageSendingTime,* removed field *TransactTime*
	- **RequestAckMessage (Uy)**: Updated description for message use, removed fields *ClOrdID* and *TransactTime,* added fields *ClientMessageSendingTime and RequestID,* Updated presences of the following fields from Mandatory to Conditional: *OEGINFromMember*, *OEGOUTToME*, *BookOUTTime* and *OEGINFromME*
	- **OwnershipRequest (U18)**: Updated description and added repeating group *OrderAttributeGrp* for particular client short code management (AGGR and PNAL), updated description for rejection message, added fields *OrigClOrdID* and *EMM*, removed field *TransactTime*
	- **AskForQuote (AL):** removed field *TransactTime*
	- **PriceInput (UI)**: Updated description and added repeating group *OrderAttributeGrp* for particular client short code management (AGGR and PNAL), Removed value '3' (Reference Price) from the field *InputPxType,* updated description following the removal of this value, removed field *TransactTime*
	- **LiquidityProviderCommand (UZ)**: Updated description and added repeating group *OrderAttributeGrp* for particular client short code management (AGGR and PNAL), removed field *TransactTime*
	- **OrderMassStatusRequest (AF)**: Updated description and added repeating group *OrderAttributeGrp* for particular client short code management (AGGR and PNAL), removed fields *ClOrdID* and *TransactTime*
	- **OrderMassCancelRequest (q):** Updated description and added repeating group *OrderAttributeGrp* for particular client short code management (AGGR and PNAL)
	- **OrderMassCancelReport (r):** Added field *ClientMessageSendingTime*
	- **UserNotification (CB):** Updated description for repeating group usage in case of a firm suspension, updated description and added repeating group *OrderAttributeGrp* for particular client short code management (AGGR and PNAL), updated presences of the following fields from Mandatory to Conditional: *NoInstrumentScopes*, *InstrumentScopeSecurityID* and *InstrumentScopeSecurityIDSource,* added value 'D' (Proprietary / Custom Code) to the field *PartyIdSource*
	The following messages have been added:
	- **InstrumentSynchronisationList (U50)**
	- **SynchronisationTime (U51)**
	The following fields have been updated:
	- Multiple integer fields updated to align possible values with their presence in messages structures: the mandatory fields have one less authorized value (Null Value is not accepted)
	- Multiple bitmap fields updated to remove "Future Use" values previously set on unused bits
	- Updated descriptions for fields: *Account; LastCapacity; OrderPriority; Price; SoftwareProvider; STPAggressorIndicator*
	- Updated length for fields as follows: *Account:* from '14' to '12'; *AckQualifiers:* from '15' to '3'; *DarkExecutionInstruction:* from '8' to '9'; *MassStatusReqID:* from '30' to '20'; *PostingAction:* from '19' to '17'
	- Updated or Added conditions for fields: *Account; AckPhase; BidErrorCode; BidPx; BidQuoteID; BidSize; BuyRevisionIndicator; ClOrdID; CancelOnDisconnectionIndicator; ClearingInstruction; DarkExecutionInstruction; DeliverToCompID; DisplayQty; ExecID; ExpireDate; ExpireTime; InstrumentScopeSecurityID; InstrumentScopeSecurityIDSource; InvestmentDecisionWFirmShortCode; LPRole; OfferErrorCode; OfferPx; OfferQuoteID; OfferSize; OrderOrigination; OrderQty; OrdType; PegOffsetValue; PegPriceType; Price; QuoteReqID; RequestID; SelfMatchPreventionID; SellRevisionIndicator; SenderCompID; Side; StopPx; STPAggressorIndicator; TargetCompID; TechnicalOrdType; Text; TimeInForce; TradeType; TradingSessionID; TriggeredStopTimeInForce; UndisclosedIcebergType; UndisclosedPrice*
	Modified Values as follows: *AccountCode*: value '8' changed from 'Riskless Principal' to 'Structured Product Market Maker' ; *AckQualifiers:* 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' ; *CumQty*: update values from 'From 0 to 2^64-2' to 'From -1 to 2^64-2'; *DarkExecutionInstruction:up* removed values '5 = Future Dark Use 1', '6 = Future Dark Use 2' and '7 = Future Dark Use 3' *; EMM*: value 'Not Applicable' changed from '254' to '99' ; *ExecType*: added values 'D = Restated', 'L = Triggered or Activated by System' and 'm = OrderMassStatusRequest Ack' ; removed values 'c = Stop

