

Document title

# **EURONEXT CASH MARKETS – OPTIQ® CCG TO OEG CHANGE HIGHLIGHTS**

Migration Phase 2

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## PREFACE

### PURPOSE

The purpose of this document is to explain changes and improvements to the messages and processes, between the current Euronext Common Customer Gateway (CCG) used by customers to connect to the Universal Trading Platform (UTP) and the Optiq Order Entry Gateway (OEG). The second phase of the migration to the Optiq systems will cover the Euronext Cash markets, during which the Euronext Derivative markets will remain in place; on the UTP trading engines and order entry gateways (CCG's) and only the Cash markets will be migrated to the Optiq platform.

The intended audience of this document is any client currently connecting to the Euronext Cash markets via CCG.

**Note:** This document is for informational purposes only, and should be consulted alongside its associated documents, as outlined below.

### SCOPE

Optiq Segment	Tag	Coverage
Equities	EQ	✓
Funds	FUND	✓
Fixed Income	FRM	✓
Warrants and Certificates	SP	✓
Options	OPT	
Futures	FUT	
Commodities	CMDT	
Indices	IDX	
Drop Copy	DC	✓

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## WHAT'S NEW?

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

REVISION NO./ VERSION NO.	DATE	CHANGE DESCRIPTION
1.2.0	11/10/2017	<p>Updated release for Phase 2 migration to Optiq, covering the following changes:</p> <ul style="list-style-type: none"> <li>- Added section <u>"Change in Modification (Cancel / Replace) message behavior"</u> and made associated updates to the Cancel / Replace message</li> <li>- Peg orders flagged for Future Use</li> <li>- List of possible Ack Types and their mapping are updated with new values for "Order Creation by MO" / "Bid Only / Offer Only Ack" / "Ownership Request Ack", and clarified mapping to FIX tags</li> <li>- Drop Copy section updated, to indicate availability in FIX protocol only, and adjustments in the scope of the service</li> <li>- Order ID section updated to include behaviour in FIX</li> <li>- Sections Extended Fill (29) and Extended Response (16) removed from SBE protocol. Drop Copy service will no longer be support SBE protocol and Ownership Request will replied by an Ack (03) message</li> <li>- For improved readability sections providing technical details for SBE and FIX are reorganized to segregate description of changes and message by message comparison &amp; mapping of fields.</li> <li>- Sections previously called <u>"Technical Messages"</u> are renamed to <u>"Administration Messages"</u></li> <li>- Messages NewOrderMiFIDExtension (U02) and NewOrderMiFIDExtensionAck (U30) removed as they will no longer be used.</li> <li>- ETF MTF related messages Quotes Request (10), RFQ Notification (35), RFQ Matching Status (36) added to the document, however are for Future Use</li> <li>- Added clarification on management of <u>"Minimum amount check of Iceberg orders"</u></li> <li>- Added clarification for the Cancel on Disconnect mechanism</li> <li>- Updated section on improved Timestamp fields with clarifications</li> <li>- Added section for Ownership Request (18) and Ownership Request Ack (17) messages</li> <li>- Added mapping of Kill reasons to existing OrdStatus for the Kill (05) message</li> <li>- Added sections <u>"Mapping of messages CCG Binary to OEG SBE"</u> and <u>"Mapping of messages CCG FIX 4.2 to OEG FIX 5.0"</u></li> <li>- Added clarification on RFE mechanism</li> <li>- Updated section <u>"MiFID II related Changes"</u> to <ul style="list-style-type: none"> <li>o Included FIX references</li> <li>o Updated notes on process of implementation</li> <li>o Added a section on new message User Notification (39 / FIX CB)</li> </ul> </li> <li>- Update of section <u>"Dissemination of Day Order Cancellation at the Close of Business"</u> – removed references to EOD application files</li> <li>- Section <u>"Public &amp; Private feed reconciliation"</u> renamed <u>"Reconciling Orders in Public &amp; Private Feeds"</u></li> <li>- Removed references to Routing info</li> <li>- General formatting, spelling and grammar corrections throughout the doc</li> <li>- Addition of value in field Account Type - 8 for Structured Product Market Maker</li> <li>- Regrouped "new" messages into section Messages Associated to New Functionalities (New Messages) for each protocol</li> <li>- Modified the Tick Size and Number of decimals section with minor clarification</li> <li>- Addition of FIX message comparison of messages and field changes, including newly added messages for FIX: Sequence Reset (FIX 4)</li> <li>- Added section "Future Use"</li> <li>- Update to the sections about the TCS scope and messages <ul style="list-style-type: none"> <li>o Section <u>"TCS &amp; Transaction Reporting"</u> renamed to <u>"Trade Confirmation System (TCS)"</u> and updated with clarifications</li> <li>o Reference to the MiFID II services removed, due to their</li> </ul> </li> </ul>

REVISION NO./ VERSION NO.	DATE	CHANGE DESCRIPTION
		<ul style="list-style-type: none"> <li>migration into Saturn <ul style="list-style-type: none"> <li>○ Added a section “<u>Fields for Cross declarations</u>”</li> </ul> </li> <li>- Removed references to the order entry for segment “TCS &amp; Transaction Reporting”</li> <li>- Field Mapping tables in SBE adjusted to provide CCG field on the left, and Optiq fields on the right</li> <li>- Multiple integer fields updated in the SBE Field Mapping tables, to align possible values with their presence in messages structures: the mandatory fields have one less authorized value (Null Value is not accepted)</li> <li>- Adjusted visual representation of any "future use" fields in the SBE Field Mapping tables, with addition of [N/A] "flag"</li> </ul>

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## ASSOCIATED DOCUMENTS

The following documents should be read in conjunction with this document:

- Euronext Cash Markets - Optiq OEG Client Specifications - SBE Interface
- Euronext Cash Markets - Optiq OEG Client Specifications - FIX 5.0 Interface
- Euronext Cash Markets - Optiq Kinematics Specifications
- Euronext Cash Markets - Optiq OEG Connectivity Configuration specifications
- Euronext Cash Markets - Optiq & TCS Error List
- SBE XML message template

For the latest version of documentation please visit <http://www.euronext.com/optiq>

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## 1. OVERVIEW

The aim of this document is to explain changes and improvements between the existing CCG Cash private messages and the new Optiq Order Entry Gateway (OEG) providing access to the Optiq matching engine (ME) for Cash markets for the second phase of migration to the Euronext Optiq trading platform.

While Derivative markets are not migrating to Optiq until phase 3, the messages of the Order Entry specifications and kinematics for phase 2 already include adjustments in behaviour, naming conventions, values as well as new fields, with the goals of (1) providing in phase 3 a harmonized protocol for between Cash and Derivatives and (2) reducing the impact to clients for the phase 3 migration of the Derivatives markets to Optiq.

The OEG client specifications provide a full description of static message structures that will be used and disseminated in order entry. Some of the fields currently used in CCG Cash messages were removed, and some will have a change in behaviour due to the phased migration process.

The Kinematics documents provide for each market the dynamic rules that drive message publication. As such, the documents provided for phase 2 of the migration should be considered only for Cash markets, since these rules depend primarily on the matching engine. At a later date, an update of the specifications and kinematics documents will be issued to include complete coverage of Derivatives functionalities for Phase 3 of migration.

This document provides:

- High level description of:
  - technical changes
  - functional changes
  - message sending logic
- Details of:
  - mapping between existing CCG Cash private messages & new Optiq OEG messages, and fields within them
  - details of changes made to the structure of message and format / values of fields

### *Note:*

*SmartPool and BondMatch are out of scope for the migration from CCG / UTP Cash to Optiq OEG Cash.*

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### 1.1 FUTURE USE

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

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

The associated messages and effective use of fields will not be technically supported on day 1 implementation of Optiq for the Cash markets.

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## 1.2 WORK IN PROGRESS

Some updates to this document may be issued in the future to address minor changes. Majority of topics previously identified in this section have been incorporated into the overall specifications documents. Error code list, as well as business continuity & recovery topics are to be addressed in separate, dedicated documents.

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## 2. TECHNICAL CHANGES

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### 2.1 ACCESSES AND CONNECTIVITY

In UTP, access to Euronext markets was provided through SLE Order Entry, which supported the connectivity from client application to UTP Common Customer Gateway (CCG).

In Optiq, the Order Entry Gateway (OEG) replaces the CCG, and access to Euronext markets is provided through the notions of OEG Logical Access and OE Sessions, that are in line with the newly introduced instrument segregation.

In UTP, an SLE is a logical session that allows network communication between the CCG and Euronext Cash Markets.

In Optiq, a Logical Access represents the same notion, which provides a member with access to an Optiq Segment (for more information client may refer to the dedicated section: Optiq Segment and Logical Access). For each Logical Access, clients may establish one or several OE Sessions to the partitions that make up the Optiq Segment.

OE Partition ID will be a unique identifier of a partition across all segments and throughout the Optiq system.

An OE Session is a physical connection through which a client is able to reach directly a specific Optiq Partition. Further details are provided in the dedicated section : Partition and OE Sessions.

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### 2.2 NEW BINARY MESSAGE PROTOCOL - SBE

In Optiq for order entry binary protocol will be provided using the SBE standard. SBE uses binary data format to reduce the size of messages as much as possible, uses bitmap fields to further optimize the data use, and follows the specifications of the SBE protocol.

SBE offers the possibility to have backward and forward compatibility. It means that clients are not required to be on the last version of Schema Version (message structure version) to be able to read the message.

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

While general use of SBE protocol has been described for MDG, clients are encouraged to carefully review the SBE OEG client specifications in order not to miss anything specific to order entry.

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### 2.3 FIX 5.0 FOR ALL MARKETS

Euronext Cash market CCGs support FIX 4.2 protocol, and are being upgraded to the FIX 5.0, with adjustments required to be in line with new Optiq architecture and for MIFID II compliance.

## 2.4 HARMONIZED MESSAGES AND FIELDS

### 2.4.1 Messages

A number of messages that for Cash CCGs are similar in structure are combined into one, less specialized messages, to reduce complexity. While scope covers Euronext Cash markets, some of the message structure will include the framework for Derivative specific functionalities, to ensure reduced impact of future migration and as the first steps in harmonization between Cash and Derivative messages.

### 2.4.2 Fields

New fields are added to support new Optiq architecture, as well as MIFID II compliance, and to facilitate harmonization between the Cash and Derivative feeds. While Derivative private messages are going to be migrated to Optiq in a later phase, to reduce impact for future development, phase 2 includes some Derivatives specific fields to have a single, harmonized specification for Cash and Derivative markets.

Existing fields are also adjusted to be MIFID II compliant.

### 2.4.3 Error Text and Codes

Error text previously provided in the response messages will be replaced with error codes only, which are enriched to provide more details and granularity for the errors. For the text corresponding to the error codes please see the Error codes document.

The values of the Error codes provided currently in UTP Cash will be replaced by a new set of codes, which will be identified in dedicated document “Optiq & TCS Error List”. While the error codes used in Optiq are different from the ones sent by UTP, they cover the full scope of functional cases covered by UTP and in many cases provide more granularity and details about the case that caused the error.

Because the error messages have been rearranged, some of the UTP errors will no longer appear in the list.. In the Error codes document, each new code is mapped, when relevant, with a UTP code.