Version	Change Description
	Triggered Ack' and 'f = MTL Second Ack' ; *InputPxType*: removed value '3' ; *LastCapacity*: 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)' ; *LeavesQty*: update values from 'From 0 to 2^64-1' to 'From -1 to 2^64-2'; *MassStatusReqID:* update value from 'User-defined value' to 'From -2^63 to 2^63-1' ; *MsgSeqNum*: update values from 'From 0 to 2^32-1' to 'From 1 to 2^32-1' ; *MsgType:* added values 'U50 = InstrumentSynchronizationList' and 'U51 = SynchronizationTime' ; *NextExpectedMsgSeqNum*: update values from 'Integer' to 'From 1 to 2^32-1' ; *NoInstrumentScopes:* update value from 'From 1 to 100' to 'If provided, always set to 1' ; *OrdStatus*: 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' ; *PostingAction*: removed value '0 = Field Actively Used', values '2' to '9' set for Derivatives only ; *RefTagID:* update values from 'Integer' to 'From 1 to 999 999' ; *SessionRejectReason:* added value '19 = NewSeqNo(36) too low' ; *TradeType*: removed value '35', added values '37' and '38' ; *TriggeredStopTimeInForce*: removed values '2', '3', '4', '5', '7' and '8' **The following sections have been added:** - 1.3 FUTURE USE **The following sections have been modified:** - 1.2.1 Maintenance of Relevant Data relating to Orders in Financial Instruments: Added paragraph on short code general presence rules - 2.2.2 Drop Copy: Removed details of SBE Drop Copy as it will be provided in FIX only - 4.1 Field Format: Added further explanation for *MultipleCharValue* field type usage - 4.6.1 Symbol Index: Removed tab depicting Symbol Index ranges - 5.1.1 Scope of Messages and Functionalities: Removed 'TCS & Transaction Reporting service' segment **The following sections have been removed:** - 2.4 Throttling Mechanism: will be described in a dedicated document - 2.5 Throttling Parameters: will be described in a dedicated document
1.2.0	**The following sections have been updated:** - 1.2 MiFID Related Changes: updated fields possible values in description. - 4.6.1 Price, Quantity, Ratio and Amount Formats: added fields calculation method and formulas description. **The following messages have been updated:** **General message description updates:** - Description of messages updated with clarification & 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 **NewOrderSingle:** - Updated field from Optional to Conditional: *NoNestedPartyIDs* - Updated field from Mandatory to Conditional: *NestedPartyRoleQualifier* **ExecutionReport:** - Updated fields from Mandatory to Conditional: *BookInTime*, *DarkExecutionInstruction*,*LastPx*, *LastQty*, *AckQualifiers*, *TradeType*, *ExecPhase*, *TradeQualifier*, *TradeTime*, *OEPartitionID*, *LogicalAccessID*, *OrdType*, *TimeInForce*, *NoSides*, *AccountCode*, *NestedPartyRoleQualifier*, *ErrorCode*, *TransactTime* - Update fields from Optional to Conditional: *UndisclosedPrice*, *MinQty*, *ClearingInstruction*, *Text*, *Account*, *TechnicalOrdType*, *NoNestedPartyIDs* **MassQuote:** - Added fields: *NoNestedPartyIDs*, *NestedPartyID*, *NestedPartyIDSource*, *NestedPartyRole*, *NestedPartyRoleQualifier* **MassQuoteAck:**

Version	Change Description
	- Updated field from Mandatory to Conditional: *BookInTime*
	- Added fields: *NoNestedPartyIDs, NestedPartyID, NestedPartyIDSource, NestedPartyRole, NestedPartyRoleQualifier*
	OrderCancelReplaceRequest:
	- Added fields: *NoNestedPartyIDs, NestedPartyID, NestedPartyIDSource, NestedPartyRole, NestedPartyRoleQualifier*
	OrderCancelReject:
	- Removed unused field: *OrigClOrdID*
	- Updated field from Mandatory to Conditional: *ErrorCode*
	RequestAckMessage:
	- Updated field from Mandatory to Conditional: *ErrorCode*
	The following individual field descriptions have been updated:
	- Description updated for fields: *SoftwareProvider, BidPx, BidSize, CumQty, DisplayQty, LastPx, LastQty, LeavesQty, LegLastPx, LegLastQty, MinQty, OfferPx, OrderQty, OfferSize, PotentialMatchingPrice, PotentialMatchingQuantity, BreachedCollarPrice, Price, ClOrdID*
	- Updated length of fields: *NestedPartyID* from 10 to 11, *OEPartitionID* from 10 to 5
	- Updated / Added Conditions of field: *BookInTime, CumQty , DarkExecutionInstruction, ErrorCode, ExpireTime, ExpireDate, LeavesQty, DisplayQty*
	- Updated possible values of fields: *BeginSeqNo, EndSeqNo, ExecType*, *EMM, SessionStatus, OrdStatus, NestedPartyRoleQualifier , PartyRole, PartyRoleQualifier ,PartyIDSource, OrderAttributeType*
1.1.0	**Specifications, including all messages, components, structures, descriptions and values have been fully revamped to take into consideration:**
	- Latest guidelines from the FIX community on specifications and best practices on implementation of version 5.0
	- Implementation of MIFID II and MIFIR requirements EP222 - Critical data requirements identified by the sub-working groups on transparency, and order data and recordkeeping
	- Client consultations on functionalities previously identified or missing from the scope of the Optiq specifications
	The following sections & messages have been removed:
	- **Sections**: *1.2 Work In Progress Section & 3.1.5 Accepted messages*
	- **Messages**: *NewOrderMiFIDExtension (U02) & NewOrderMiFIDExtensionAck (U30)*
	The following sections & messages have been added:
	- **Sections**: *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)*
	- **Messages**: *OwnershipRequestAck (U29); OwnershipRequest (U18); QuoteRequest (R) ; RFQNotification (U35); RFQMatchingStatus (U36); UserNotification (CB)*
1.0.0	First Version

DOCUMENT HISTORY

REVISION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
1.7.1	3 Jul 2019	IT Solutions – TCH/FBO	
1.7.0	12 Jun 2019	IT Solutions – FBO	
1.6.0	14 Nov 2018	IT Solutions – FLO	Ninth Release
1.5.0	9 Nov 2018	IT Solutions – FLO	Eighth Release
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	IT Solutions – FLO	Fifth Release
1.3.0	7 Dec 2017	IT Solutions - DCO	Fourth Release
1.2.0	28 Jun 2017	IT Solutions - DCO	Third Release
1.1.0	2 May 2017	IT Solutions - DCO	Second Release
1.0.0	31 Oct 2016	IT Solutions - DCO	First Release