The list of deleted UTP error codes is below:

UTP Error Code	Text
20104	Bad ExpireTimeFlag, not a GTD
20105	Bad ExpireTimeFlag, not a GTT
20116	Can't change Side
20117	Can't change to Discretion
20132	Cannot change side
20140	Class closed or early monitoring
20141	Class closed
20142	ClOrdID already exists
20153	Discretion order forbidden
20185	Invalid Account on bulk cancel
20186	Invalid class
20192	Invalid ExecInst on cross
20193	Invalid ExecInst on Mkt to Limit order

UTP Error Code	Text
20195	Invalid ExecInst on order
20196	Invalid ExecInst on peg
20202	Invalid OnBehalfOfCompID on bulk cancel
20203	Invalid OnBehalfOfCompID
20211	Invalid PegDifference, must be = 0
20243	Missing Class/Instrument on bulk cancel
20245	Missing OnBehalfOfCompID
20292	No ExecInst on Mkt to Limit order
20293	No ExecInst on MOC/LOC
20343	Not same ClOrdID (F11-F41)
20344	Not same OnBehalfOfCompID (F115)
20359	OrderID not found
20404	technical error
20411	Too late to cancel
20413	Too late to modify
20417	Type of price invalid for this phase
20429	Cancelled for LACP change
20430	Cancelled for LTP change
20431	Invalid OnBehalfOfCompID
20507	MinQty forbidden
20510	Invalid number of quotes
20512	Duplicated Symbol
20520	Instrument ineligible to KIBI/KOBI/TAKO
20527	Class must have at least 4 decimals
20537	RFE modem switched
20600	RFS not available for this Market Place
20601	RFS is not authorized for this instr category
20602	RFS Qty is too low
20625	Max amount reached for order on Equities
20626	Max qty reached for order on Bonds
21234	Invalid mkt phase for this TIF
21235	Midpoint peg must have Peg type
21236	Type forbidden during this market phase
21237	SmartPool : Maxfloor forbidden
21238	Cancel/Replace invalid on routed order
21240	Min quantity must be >= MIQ
21242	Mid Point pricetoo high
21243	Mid Point pricetoo low
21506	SmartPool : MaxFloor forbidden
23015	Update of dark order forbidden
29020	Field (side) invalid
30001	Field (MinQty) invalid

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## 2.5 NEW INSTRUMENT SEGREGATION

Optiq introduces a new classification for instrument management in the Euronext trading system. As detailed in the OEG messaging specifications, for performance purpose, concepts of Optiq Segment and Optiq Partition are introduced. While the Trading Classes as they existed in UTP will no longer have the same use they could still be used as a grouping of instruments for some functionalities (e.g. Mass Cancel).

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### 2.5.1 Optiq Segments and Logical Accesses

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

Optiq Segments available for order entry on the Cash markets in Step 2 are:

- Equities
- Fixed Income
- Funds
- Warrants & Certificates

Referential standing data provided on a daily basis for each instrument via messages and files identifies to which Optiq Segment an instrument belongs to.

Since Optiq Segments are technically independent from one another, access to each Optiq Segment requires a dedicated Logical Access.

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### 2.5.2 Partitions and OE Sessions

Individual Optiq Segments may be comprised of at least one or several Optiq Partitions.

An Optiq Partition is a technical subdivision of an Optiq Segment. Each Partition relies on an optimized technical environment, physically independent from one another, but connected.

Access to Optiq Partitions is managed through Order Entry Sessions. For each Logical Access, an OE Session can be set up to a given Partition. However, since a Logical Access allows trading on the whole Optiq Segment two technical paths are possible for a market participant to reach an instrument order book:

- A direct path through an OE Session established to the partition hosting the targeted instrument
- An indirect path through an OE Session established to another partition (within the same Optiq Segment), relying on internal connectivity between Matching Engines of the various partitions.

In the second case, extra latency is introduced due to the additional step involved in forwarding messages by the system between partitions via the indirect connection.

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### 2.5.1 Load Balancing Process within Optiq segment

Within the same Optiq segment load balancing process may result in instruments being assigned a different partition and as such a different routing information from one day to another. Due to this, clients are encouraged to download and incorporate the standing data on a daily basis and to ensure correct routing of their messages. For more information please refer to the OEG Message specifications documents.

The ownership of the orders is with the OE session id (the physical connection to the individual segment / partition). In case where an instrument is re-balanced over partitions, or if client chooses to access the market with some, but not all available partitions of a segment from one day to another, to ensure receipt of all messages and the lowest possible latency, clients are advised to ensure that the OE session set as the owner of orders for any given day matches the ME partition on which the instrument resides. To facilitate any necessary adjustment for this, clients may use the **Ownership Request (18)** message.

## 2.5.2 Symbol Indexes & EMM

Each instrument for Euronext markets is uniquely identified by a Symbol Index. Symbol Index represents a combination of the ISIN, MIC and Currency and is valid for the lifetime of the instrument. Symbol Index may be impacted by a Corporate Event; however whether the Symbol Index value will change depends on the nature of the corporate even applied. Information on the action taken on the instrument and its identifier is communicated by the notices for the Corporate Events.

In Optiq Symbol Indexes is used as the system-wide identifier of an instrument. Thus, both public and private messaging systems rely on this identification, which also allow easier reconciliation of public and private messages.

In the message instrument identification via Symbol Index and EMM fields replaces the use of the Symbol, MIC, and Currency fields.

Identifier	SBE Field Name	FIX Field Name	FIX Tag
Symbol Index	Symbol Index	SecurityID	48
		SecurityIDSource	22
EMM	EMM	EMM	20020

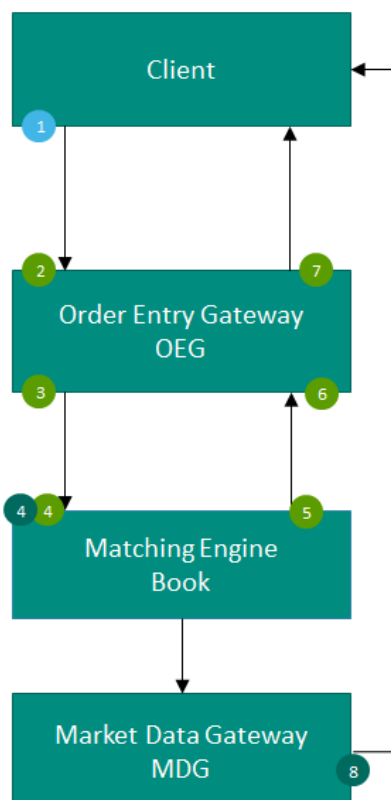
## 2.6 IMPROVED TIMESTAMPS IN PRIVATE MESSAGES

Optiq will deliver an improvement in the data and format of timestamps within the private messages that identify the events occurring in a book. With UTP trading platform they were provided in microseconds ( $\mu$ s), while with Optiq they are provided with a higher granularity, which is in most cases represented in number of nanoseconds (ns) after Unix epoch (since 1970, January the 1st). All Timestamps communicated by the Exchange will be in UTC to match MiFID II requirements. To allow for consistent data of Timestamps clients are encouraged to specify data in the same format & time zone. Timestamps listed below are provided to the clients in each Ack message, and will include the following fields / information:

Timestamp Identifier	SBE Field Name	FIX Field Name	FIX Tag	Short Description of Data Provided
T1	Message Sending Time	Sending Time	52	is assigned by the Client in his inbound message.
		Client Message Sending Time	21005	Present only in outbound messages. Populated with the same value provided by the client in the field Sending Time in the inbound messages
T2	OEG IN From Member	OEGINFromMember	5979	is assigned by the OEG after decoding the inbound message.
T3	OEG Out To ME	OEGOUTToME	7764	is assigned by the OEG when sending the inbound message to the matching engine.



Timestamp Identifier	SBE Field Name	FIX Field Name	FIX Tag	Short Description of Data Provided
T4	<i>Book IN Time</i>	<i>BookINTime</i>	21002	is assigned by the ME when receiving the inbound message from the OEG. Matches <i>Event Time</i> field in the following MDG public feed messages: <ul style="list-style-type: none"> <li>1001 – Market update, when sent for a trade</li> <li>1002 – Order Update</li> <li>1004 – Full Trade Information</li> </ul>
T4'	<i>Event Time [MDG]</i>	N/A	N/A	Maps to <i>Book In Time</i> in private messages
T5	<i>Book OUT Time</i>	<i>BookOUTTime</i>	21003	is assigned by the ME when sending the outbound message to the OEG.
T6	<i>OEG IN From ME</i>	<i>OEGINFromME</i>	7765	is assigned by the OEG when receiving the outbound message from the ME.
T7	<i>OEG OUT To Member</i>	<i>SendingTime</i>	52	is assigned by the OEG when sending the outbound message to the client.
T8	<i>Packet Time [MDG]</i>	<i>PacketTime</i>	N/A	is assigned by the MDG when sending the message to the market.
TT	<i>Trade Time</i>	<i>Transact Time</i>	60	Assigned by the ME at the time the match occurs. For aggressive orders that are matched immediately, this value is same as <i>Book In Time</i>



#### COLOR CODES

- Sent by client in private inbound messages  
Sent back to the client by Euronext in outbound messages
- Sent by Euronext in private Outbound messages
- Sent by Euronext in public Outbound messages

## 2.7 DROPCOPY CHANGES

The scope of data in Drop Copy would allow clients to receive messages for all of their Logical Accesses, across the different Optiq Segments, or receive only messages for a specific Segment or Logical Access. This flexibility of setup is available on setup or modification of the dedicated Logical Access for the Drop Copy service.

The changes to functionalities of Drop Copy service are as follows:

### Drop Copy Protocol:

- Drop Copy service will be provided in FIX 5.0 protocol only
- As with other messages in FIX, the format for Order & Trade messages in Drop Copy for cash markets will be updated to version 5.0 and will include updates to be in line with the latest FIX extension packs.

### Increased Flexibility and Granularity in Setup:

- With Optiq clients will have the ability to setup which trading (OEG) Logical Accesses belonging to their firm would be received per Drop Copy Logical access. The default settings for the Cash markets will remain as currently, with single firm ID receiving data for all Logical Accesses setup for that Firm ID, however, if required, clients could choose to segregate their Drop Copy connections to receive information for some and not all Logical Accesses, per individual Drop Copy Logical access; this will be done on the setup of the individual Drop Copy Logical access connections.
  - To identify the scope of data to be received by a connection clients may select:
    - ◆ one or more member codes (Firm IDs) belonging to the same Legal entity, or managed by the same Risk Manager
    - ◆ all, or some Logical Accesses belonging to the same Firm ID
    - ◆ Specific Optiq segment, or a set of segments
  - Information for a single Logical access or Firm ID (member code) may be setup to be sent to multiple different Drop Copy sessions, and individual Logical connections (e.g. a Logical access for Sponsored access) could request a Drop Copy connection of their own activity.

### Addition of Order related messages for Cash Markets:

- Addition of Order messages to the Drop Copy for the Cash markets, provided in the format of the **Execution Report** (FIX 8) message. The trades will also be provided via **Execution Report** (FIX 8) message.

Clients will be able to choose on setup of their Drop Copy logical access connection whether they'd like to receive (a) order messages only (b) trade messages only or (c) both order and trade messages.

As on UTP, in addition on setup or modification of their Drop Copy logical access clients will be able to select to receive values "Long fill" messages for the User choice model. This should be identified on the setup of the type of messages to receive for the Drop Copy trade service either on creation of the associated Logical access, or on request to modify it.

### Drop Copy provision & scope:

- Drop Copy services will be provided via a dedicated gateway and will cover, as currently, all instruments and transactions available via Cash Central Order Book (COB).

Note:

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*Clients are urged to carefully review the guidelines of format identified in the message specifications for both SBE and FIX protocols, in which data should be sent in private messages, to ensure the most appropriate correct interpretation of the data sent back via Drop Copy.*

### 3. FUNCTIONAL CHANGES

#### 3.1 RECONCILING ORDERS IN PUBLIC & PRIVATE FEEDS

Clients may reconcile their order messages between public (MDG) and private (OEG) feeds by using the MDG **Order Update** (1002) message and private **Ack** (03) message, using the *Order Priority* field available in both messages.

Some of the cases when clients may want to perform the reconciliation are:

- Ack message in response to a NewOrder or a CollarBreachConfirmation (corresponding Order Update message – Market Data Action type : New Order)
- Ack message for a triggered Stop/Stop-limit order (corresponding Order Update message – Market Data Action Type : Modification of an existing order)
- Ack message for a refilled Iceberg Order (corresponding Order Update message – Market Data Action Type : Modification of an existing order)

#### 3.2 CHANGES IN ACK MESSAGES

The Optiq private Ack message has been redesigned in order to (1) harmonize between several existing messages on UTP trading platform, and also (2) to introduce enhancements of several functionalities as identified below.

##### 3.2.1 Harmonization of Ack messages

In Optiq a single Ack message replaces several acknowledgement messages available in UTP that have similar data and behaviour. The new SBE Ack message is also built to provide harmonization with the acknowledgements in FIX protocol. To identify the reason for an Ack message, please use the *Ack Type* field.

The following table provides the list of existing UTP messages being combined into the single Ack in Optiq:

UTP Messages				Optiq messages		
Market	Binary Code	FIX Code	Description	Binary Code	FIX Code	Description
Cash	a	8	Order Acknowledgement	03	8	Ack
Cash	6	8	Cancel Request Ack	03	8	Ack
Cash	E	8	Cancel/Replace Ack	03	8	Ack
Cash	5	8	Order Replaced	03	8	Ack
Cash	s	Us	Request For Size Ack	N/A - Removed	N/A - Removed	N/A - Removed

##### 3.2.2 Introduction of New Acknowledgments

New types of acknowledgement are introduced for the market events on which no data was provided within UTP. These new cases are also indicated in the Ack Type field.

Table below provides the list of different types of acknowledgements to be covered by the **Ack** (03) message and identifies (1) the value to be provided in these cases in the *Ack Type* field and (2) when feasible the mapping to the associated FIX fields *ExecType* (150) and *OrdStatus* (39):

SBE Ack Type	Acknowledgements					Description
	SBE Code	FIX ExecType (150) value	FIX OrdStatus (39) value	New / Existing / Merged	On request / Unsolicited	
New Order Ack	0	0 = New	0 = New	Existing	On request	Response to a New Order (01) request
Replace Ack	1	5 = Replaced	5 = Replaced	Existing	On request	Response to a CancelReplace (06) request
Order Creation by Market Operations	2	i = Order Creation By Market Operations	0 = New	Existing	Unsolicited	
Stop Triggered Ack	3	L = Triggered or Activated by System	S = Stop Triggered Ack	New	Unsolicited	Notification of a triggered Stop/Stop Limit order
Collar Confirmation Ack	4	d = Collar Confirmation Ack	5 = Replaced	Merged	On request	Response to a CollarBreachConfirmation (20) request
Refilled Iceberg Ack	5	e = Refilled Iceberg Ack	0 = New	New	Unsolicited	Notification of a refilled Iceberg Order
MTL Second Ack	6	L = Triggered or Activated by System	T = MTL Second Ack	New	Unsolicited	Notification of a resting MTL order transformed into a Limit Order
KIBI Ack	7	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	Merged	On request	Response to the corresponding LiquidityProviderCommand (32) request
KOBI Ack	8	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	Merged	On request	Response to the corresponding LiquidityProviderCommand (32) request
PAKO Ack	9	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	Merged	On request	Response to the corresponding LiquidityProviderCommand (32) request
Price Input Ack	10	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	Merged	On request	Response to a Price Input (20) request
RFQ Ack (Future Use)	11	j = RFQ Ack For Future Use	0 = New	New (Future Use)	On request	Response to a RequestForQuote (17) message
Bid Only / Offer Only Ack	12 / 13	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	N/A Note: Covered in field "LPActionCode" (tag: 10076) in message RequestAckMessage (Uy)	Merged	On request	Response to the corresponding LiquidityProviderCommand (32) request
Iceberg Conversion Ack	14	h = Iceberg Transformed to Limit due to Minimum size	0 = New	New	On request	Notification to clients when an Iceberg order is transformed into a Limit order when it is below the minimum allowed size
Ownership Request Ack	15	k = Ownership Request Ack	l = Order Status	New	On request	Response to the corresponding OwnershipRequest (18) request

SBE Ack Type	Acknowledgements					Description
	SBE Code	FIX ExecType (150) value	FIX OrdStatus (39) value	New / Existing / Merged	On request / Unsolicited	
VFA / VFC Ack	16	L = Triggered or Activated by System	Q = VFA VFC Triggered Ack	New	Unsolicited	Notification of a triggered Valid for Uncrossing (VFU) [previously VFA] or Valid for Closing Uncrossing order [previously VFC]
Open Order Request Ack	17	I = OrderMassStatusRequest Ack	I = Order Status	New	On request	Response to the corresponding Open Order (15) request

### 3.2.3 Single Ack message for Cross Orders

In UTP two **Ack** (03) (FIX: 8) messages are sent for Cross orders, however cross orders are sent as a single message with both sides identified from a single Euronext client. As such a single **Ack** (03) (FIX: 8) message will provide sufficient information for this case and only one message will be issued in Optiq for Cross orders on the Cash markets.

## 3.3 DISSEMINATION OF DAY ORDER CANCELLATION AT THE CLOSE OF BUSINESS

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

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

## 3.4 IMPROVED SELF TRADE PREVENTION (STP) MECHANISM

The Self-Trade Prevention (STP) mechanism implemented in Optiq for the cash markets slightly differs from the existing service provided by UTP platform.

The parts of functionality that remain the same as in UTP are (1) functionality is optional, (2) available only to the Liquidity Providers, (3) applies to orders only, (4) applies during Continuous phases, (5) with exception of Cross orders and Market To Limit orders is applicable to all order types, and (6) allows for partial execution.

Cancelling the resting order remains, and the ability to choose to cancel the new order is added, and this is referred to as STP Type.

To facilitate selection of which STP type (i.e. cancel resting or cancel aggressive order) is to be applied two values have been added to the field Execution Instruction. This field being a bitmap, the STP Type can be combined with the other possible values of Execution Instruction.

With the introduction of the new STP types, no additional logic for matching between different STP Types would be needed. STP will be triggered only when order and account type are eligible, and all associated fields in two opposing orders have the same values:

- Firm ID (or member code) are the same
- STP Type

STP is expected to be enabled per Optiq segment. To ensure fairness in performance within a single segment, STP check will be done on all orders, for all market participants, as it is today.

As mentioned above, to manage the increased flexibility of the improved service a field is added in the New Order and Cancel/Replaces messages

- *STP Type (Flags available in the Execution Instruction field in SBE **New Order** (01) message and in field STPAggressorIndicator in FIX (D) message* : will allow clients to choose whether to use Cancel resting or new orders. Provision of the data in the STP Type field will replace the use of STPIndicator. Client may refer to the mapping table provided in the New Order (01) (FIX D) dedicated section to assess the changes of fields from UTP to Optiq.

Further details of this service will be provided in the updated STP service description document available on the Euronext website in the sub-tab “Background Documentation”.

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### 3.5 NEW CANCEL ON DISCONNECT MECHANISM

Setup of Cancel on Disconnect (CoD) functionality will migrate from a configurable setting of connections, to being a value managed for each individual order.

To ensure fairness, all order messages will be checked for CoD. Clients may choose on each individual order messages, independent of type of order or its validity whether it will be subject to CoD or if the order is to be persisted.

As currently, CoD setting for the order will apply only to the orders submitted during the current trading day. With exception of “Inaccessible” phase, CoD will be active and will be triggered, in all other trading phases and for all types of disconnections, including disconnection following sending of the new message of Logout.

Clients will no longer need to contact Euronext to set up CoD for their connections on the Cash market, as it will be available to all connections by default.

The response message that should be issued in case of triggering of CoD will be a **Kill** (05) (FIX 8) message for each individual killed order, and will follow the same kinematics as for **MassCancel** (13) (FIX q) message.

Scenarios describing the triggering of the mechanism during business continuity scenarios will be provided in the CoD service description document available on the Euronext website in the sub-tab “Background Documentation”.

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### 3.6 WARRANTS CHANGES

All the fields required to represent this data are already included in the message specifications. For information on how Warrants market model operates clients are advised to review the Euronext Trading manual and Rule book, which will be updated in due course to reflect associated changes.

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### 3.6.1 Quotes Validation

Checks of Bulk quote data will be modified, to provide more flexibility to the Warrant LPs and harmonize with the similar behaviour on Cash and Derivatives markets. Bulk quotes, that are otherwise technically and functionality formatted correctly, will no longer be rejected in case the first symbol provided is not recognized, or if duplicate symbols are provided within the same quote message.

If referential information of a record in a bulk quote is not recognized, rejection would be generated only for the records within bulk quote that are not recognized, and the records that have correct referential information specified, will be processed.

If duplicate referential information is provided within the same bulk quote, the last provided record in the bulk quote will be integrated into the system. This should allow clients to update the bulk quote if the underlying moves, while the bulk quote is being generated, and provide a newer, more accurate price in the later part of the message.

---

### 3.6.2 Scope of Bulk Quote

The scope of instruments to be included within a single bulk quote should no longer be limited to the population of a single Trading group. However, a single bulk quote may contain only the instruments hosted on a single partition. Information about the Partition on which instruments are hosted is provided in the instrument referential Standing data files. For day 1 implementation Warrants segment is expected to have only one partition, however, as Optiq architecture allows for partitions to be added seamlessly, this limitation should be incorporated in the bulk quote logic.

As currently on UTP, bulk quote functionality is only applicable for the Warrants & Certificates on the "new market model" (for instruments flagged in the referential standing data as LP Quote driven).

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### 3.6.3 Request for Execution

In Optiq Request for Execution (RFE) service for Warrants on the new market model will be enhanced. The enriched **Request for Execution** (34) (FIX UM) message provides a flag that allows to link the client's request with the specific response by the LP to this request. This will replace the existing Request for Execution mechanism. For further details on how the mechanism will function and which field are added, please refer to the OEG client kinematics & message specification documents.

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### 3.6.4 Opening Auction

Removal of Opening Auction and IMP dissemination for Warrants flagged in referential as using the LP quote driven market model;

- Currently the mechanism of opening auction with dissemination of indicative matching price (IMP) is not fully in line with the principals setup for the Warrants on the new market model (LP quote driven), and represents an additional mechanism on the platform that is not fully in use. To simplify the processes available for this segment, the opening auction with IMP dissemination will be removed from this segment.
- Warrants on the new market model (LP quote driven) will use the same mechanism for uncrossing at the beginning of the session as they do for any other time an LP representing the instrument comes back to the market (referred to as Continuous Uncrossing). After the opening Call phase these



instruments will go directly into Continuous phase and IMP would not be disseminated during Call for these instruments.

---

### 3.6.5 Knock-out Changes

For Warrants with Knock-out barriers, in the event such an instrument is Knocked-out, the following changes will apply:

- Instrument will be halted with order entry set to “Yes”, allowing only for Cancellation of orders so that non-LP clients would be able to cancel their orders
- All of the LP quotes will be automatically cancelled

As currently, a status message will be issued via the public market data (MDG).

All the fields required to represent this data are already included in the message specifications. For information on how Warrants market model operates clients are advised to review the Euronext Trading manual and Rule book, which will be updated in due course to reflect associated changes.

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### 3.6.6 New Account Type for Structured Products

For Warrants and Certificates a new account type with value 8 is introduced. This account type is identified as the “Structured Product Market Maker”.

To use this account type no technical pre-setup is required. It can be used only on the Warrants & Certificates segment, and is used to indicate Liquidity Provision by clients that are not the primary Liquidity Provider for a Structured Product instrument.

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### 3.6.7 Clearing Data Fields in LP Quotes & Modification

Quote messages allow for a single set of clearing data for all instruments and prices included in the same message. With Optiq modification of the clearing data in LP Quotes would not be accepted. If different clearing information is provided in a modification of an existing Quote, this data will be ignored.

In case client need to modify clearing data previously sent on an instrument during the trading session the previously submitted LP quote must first be fully cancelled (with a quote of zero values for both sides) and submit a new one with the modified data.

If a quantity of a quote is fully traded out, and LP sends a new quantity / price for the same instrument, this is treated as an update, and won't allow to modify the clearing data. To modify clearing data following a trade client must send a cancellation of the quote on the instrument in question.

In order to ensure coherence of data, clients are advised that a quote should always contain only instruments with the same clearing data, and if any changes are required to the previously submitted clearing data intra-day for any instrument - quotes for that instrument must be fully cancelled.

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## 3.7 MODIFICATION OF MARKET TO LIMIT (MTL) BEHAVIOUR

Market to Limit (MTL) orders that were entered in the Call phase, did not get matched during the Uncrossing (Auction), and then enter into the Continuous phase against an empty order book will no longer halt the instrument and would instead be rejected to reduce the inconvenience the halt brings to the

market. This is in line with the behaviour of the MTL orders when they enter directly in continuous phase in similar conditions (i.e. against an empty book).

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### 3.8 ADJUSTMENT OF GOOD TILL TIME (GTT) VALIDITY

Handling of Good Till Time (GTT) validity are subject to a minor adjustment; in Optiq orders flagged with GTT will be eliminated within one second of the indicated expiration time.

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### 3.9 ORDER CANCELLATION MECHANISM : KINEMATICS CHANGES

In UTP the order cancellation mechanism for both single cancellation and mass cancel uses the following CCG messages: **Order Cancel Request** (F) (FIX F), **Cancel Request Ack** (6) (FIX 8), **Order Killed** (4) (FIX 8), and **Bulk Cancel Report Ack** (K) (FIX 8). In Optiq, the messages to be used for this purposes as well as the associated kinematic logic, have changed. The new messages that would be used in Optiq for cancellation are: **Cancel Request** (12) (FIX F), **Mass Cancel** (13) (FIX q), **Kill** (05) (FIX 8) and **Mass Cancel Ack** (14) (FIX r).

The message behaviour will change as following:

- A cancellation instruction for multiple orders has been separated from the message to cancel a single order into a dedicated **Mass Cancel** (13) (FIX q) message
- Feedback for the single cancellation will no longer provide an Ack message before the actual cancellation message

For further details on how the single and multiple order cancellation mechanisms will function clients should refer to the OEG client kinematics document.

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### 3.10 ORDER OWNERSHIP AND MIGRATION MANAGEMENT

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#### 3.10.1 Order Ownership

Technical ownership of an order in Optiq identifies the OE session that would receive the unsolicited messages for that order. An OE Session is the login identifier for each physical connection represented by the combination of the Logical Access ID and the OE Partition ID. Orders for the same instrument may be submitted by clients from different OE partitions, and each such order will be owned by the OE Session that submitted it (i.e. which includes the identification of the OE partition from which it was submitted).

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#### 3.10.2 Order Ownership Migration Management

In some cases order ownership may need to be transferred to a different physical connection (OE Sessions) or the Logical access of the same Firm ID. This need may arise in case of instrument re-balancing or technical failure of the connection that originally submitted the order. In all cases, Optiq will not perform any automatic re-assignments of ownership of orders.

When order ownership migration is required, (and to get the best possible response times,) clients would need to request ownership of their orders if they plan to start submitting other orders to the same partition where instrument moved. In case connection that submitted the orders originally is not

connected, clients lose access to the orders, and the associated unsolicited messages, until they request ownership back.

In case of business continuity events of the Euronext systems it is expected that the same OE Partitions and IDs would be available and no changes should be required, provided client tries to access their orders from the equivalent partition.

In response to the order ownership request Optiq will reply with the **Ack (03)** message in OEG. In parallel of the Ack client will be sent full order information via Drop Copy.

Order ownership requests could be submitted with one of the following granularities:

Criteria	Granularity Description
Order ID (or Original Client Order Id) + SymbolIndex + EMM + Firm ID	Single Order
SymbolIndex + EMM + Logical Access + OE Partitions ID + Firm ID	All orders for the instrument owned by a OE Session
Symbol Index + EMM + Logical Access (OE Partition ID is optional) + Firm ID	All orders for an instrument owned by a firm's Logical Access on all partitions of the Optiq Segment

### 3.11 PEG ORDERS ON THE LIT MARKET (FOR FUTURE USE)



**Important note:** Peg orders will not be available in Optiq for the day 1 of phase 2 (Cash market migration) implementation, and are now flagged for Future use.

In Optiq Peg orders on the Lit market will be recalculated by the matching engine on a tick-by-tick basis, with every modification of the BBO. Lit COB market would have only the Primary Peg with non-aggressive offset (same as currently on UTP). Peg orders (lit or Dark<sup>1</sup>) can only peg to the Limit orders on Lit COB.

Peg orders from the Lit and Dark market could interact, if eligible, without any additional specific restrictions for such interaction.

Peg order offset is measured in tick sizes, and is restricted to maximum of 20 tick sizes.

Every update of Peg order will be considered as a Cancelled order, and will be included into the calculation of the Order / Trade ratio.

All the fields required to represent these orders are already included in the message specifications. For more information on how Peg orders function clients are urged to review the Euronext Trading manual and Rule book, which will be updated in due course to reflect associated changes.

#### 3.11.1 Dissemination of Peg orders in Market data [MDG] (For Future Use)

Peg orders are included in the dissemination of limits in MDG [**Market Update** (1001) message], with the inclusion of the volume of the associated orders in the overall volume disseminated at the price they are pegging to.

Peg orders in the Market by Order in MDG [**Order Update** (1002) message] will be disseminated as following:

<sup>1</sup> For Future Use, Pending regulatory approval

- On creation order will be disseminated with its characteristics
- On partial fill the updated order information will be disseminated with its characteristics
- On updates of BBO, the order will not be re-disseminated. Clients are urged to follow the updates of best limits and adjust information about the Peg orders in their systems according to these updates, and characteristics of the Peg order (e.g. offset).

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### 3.12 TICK SIZE AND NUMBER OF DECIMALS

With MiFIDI II requirements it is expected that the tick sizes will be restricted by the ESMA specified values for individual instrument.

Field PriceScale is removed in both OEG and MDG messages. The PriceScale values will be defined per instrument, and provided in the Referential standing data. Most prices are to be calculated using the Price value and the Scale code (also referred to as Price/Index Level Decimals), which can be obtained from the referential Standing data. A similar mechanism applies to the calculation of Quantities, Ratio and Amounts for Optiq / trading related fields. A dedicated section in the SBE / FIX specifications explains how to calculate prices using these values.

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### 3.13 COLLARS

- Kinematics are corrected for the case “Breaching a Collar with Confirmation (No Halt)” to reintroduce an **Ack** (03) message following receipt of an order which breaches the collars, followed by a **Reject** (07), and if appropriate a Fill message.
- Static collars are now included in the MDG start of day initialization, and would also be communicated in case of any changes to the static collars during the day.

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### 3.14 ICEBERG ORDERS MODIFICATION

- Modification of Dark Iceberg orders (For Future Use)
  - The Dark book that is currently in process of implementation on UTP does not allow modification of the Iceberg orders, to reduce technical impact to clients. In Optiq modification of such orders will be allowed, however the rules associated to the management of Iceberg orders on the dark book will be enforced with associated rules.
- Minimum amount check of Iceberg orders

With implementation of Optiq Iceberg orders will be checked to respect the minimum amount (size) of the order. MIFID II requires the size of such orders to be at minimum 10,000 Euro, or equivalent to if trading currency of the instrument is other than Euro. To accommodate this, in Optiq

- Any Iceberg order that is entered into the book that is below this amount will be automatically converted into a Limit order. This conversion will be indicated to the clients in the **Ack** (03) message, by a dedicated value in the Ack Type field.
- Any modification of previously not traded Iceberg order that aims to reduce the total amount of that order below the minimum size will be automatically rejected.

- Any Iceberg orders for which the amount reaches below minimum amount through trading remain unaffected.
- The same behavior will be enforced for the Lit and Dark books.
- In Optiq, Iceberg orders are identified via their own dedicated Order Type value. The value “Iceberg” must be set in the field Order Type and the field disclosed quantity must be provided.

All the fields required to represent data for the Iceberg orders is included in the message specifications. For information on management of Iceberg orders clients are advised to review the Euronext Trading manual and Rule book, which will be updated in due course to reflect associated changes.

### 3.15 TRADE CONFIRMATION SYSTEM (TCS)

#### 3.15.1 TCS Message via OE Gateway

TCS Web access will remain unchanged, however in Optiq private message submission to TCS will be made available via the OEGs of the existing Optiq segments, as for other Optiq private messages. For more information on connectivity to TCS please review the updated *Euronext Cash Markets - Optiq OEG Connectivity Configuration specifications* document.

#### 3.15.2 Update of TCS Messages

The updated version of the specifications are now available for the TCS messages to enable updates of TCS via private messaging gateway. Only the messages for Declaration of on-exchange/ off-book and Funds services will remain in TCS.

Please note, services associated to OTC trade reporting previously supported by TCS are now managed in a different application. For more information please refer to the Euronext’s website about APA/ARM services under MiFID II [<https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii>]. Due to this change Trade related TCS messages [*TCSTRADEENTRY (T) (FIX UT)* & *TCSTRADEENTRYNOTICE (t) / (FIX Ut)*] have been removed.

To make sure clients are not burdened with additional development or sending unnecessary data, the message **Declaration Entry** (40) (FIX AE) contains a flag *Operation Type* (SBE) / *OperationTypeIndicator* tag: 9951 (FIX), which indicates what type of activity client would like to send the information for using a single entry message.

A single, dedicated **Reject** (46) (FIX AR) message will be used to replay to the Declarations and Fund Price Input messages in case any of the data provided in the messages doesn’t pass data format controls.

As currently these messages will be provided in Binary (SBE) and FIX protocols.

#### 3.15.3 List of TCS messages

The table below provides a mapping of TCS messages used in Optiq (OEG) and UTP (CCGs):

Optiq OEG Messages for TCS		CCG Messages for TCS	
SBE	FIX 5.0	Binary	FIX 4.2

Optiq OEG Messages for TCS		CCG Messages for TCS	
SBE	FIX 5.0	Binary	FIX 4.2
Declaration Entry (40)	TradeCaptureReport (AE)	TCSDECLARATION (d)	TCSDECLARATION (UD)
Declaration Entry Ack (41)	TradeCaptureReportAck (AR)	TCSNOTICE (n)	TCSNOTICE (U8)
Declaration Notice (42)	TradeCaptureReportAck (AR)	TCSNOTICE (n)	TCSNOTICE (U8)
Declaration Cancel and Refusal (43)	TradeCaptureReport (AE)	TCSC&R (c)	TCSC&R (UF)
Fund Price Input (44)	FundPriceInput (U44)	TCSPRICEINPUT (p)	TCSPRICEINPUT (Up)
Fund Price Input Ack (45)	FundPriceInputAck (U45)	TCSPRICEACK (q)	TCSPRICEACK (Ua)
Declaration Entry Reject (46)	TradeCaptureReportAck (AR)	TCSMESSAGEREJECT (j)	TCSMESSAGEREJECT (Uj)
N/A (existing CCG message merged)	N/A (existing CCG message merged)	TCSTRADEENTRY (T)	TCSTRADEENTRY (UT)
N/A (existing CCG message merged)	N/A (existing CCG message merged)	TCSTRADEENTRYNOTICE (t)	TCSTRADEENTRYNOTICE (Ut)

### 3.15.4 Mapping of TCS Action Fields

TCS messages have been adjusted to account for the removed functionality, provide clearer status of actions and status, and to align overall structures with the overall Optiq principles. This section provides mapping of some of such action related fields.

#### Notice

Functionality of the CCG message TCSNotice [Binary (n) / FIX (U8)] in Optiq will be managed via OEG message Declaration Notice [SBE (42) / FIX (AR)]. Table below provides mapping between values provided in multiple CCG fields and field *DeclarationStatus* in OEG message to indicate the type of action being performed.

System >	UTP / CCG				Optiq OEG	
Protocol >	Binary / FIX 4.2				SBE	FIX 5.0
Message >	TCS NOTICE (n / U8)				Declaration Notice (42)	TradeCaptureReportAck (AR)
Field >	ExecType	ExecTransType	OrdStatus	EliminationIndicator	DeclarationStatus	TrdRptStatus (tag: 939)
	D	0	0	(blank) Not applicable	1 = New Waiting for Counterparty Confirmation	4 = Pending New
	D	0	0	(blank) Not applicable	8 = Restated	13 = Restated
	0	0	0	(blank) Not applicable	2 = Confirmed by Counterparty	10 = Verified
	D	0	4	(blank) Not applicable	3 = Refused by Counterparty	1 = Rejected
	6	1	6	(blank) Not applicable	4 = Pending Cancellation	5 = Pending Cancel

System >	UTP / CCG				Optiq OEG	
Protocol >	Binary / FIX 4.2				SBE	FIX 5.0
Message >	TCS NOTICE (n / U8)				Declaration Notice (42)	TradeCaptureReportAck (AR)
Field >	ExecType	ExecTransType	OrdStatus	EliminationIndicator	DeclarationStatus	TrdRptStatus (tag: 939)
	4	1	4	(blank) Not applicable	5 = Cancelled	2 = Cancelled
	C	0	C	(blank) Not applicable	6 = Time Out	12 = Time Out
	C	0	C	'0' Expiration of a pending declaration	9 = Expiration of a pending declaration	14 = Expiration of a pending declaration
	C	0	C	'1' Elimination of a pending declaration	10 = Elimination of a pending declaration	15 = Elimination of a pending declaration
	C	0	C	'2' Elimination of a pre-matched declaration following a CE	11 = Elimination of a pre-matched declaration following a CE	16 = Elimination of a pre-matched declaration following a CE
	C	0	C	'3' Elimination of a pre-matched declaration by MOC	12 = Elimination of a pre-matched declaration by MOC	17 = Elimination of a pre-matched declaration by MOC
	2	0	2	(blank) Not applicable	7 = Filled	19 = Filled
	2	0	2	(blank) Not applicable	13 = Pre-Matched	18 = Pre-Matched

### Cancellation & Refusal

Functionality of the CCG message TCSC&R [Binary (c) / FIX (UF)] in Optiq will be managed via OEG message Declaration Cancel and Refusal [SBE (43) / FIX (AE)]. Table below provides mapping between values provided in fields *TCSMessageType* (CCG) and *ActonType* (OEG) and the associated FIX fields within these messages to indicate the type of action being performed.

System >	UTP / CCG		Optiq OEG	
Protocol >	Binary	FIX 4.2	SBE	FIX 5.0
Message >	TCSC&R (c)	TCSC&R (UF)	Declaration Cancel and Refusal (43)	TradeCaptureReport (AE)
Field >	TCSMsgType	TCSMsgType	ActionType	TradeReportType (tag: 856)
	'0402' TCS declaration cancellation	'0402' TCS declaration cancellation	1 = Declaration Cancellation Request	1 = Declaration Cancellation Request
	'0403' TCS declaration refusal	'0403' TCS declaration refusal	2 = Declaration Refusal	2 = Declaration Refusal
	'0404' TCS trade cancellation	'0404' TCS trade cancellation	3 = Trade Cancellation Request	3 = Trade Cancellation Request

### Operation Type

Various CCG messages use the field *OperationTypeIndicator* (FIX tag: 9951) to indicate the type of TCS operation being declared. With merging of various TCS messages in Optiq field *OperationType* will perform similar function to indicate in the messages what type of activity is being Declared. Table below provides mapping between values provided in fields *OperationTypeIndicator* (CCG) and *OperationType* (OEG SBE) and the associated FIX fields within these messages to indicate the type of action being performed, and identifies the values that have been transferred outside of management in TCS.

System >	UTP / CCG		Optiq OEG	
Protocol >	Binary	FIX 4.2	SBE	FIX 5.0
Message >	TCS Declaration (d), TCS Notice (n)	TCS Declaration (UD), TCS Notice (U8)	Declaration Entry (40)	TradeCaptureReport (AE)
Field >	OperationTypeIndicator	OperationTypeIndicator (tag: 9951)	Operation Type	TrdType (tag: 828)
	'O' Trade outside the book	'O' Trade outside the book	1 = Declaration of a trade outside the book	1001 = Declaration of a trade outside the book
	'9' Prorogation buy	'9' Prorogation buy	2 = Declaration of a Prorogation buy	43 = Prorogation buy
	'a' Prorogation sell	'a' Prorogation sell	3 = Declaration of a Prorogation sell	44 = Prorogation Sell
	'i' Fund order (quantity)	'i' Fund order (quantity)	4 = Fund order (quantity)	1002 = Fund order (quantity)
	'E' VWAP transaction	'E' VWAP transaction	5 = Declaration of a VWAP transaction	51 = Volume weighted average trade
	'l' Fund order (cash amount)	'l' Fund order (cash amount)	6 = Fund order (cash amount)	1003 = Fund order (cash amount)
	'R' Second. listing place trade	'R' Second. listing place trade	7 = Declaration of a trade on a Secondary listing place	1004 = Declaration of a trade on a Secondary listing place
	'K' OTC trade	'K' OTC trade	N/A - Removed from TCS	N/A - Removed from TCS
Message >	TCS Trade Entry (T), TCS Trade Entry Notice (t)	TCS Trade Entry (UT), TCS Trade Entry Notice (Ut)	N/A	N/A
	'L' Reporting	'L' Reporting	N/A - Removed from TCS	N/A - Removed from TCS
	'M' Publication	'M' Publication	N/A - Removed from TCS	N/A - Removed from TCS
	'N' Reporting and Publication	'N' Reporting and Publication	N/A - Removed from TCS	N/A - Removed from TCS

### 3.15.5 Fields for Cross declarations

Unlike other message structures in Optiq, TCS related OEG SBE messages do not use repeating sections.

For Cross orders two instances of fields listed below are provided, to identify the information for each side of the cross order (repeated fields). The description of each field identifies whether the field is to be used for identification of the buy or sell side, but as a general rule fields containing "Cross" in the name, are used for provision of the information for the sell side.

List of the Cross associated "repeated" fields: *Account Number*, *Account Number Cross*, *Account Type*, *Account Type Cross*, *Free Text*, *Free Text Cross*, *Principal Code*, *Principal Code Cross*, *Trading Capacity*, *Trading Capacity Cross*



## 3.16 STOP ORDERS CHANGES

### 3.16.1 Triggered Stop Time in Force

The new feature Triggered Stop Time in Force allows the Stop Orders to enter the Central Order Book (COB) while triggered with a Time in Force different from the original order had while entering the Stop Order Book (SOB). The field *Triggered Stop Time in Force* in SBE & *TriggeredStopTimeInForce* (20175) in FIX has exactly the same set of values as the field *Time in Force*.

While entering the COB after being triggered, the Stop Orders behave then like new orders with a time in force equal to the Triggered Stop Time in Force. The values for this functionality enhancement will be managed via the field *Trigger Stop Time in Force* in SBE & *TriggeredStopTimeInForce* (20175) in FIX.

Example:

New Stop order #1 entered with the *Time in Force* field set to '0' (Day), and *Triggered Stop Time in Force* field set to '6' (Good till Date)

If never triggered, the Stop order will expire at the end of the trading session due to its Time in Force being Day

If the Stop order is triggered, it will enter the book as a Limit order with the Time in Force of that Limit order being Good till Date due to the *Triggered Stop Time in Force* of the original Stop order being set to this value

## 3.17 CLEARING INSTRUCTIONS

Values used for Clearing instructions are defined to map existing Cash values to the standard values used by the FIX 5.0 protocol. Derivative values are currently provided exactly as used currently, and may be re-evaluated for Step 3.

Mapping of values used currently in CCG messages to the values setup for use in Optiq is provided below:

Value in Optiq Step 2	Use	Value in CCG Cash v4.2 ClearingHandlingType / TagL 9938	Value in CCG Derivatives v5.0 ClearingInstruction / Tag: 577
0 = Process normally	C	Value: Currently filled as blank Label: Systematic posting	Value: Currently filled as zero Label: "Undefined" for Derivatives
10 = Automatic give-up mode (trade give-up to the give-up destination number specified)	C	Value: Currently filled as 2 (two) Label: Automatic allocation	Not used for Derivatives
8 = Manual mode (pre-posting and/or pre-give-up)	C & D	Value: Currently filled as 0 (zero) Label: Manual mode	Value: Currently filled as 8, no change Label: Manual
9 = Automatic posting mode (trade posting to the position account number specified)	C & D	Value: Currently filled as 1 (one) Label: Automatic extraction	Value: Currently filled as 9, no change Label: Automatic
4008 = Automatic and account authorization	D	Not used for Cash	Value: Currently filled with 4008, no change Label: Automatic and Account Authorisation
4009 = Manual and account authorization	D	Not used for Cash	Value: Currently filled with 4009, no change Label: Manual and Account Authorisation
4010 = Give-up to single firm	D	Not used for Cash	Value: Currently filled with 4010, no change Label: Give-up to single firm

### 3.18 ORDER ID

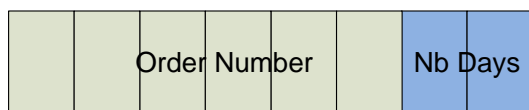
The *Order ID* (SBE) / *OrderID* tag: 37 (FIX) field used in the messages for trading purposes is a numerical order identifier assigned by the matching engine, unique per instrument over the entire lifetime of the order, which means that this value remains unchanged, even upon submission of the modifications of the order using **CancelReplace** (06) (FIX G) message.

### 3.18.1 Conversion for clearing partners

For reconciliation purposes with Euronext's clearing & settlement partners clients may obtain the Order Number and the Order Entry Date, which is forwarded to the clearing partners, from the *Order ID* (SBE) / *OrderID* tag: 37 (FIX) field, provided in the private messages via OEG, which is composed of two parts required for this, as depicted below:

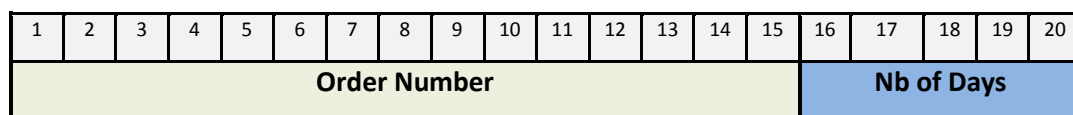
Representation in SBE:

- The least-significant 2-bytes include the relative calendar days number since 1-jan-1970 at 0:00 UTC (EPOCH); (Please note, currently the clearing partners may use the date corresponding to this value in ASCII format)
- The remaining most-significant 6-bytes will include the Order Number



### Representation in FIX:

- The least-significant 5 characters include the relative calendar days number since 1-jan-1970 at 0:00 UTC (EPOCH); (Please note, currently the clearing partners may use the date corresponding to this value in ASCII format)
- The remaining most-significant 15 characters will include the Order Number



### 3.19 CHANGE IN MODIFICATION MESSAGE BEHAVIOR

Based on limited use the following modifications of existing order and LP quote will no longer be available in Optiq:

- **Modification of *Order Type* for Orders**  
Used in: All Optiq cash segments
  - If different Order Type information is provided in the modification of an existing order, the modification message will be rejected with an appropriate Error code

#### ■ Modification of *Account Type* for Orders

Used in: All Optiq cash segments

- If different *Account Type* information is provided in the modified order, this data will be ignored
- The same behavior / rule will apply to the new field *LP Role*. It isn't modifiable and will be ignored if different information is provided

#### ■ Modification of *Disclosed Quantity* for Iceberg orders

Used in: All Optiq cash segments

- If different *Disclosed Quantity* information is provided in a modification of an existing order, the modification message will be rejected, with an appropriate Error code

#### ■ Modification of Clearing data fields for LP Quotes

Used in: Warrants and Certificates segment

- If different clearing information is provided in a modification of an existing Quote, this data will be ignored. This includes quotes that have been fully traded out. More details associated to clearing data in quotes can be found in the section on Warrants Changes

In a rare case of an error made in such messages / fields, clients need to cancel the previously submitted order or LP quote and submit a new one with the correct data.

## 4. 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.

### 4.1 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. **New Order** (01) message. The list of fields added for compliance with act\* are listed in the table below and is provided in the description of each individual message:

Field in the Act	Optiq Fields (SBE)	FIX Fields
Client identification code	ClientIdentificationShortCode	Covered by the combination of fields and values in the Parties, NestedParties, OrderAttributeGrp components.
Investment decision within firm	InvestmentDecisionWFirmShortCode	
Execution within firm	ExecutingWithinFirmShortCode	
Non-executing broker	NonExecutingBrokerShortCode	Detailed explanation on use of fields is provided on a message by message basis within the FIX message specifications document.
MiFID Indicators	MiFIDIndicators	
Trading Capacity	TradingCapacity	LastCapacity (Tag 29)

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:

#### ■ Short codes in order entry messages

- A range of “MIFID II short code” fields is being added to all incoming application messages including the LP related quote and command messages
- To provide flexibility to its clients in use of short codes, clients are required to generate their own short codes (change from what was identified in v1.0), and provide these short codes to the Euronext systems. Euronext system will check that short codes are provided, in the format specified.
- 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 New Order message in the SBE field ClientIdentificationShortCode (SBE) or in the combination of FIX fields corresponding to the values explained in the messages description under ClientIdentificationShortCode.

- The message specifications include the guidelines, rules and conditions for filling the short code fields and the types of checks that would be done on this data.
- For clients using algorithms in their trading, guidelines are provided for the way clients should generate and populate the short codes associated to the executing and investment decision making have the following guidelines for completion
  - ◆ When an order message is flagged to indicate that algorithm is not involved, then in the associated short code field 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 the associated short code 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  $2^{63}-1$
    - ISV algorithms: negative range of values between  $-2^{63}+1$  to -1

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## 4.2 USER NOTIFICATION MESSAGE

To provide clients with a status of their connection, associated to the possible blocking of access and /or cancellation of orders by the Market Operation, a new outbound message, **User Notification (39)** (FIX CB), is added to the specifications. Details of the message are provided in the message specifications. Message is sent to the clients as a response either to the Kill or Block action by Market Operations users, or upon clients' attempt to interact with Optiq after they're access has been blocked, with a possible cancellation of their orders.

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## 4.3 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.

## 5. SBE (BINARY) PROTOCOL - CHANGES IN MESSAGES FOR OPTIQ

The messaging system of Euronext's private exchange of data with clients has been completely redesigned with Optiq, and this was driven by the following objectives:

- The harmonization of Cash & Derivatives private messages. With Optiq, all markets will rely on one unique messaging system. The messages are the same across all markets, in terms of message structure and fields included. Specific behavior for each market is addressed within the fields' authorized values: some are common to both cash and derivatives; some are specific to cash markets, others to derivatives market. Specific fields for separate markets have been reduced to a minimum.
- A simpler messaging system: Reduction of overall number of messages types and harmonization between similarly behaving messages in CCG. Technically, this has been achieved with the introduction of new Simple Binary Encoding (SBE) field types, allowing the use of bitmaps.
- An agile messaging system: with SBE technology, messages can evolve without a retro-compatibility impact, giving Euronext customers more flexibility and options for adaptability.
- Message content and behaviour that are MIFID II compliant.
- The section below describes changes to the messages exchanged between client systems and the exchange. Short description of differences in behaviour is provided for those messages that have significant changes (and are listed in this section), including mapping of merged messages and identification of those being deprecated with Optiq. Comparison of Optiq SBE to UTP Binary message structures and values is provided in a dedicated section of this document. However clients should review the Optiq message specifications and kinematics documents to obtain full description of the messages and values setup for Optiq.

### 5.1 HEADER

With the introduction of the SBE protocol, fields belonging to the technical SBE header are described in the OEG Client Specifications.

Since Optiq follows SBE recommendations, legacy CCG technical fields common to all messages are considered as obsolete.

### 5.2 MAPPING OF MESSAGES CCG BINARY TO OEG SBE

Table below provides the mapping of messages between CCG Binary and OEG SBE protocols. TCS messages are covered in a separate section within this document. More details on removed or merged are identified in a dedicated section in this document.

CCG Binary – Label (ID)	OEG SBE – Label (ID)	Notes
New Order (D) and (e)	New Order (01)	
Order Ack (a)	Ack (03)	Please review section on Ack harmonization
One Side Only Period Ack (P)	Ack (03)	Please review section on Ack harmonization
Cancel Request Ack (6)	Ack (03)	Please review section on Ack harmonization
Cancel/Replace Request Ack (E)	Ack (03)	Please review section on Ack harmonization
Order Replaced (5)	Ack (03)	Please review section on Ack harmonization

CCG Binary – Label (ID)	OEG SBE – Label (ID)	Notes
Generic Response (y)	Ack (03)	Please review section on Ack harmonization
Order Fill (2)	Fill (04)	
Order Killed (4)	Kill (05)	
Cancel/Replace Order (G)	Cancel Replace (06)	
Order Cancel/Replace Reject (8)	Reject (07)	
Bulk Quotes (B)	Quotes (08)	
Bulk Quotes Ack (J)	Quote Ack (09)	
Cancel Request (F)	Cancel Request (12)	
Cancel Request (F)	Mass Cancel (13)	New message for existing functionality
Bulk Cancel Ack Report (K)	Mass Cancel Ack (14)	
Order Status Request (H)	Open Order Request (15)	
Bust/Correct (C)	Trade Bust Notification (19)	
Price Input (I)	Price Input (28)	
One Side Only Period (O)	Liquidity Provider command (32)	Merged message
Liquidity Provider Command (Z)	Liquidity Provider command (32)	
Quote Request (L)	Ask For Quote (33)	
Request for Execution (M)	Request For Execution (34)	
Logon (A)	Logon (100)	
Logon Reject (I)	Logon Reject (102)	
Heartbeat (0)	Heartbeat (106)	
Test Request (1)	TestRequest (107)	
N/A	Logout (103)	New message
N/A	Logon Ack (101)	New message
N/A	Quote Request (10)	New. Future Use for ETF MTF
N/A	RFQ Notification (35)	New. Future Use for ETF MTF
N/A	RFQ Matching Status (36)	New. Future Use for ETF MTF
N/A	Ownership Request Ack (17)	New
N/A	Ownership Request (18)	New, replaces one of the functionalities of CCG Order Status Request (H) message
N/A	Collar Breach Confirmation (20)	New, replaces one of the functionalities of CCG Cancel/Replace Order (G) message
N/A	User Notification (39)	New
Request for Size (r)	N/A	Removed
Request for Size Acknowledgement (s)	N/A	Removed
One Side Only Period Notice (N)	N/A	Removed
Trading Session Status (h)	N/A	Removed
Class Event (Q)	N/A	Removed
Extended Response (x)	N/A	Removed

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## 5.3 ADMINISTRATION MESSAGES

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### 5.3.1 Logon (100)

- In Optiq Logon message will be enriched to allow clients to specify what type of behaviour they'd like to have for messages over the throttling limit: Queue or Reject. If nothing is specified, the system will assume that default setting of Reject is chosen. Clients can overwrite this setting on every logon into the system.
- The protocol version in the Logon previously required for the BIN messages is being replaced by the Schema Version provided in SBE header.
- Client must note the following about the Message Sequence Number : '0' is the first value for the day. If the SBE 'Null' value is sent, it means that the message is to be skipped. In UTP the same functionality was supported through '-1' value set in the field.
- Identification of individual physical connections & OE session ID

To trade on any of the Optiq segments, clients will need to establish one or more physical connections to partitions within the segment.

For each established physical connection clients will be able to construct and provide within the logon message the unique identifier, referred to elsewhere as OE Session ID, which will now be represented by two fields: Logical Access ID and OE Partition ID.

For this purpose changes are being made to the field associated to this data, in the Logon message as listed in the table of field mapping. Similar changes are being included in the following other incoming messages: Logout, Ownership Request and Mass Cancel (as an optional criteria). Associated changes to these messages are listed in their respective sections.

- Software Provider

To assist Euronext in providing the best possible level of service to its clients, knowing which provider's software a client is using improves aspects of conformance testing and assists in troubleshooting. To facilitate this an optional field "software provider" is added in the Logon message, where clients may provide a free text description / name of the vendor that provides the software they use to connect and trade on Optiq.

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### 5.3.2 Logon Ack (101)

In UTP, if logon is successful, CCG Binary sends back a Logon message to the client. In Optiq, in its place the **Logon Ack** (101) message is introduced. The new **Logon Ack** (101) message provides back to the client the Partition ID to which the OE Session that sent the message is connected to.

Note that the logic of message sequence numbers based on Last Message Sequence Number remains unchanged.

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### 5.3.3 Logon Reject (102)

The **Logon Reject** (102) message is sent if logon authentication fails, but was in a correct technical format and with sufficient recognized information to assess to which OE session it should be sent back to. The message provides also the identifier of the Optiq Partition to which OE Session attempted to connect to.



The sequence number is no longer provided in the reject message. Since the logon failed no message that could have been sent after the logon attempt will be processed.

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#### 5.3.4 Heartbeat (106)

The **Heartbeat** (106) message is used to notify the client during periods of inactivity that the system is still available and not encountering any technical issues.

In UTP the Heartbeat message was sent in response to a CCG Test Request (1) message sent by the client. In Optiq, the Heartbeat is an unsolicited message, sent on a pre-determined time interval, in case of no activity from the client. The time period after which heartbeat message is issued is identified in the *Euronext Cash Markets – Optiq Kinematics Specifications* document.

The Optiq **Heartbeat** (106) message is composed only of the SBE technical header.

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#### 5.3.5 Test Request (107)

The **Test Request** (107) message is used to check if network and client systems are not encountering any technical issues.

As in UTP the message will be available to both client and exchange side to perform this check towards each other. The message is sent by the Exchange after *n* second(s) of inactivity from the client.

Client should answer the message within the same delay period once the **Test Request** (107) message is received to avoid being disconnected. The predefined parameter “delay of inactivity” is provided in the *Euronext Cash Markets – Optiq OEG Connectivity Configuration Specifications* document.

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

As an answer from client to an Optiq **Test Request** (107) client may send back either an application message or an Optiq **Heartbeat** (106) message.

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#### 5.3.6 Logout message (103)

The **Logout** (103) message is introduced with Optiq on the Euronext Cash markets. Logout message already exists on the Euronext Derivative markets, and is being introduced on the Cash markets to improve session management processes.

This message helps to identify to the exchange if the client has disconnected on purposes or due to technical issue. Logout message will trigger Cancel on Disconnect during all active trading phase, except during Inaccessible.

For the full description and behaviour of the messages please refer to the OEG client specification, kinematics or CoD background documents.

## 5.4 APPLICATION MESSAGES

The sections below describe the main technical and functional changes for the messages listed below. Mapping of fields between the existing CCG messages and the OEG messages with which they are being replaced are provided in dedicated section.

For the complete definition of message structures and field values, and to view the expected message behaviour clients should review the *Euronext Cash Markets - Optiq OEG Client Specifications - SBE Interface* and the *Euronext Cash Markets - Optiq Kinematics Specifications* documents.

### General Notes

- Due to implementation of Symbol Index system-wide MIC and Currency fields have been removed from all the messages. Please see section dedicated to Symbol Index for more details.
- Execution ID is provided in various messages (Fill / Trade Bust notification) following a full or partial execution of an orders. This value is unique to the trade, and the uniqueness of this field will be managed per instrument on the System-wide level.

#### 5.4.1 New Order (01)

In Optiq use of SBE allows to combine the data from message (D) and (e) into a single **NewOrder** (01) message.

A number of fields are combined in SBE in bitmap fields. Where possible, in the table of field mapping below, they are all indicated together opposite the single bitmap field that will represent them. Please refer to the bitmap section in the document for more information.

Value previously provided in the ExpireTimeFlag, STPIndicator and DisplayQtyRdm will be added to the existing values of the Execution Instruction, and included in the single bitmap field of Execution Instruction. All of the fields that were specific to the Dark<sup>2</sup> orders in message (e) (i.e. DarkIndicator, DisplayedOrderInteraction, MinQtyType, DefTradReq and SweepOrder) are combined in the field Dark Execution Instruction.

The acknowledgement and rejection of the New Order message changes are described in the sections for the Ack and Rejection messages, due to harmonization of Ack messages and modification of how Optiq will handle rejection of requests throughout the system.

In UTP two sections of clearing data were included in the NewOrder message for Cross orders, however cross orders are sent as a single message with both sides identified from a single Euronext Securities client. As such a single clearing data section will provide sufficient information for this case and only one section will be retained for Cross orders on the Cash market.

For the information about the MIFID II shortcodes please refer to the dedicated MIFID II section.

#### 5.4.2 Ack (03)

All functional changes related to the harmonization of acknowledgements in Optiq through one single **Ack** (03) message, are covered in a dedicated section.

<sup>2</sup> For Future Use, Pending Regulatory Approval

Additionally, no **Ack** (03) message is sent in case of collars breach when entering an order for which price lies outside the collars. The order gets rejected and the rejection is provided via the **Reject** (07) message.

### 5.4.3 Fill (04)

The Optiq **Fill** (4) message is an unsolicited message sent by the Matching Engine to notify the client of a partial or complete fill of an order. Its behaviour is the same as the CCG Order Fill (2) message. However, the data provided through the **Fill** (4) message differs, and is enriched with additional information. Moreover, in a Cash & Derivatives harmonization, some of the derivatives oriented fields (for future use on full Euronext Optiq Derivatives Markets) are already taken into account, and identified as for future use.

### 5.4.4 Kill (05)

In UTP, the CCG binary Order Killed (4) message is either an unsolicited one notifying the clients of expired orders or a response to a CCG Order Cancel Request (F) message. In Optiq, the behaviour of these messages is enriched and is provided via new messages as described below.

- The introduction of the SBE **Mass Cancel** (13) message, whose functionality is dedicated to the cancellation of multiple orders, and which leads to the sending of a single **Kill** (05) message which will contain information about all the cancelled orders for the SymbolIndex or the Instrument Group specified. As currently on UTP, the **Mass Cancel** (13) message will allow clients to request cancellation of multiple orders belonging to an instrument group code (previously referred to as ClassID) or a SymbolIndex.

In UTP the Order Killed (4) message is sent to the client when cancelling a single order on a single instrument while the CCG Order Cancel Request (F) message manages both mass and single order cancellation instruction. This means that for a single mass cancellation message sent by client, UTP responds with multiple Order Kill (4) messages for each single order.

In Optiq, only one message will be sent for multiple orders killed on mass cancellation instruction, with each order being provided through SBE repeating section functionality, with each repeating section identifying a single order and the instrument concerned.

- As in UTP single order cancellation could be requested by the clients, by sending the **CancelRequest** (12) message, which will be replied to by the **Kill** (05) message containing information for that single order.
- Too many collar breaches will no longer be sent via the **Kill** (05) message, but will rather be replied to by the **Reject** (07) message, with dedicated fields that would provide the associated information.
- Also, as in UTP, the **Kill** (05) message is used for sending notification to clients about other cancellation reasons (e.g. expired orders, orders cancelled by Market Operations, etc.). The event that led to the cancellation of order(s) is provided to the client in the **Kill** (05) message in the *Kill Reason* field, previously provided in field OrderStatus. This list of values has been enriched to provide more information on the reason for which the orders are cancelled. Comparison table below provides a mapping of existing CCG Binary and new OEG SBE values. For the full list of possible values please refer to the specifications document.

CCG Binary	OEG SBE	Notes
3 = Done for Day	5 = Done for day	
4 = Cancelled	1 = Order Cancelled	

CCG Binary	OEG SBE	Notes
C = Expired	2 = Order Expired	
S = Cancelled by Market Operations	3 = Order Cancelled by Market Operations	
O = Eliminated by Corporate Event	4 = Order Eliminated due to Corporate Event	
P = Cancelled by STP	7 = Cancelled by STP	
Z = Too many collar breach attempts	N/A	Replaced. Collar breach will be replied to by a Reject (07) message
N/A	6 = Cancelled MTL in an empty Order Book	New value. Used for Cash markets only
N/A	8 = Remaining quantity killed (IOC)	New value
N/A	9 = Beginning of PAKO Period	New value. Used for Cash markets only
N/A	11 = Order Cancelled due to Cancel On Disconnect Mechanism	New value
N/A	12 = RFQ expired	New value. Used for Cash markets only. For Future Use.
N/A	13 = RFQ partially or fully matched with other counterparts	New value. Used for Cash markets only. For Future Use.
N/A	14 = RFQ cancelled by the issuer	New value. Used for Cash markets only. For Future Use.
N/A	15 = RFQ Not matched due to issuer order's features	New value. Used for Cash markets only. For Future Use.
N/A	16 Quote cancelled due to Knock-Out	New value. Used for Cash markets only
N/A	17 = Order cancelled due to a Suspend command	New value

In the context of harmonization of the Cash & Derivatives feeds, some fields are present in these messages that will be used for Derivatives following their migration to Optiq in the phase 3. In addition, some fields are included in the specifications in preparation for future Euronext initiatives. Those fields are identified as 'For Future Use' in the specifications and would not be available for use until further communication.

The main technical change for the **Kill (05)** message consist of:

- The use of the SBE repeating sections in order to acknowledge several order cancellation
- The introduction of the Kill Reason field – whereas in UTP only the Order Status was provided with its updated value once the order is killed

#### 5.4.5 Cancel Replace (06)

The **Cancel Replace (06)** message is the equivalent of the UTP Cancel/Replace Order (G) message.

Its behaviour remains the same with the main difference being the introduction of the possibility to modify the Dark<sup>3</sup> orders. In UTP, in order to modify a Dark order client needs to cancel the old order and enter a new one. In Optiq, this can be directly done using the Cancel/Replace mechanism, with specific rules for the field dedicated to Dark orders described in the Optiq Client Specification.

The differences in the message structure / field mapping is described in the section below.

Upon submission of the **Cancel Replace (06)** message, the order will keep its originally assigned Order Id value.

Additionally, the fields indicating the Account type, LP role, Order side and Order type are kept in the message, even though their associated values cannot be changed through cancel replace mechanism, as it

<sup>3</sup> For Future Use, Pending Regulatory Approval

was in UTP. The fields are expected to be populated with the same value given in the original order. Please review section “Change in Modification Message Behaviour” for further details.

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#### 5.4.6 Reject (07)

In Optiq rejection behaviour is unified across the message types and behaviours.

To reduce complexity and improve response times, a single **Reject** (07) message will be used as the response for all application messages.

The type of collar and the limit breached is indicated in the message in new conditional fields, in case orders are rejected due to a collar breach.

The type of error that triggered the rejection will be provided via the Error code only. As text will no longer be part of the messages the list of error messages associated to the Error codes in Optiq is made more granular and is provided in a dedicated *Euronext Cash Markets - Optiq & TCS Error List* document.

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#### 5.4.7 Quotes (08)

The **Quotes** (08) message is the equivalent of the CCG Bulk Quotes (B) message.

Please refer to the section in this document covering functional changes to the Quotes mechanism.

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#### 5.4.8 Quotes Ack (09)

The **Quotes Ack** (09) message is the equivalent of the CCG Bulk Quotes Ack (J) message.

Clearing Data fields have been removed from the Bulk Quotes Ack messages.

For more details please refer to the section in this document covering functional changes for the Quotes mechanism.

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#### 5.4.9 Cancel Request (12)

The **Cancel Request** (12) message is the equivalent of the CCG Order Cancel Request (F) message.

In Optiq it will be used for cancellation only of the explicitly indicated individual order(s). This message will no longer be used for Mass Cancel functionality, which can be used to cancel unspecified number of orders. Feedback for the single cancellation will no longer provide an Ack message before the actual cancellation message.

---

#### 5.4.10 Mass Cancel (13)

The **Mass Cancel** (13) message is introduced with Optiq in replacement of the Bulk Cancellation mechanism provided in UTP via the CCG Order Cancel Request (F) message.

The functionality remains the same: giving client the possibility to cancel several orders for a single instrument (*SymbolIndex*) or for an Instrument Trading Group (*Instrument Group Code*) (multiple orders on multiple instruments). Either the *Instrument Group Code* field or the *Symbol Index* field must be populated within the message to determine the scope of the mass cancel.

For more details on changes in message behaviour clients may refer to the dedicated section "Order Cancellation Mechanism: Kinematics Changes" in this document.

For the details of the structure of this new message, clients should refer to the OEG client specifications.

---

#### 5.4.11 Mass Cancel Ack (14)

In UTP, a mass cancellation is processed by the bulk cancellation mechanism and is requested via the Order Cancel Request (F) message. The cancellation is acknowledged by UTP sending back a Bulk Cancel Ack Report (K). In Optiq the **Mass Cancel Ack (14)** message replaces the CCG Bulk Cancel Ack Report message. This logic of the functionality is similar to that in UTP. Clients may refer to the dedicated section "Order Cancellation Mechanism : Kinematics Changes" in this document, for more details of the change.

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#### 5.4.12 Open Order Request (15)

In UTP, Order Status Request (H) is used for both order retransmission functionality and ownership migration between connections own by the same client. In Optiq they are processed separately and are based on two different messages.

In Optiq **Open Order Request (15)** message will only manage functionality of providing clients with status of their order, namely whether it is still active (present in the order book), or if it was partially executed.

The granularity of the message will be Order ID and in response client will receive the **Ack (03)** message.

---

#### 5.4.13 Ownership Request (18)

This message is replacing part of the functionality that in UTP have been managed via Order Status Request (H) message. The message can be used by the clients to change the ownership of an active order from one OE Session to another belonging to the same Firm. Ownership of an order identifies the OE Session that will receive all outbound messages associated to the targeted order. The scope of the ownership is executed per instrument (*SymbolIndex*) can cover from a single order (identified by *Order ID*) to all the orders of a specific OE Session, or a Logical Access ID.

Upon submitting such a request client will receive an **Ack (03)** message in their OEG, which will also be accompanied by the full order information sent via Drop Copy.

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#### 5.4.14 Ownership Request Ack (17)

This message is sent to [a] confirm receipt and processing of the **Ownership Request (18)** message, and [b] the end of the ownership transfer processes. This is a new message created for this response and is sent twice. The information about the orders that are being transferred is provided via **Ack (03)** message(s) and in parallel also being re-sent to the Drop Copy with full order information. After all orders, even if there is only one, that were part of the ownership transfer processes are sent out, the second instance of the message is sent to confirm the successful change of ownership. The field *Total Affected Orders* in initial acknowledgement message is set to -1, and in the second instance of this message this field contains the total number of orders that changed ownership.

---

#### 5.4.15 Trade Bust (Cancellation) Notification (19)

The UTP Bust/Correct (C) message will be represented in Optiq by **Trade Bust Notification (19)** message. Behaviour of the message remains the same and notable differences are listed below:

- Client order ID is no longer provided in this dedicated message, as it was not providing any useful data for the Trade bust notification.
- Field *TradeChangeType* has been removed from the message, as trade correction is not permitted on the Euronext Cash markets.

---

#### 5.4.16 Collar Breach Confirmation (20)

In UTP, confirmation of a rejected order due to collar breach is a functionality that is part of the Cancel/Replace logic.

In Optiq, **Collar Breach Confirmation (20)** message is a newly introduced for the Cash markets. For instruments with appropriate collar logic, in case an order submission is rejected due to collar breach, clients have the possibility to confirm the submission of such order by submitting a **Collar Breach Confirmation (20)** within 30 seconds after the rejection. Such submission must take into account that threshold will be impacted. Once the threshold recalculated as a consequence, the order is either accepted or rejected again due to collar breach.

Clients may refer to OEG Message Kinematics Specifications for the full description of the process.

For a full description of the message, clients should refer to the Optiq OEG client specifications document.

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#### 5.4.17 Price input (28)

In UTP, the submission of a reference price from a primary market by the client (alternative indicative price) is done through a Price Input (I) message. In Optiq, the **Price Input (28)** message will manage the same functionality. Changes in behaviour are the following:

- If the input price of the message stands for an alternative indicative price: in UTP (respectively Optiq Step 1) the given price was disseminated to the market through a public Execution Report (respectively MDG **Price Update (1003)**) message. In Optiq, no price must be provided in the **Price Input (28)** message. If the message is accepted, then a public MDG **Price Update (1003)** message is sent for one lot size at the reference price.
- Acknowledgement to a **Price Input (28)** message is done via the harmonized **Ack (03)** message, replacing the Generic Response (y) used in UTP.

---

#### 5.4.18 Liquidity Provider Command (32)

The Optiq SBE protocol OEG **Liquidity Provider Command (32)** message replaces CCG One Side Only Period (O) and integrates its contents into a single message, covering both CCG message “O” and Liquidity Provider Command (Z). A change in the format of the message will include:

- Removal of the MIC and Currency fields that were provided in the (O) message and are now implicitly provided by the Symbol Index (as such no longer present as fields in the messages).
- New values added - The LP Action Code is thus enriched by the Bid Only / Offer only possible.

Acknowledgement of this message is included in the harmonized **Ack** (3) message (see dedicated section). The CCG One Side Only Period Ack (P) is decommissioned and the Ack is introduced for LP commands (previously supported by the Generic Response (y) message). Otherwise the kinematics of the message remain as in UTP.

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#### 5.4.19 Ask for Quotes (33)

The CCG binary Quote Request (L) message is replaced in Optiq SBE by the **Ask for Quotes** (33) message. Same as In UTP, the messages supports the Ask For Quote functionality.

Main changes in behaviour are described in the Warrants Changes in this document. For the full detailed view of the changes in Message structures, values and message behavior, clients should refer to the *Euronext Cash Markets - Optiq OEG Client Specifications - SBE Interface* and the *Euronext Cash Markets - Optiq Kinematics Specifications* documents.

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#### 5.4.20 Request For Execution (34)

The UTP message Request for Execution (M) is replaced in Optiq by the **RequestForExecution** (34) message.

For functional changes related to the enhancement of the RFE mechanism and field added, please refer to the *Euronext Cash Markets - Optiq OEG Client Specifications - SBE Interface* and the *Euronext Cash Markets - Optiq Kinematics Specifications* documents.

In general the behaviour of the message is kept the same, the main enhancement added with this message is that when LP is answering the RFE request with their Quote and set the field *RFE Indicator* to “True”, it is made clear that the answer provided by the LP was to the RFE, and not an update of Quotes that coincidentally occurred at the same time. Such an update of quotes will trigger an immediate match.

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### 5.5 MESSAGES ASSOCIATED TO NEW FUNCTIONALITIES

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#### 5.5.1 Quotes Request (10) – For Future Use

A new message added – for future use

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#### 5.5.2 RFQ Notification (35) – For Future Use

A new message added – for future use

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#### 5.5.3 RFQ Matching Status (36) – For Future Use

A new message added – for future use

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#### 5.5.4 User Notification (39)

A new message added – please see section “MiFID II related Changes” for more information.



## 5.6 MERGED & REMOVED BINARY MESSAGES

### 5.6.1 Transformed / Removed Messages

Some of the functionalities existing in UTP are removed, or migrated to be provided via a different solution, and the associated messages are being removed. The table below identifies the messages removed and if they are being replaced, the method by which the functionality would be provided in Optiq.

Removed Functionality (SBE / FIX)	Change Description
Trading Session Status (h / H)	Trading session status (also known as the Class events) will change to be issued on Instrument level, and will only be disseminated as part of public message <b>Market Status Change</b> (1005) message. Please see Market data specifications for this message and the change highlights for step 1 (XDP vs. MDG) for more information on the mapping.
One-sided only Period Notice (N / UN)	Going forward this information will be provided in Market data only, as a value in the <b>Market Status Change</b> (1005) message, in the field Trading side
One-sided only Period Ack (P / UP)	Triggering of one-sided period by LP has been merged into the Liquidity Provider command, and the one-sided only period Ack will be communicated through the <b>Ack</b> (03) message in <i>field Ack Type</i>
Order Status Request (H / H)	Functionality has been split to be covered by two messages <b>Ownership Request</b> (18) and <b>Open Order Request</b> (15)
Request For Size (r / Ur)	Functionality of Request for Size (RFS) is to be replaced with Request for Quote (RFQ) functionality, which is currently identified for Future Use
Request For Size Ack (s / Us)	Functionality of Request for Size (RFS) is to be replaced with Request for Quote (RFQ) functionality, which is currently identified for Future Use
TCSTRADEENTRY (T / UT)	Services associated to OTC Trade reporting previously supported by TCS are now managed in a different application and will not be made available via OEG dedicated to TCS. Due to this the associated TCS Trade messages have been removed. For more information please refer to the Euronext's website about APA/ARM services under MiFID II <a href="https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii">https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii</a>
TCSTRADEENTRYNOTICE (t / Ut)	Services associated to OTC Trade reporting previously supported by TCS are now managed in a different application and will not be made available via OEG dedicated to TCS. Due to this the associated TCS Trade messages have been removed. For more information please refer to the Euronext's website about APA/ARM services under MiFID II <a href="https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii">https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii</a>

### 5.6.2 Merged Messages

To reduce complexity and harmonize existing functionalities, a number of messages in Optiq are being merged. As a result the original “duplicate” messages are removed. The table below provides these messages and the target messages that would take on the associated merged functionality, fields and/or values.

Merged Message				Target Optiq Message	
Market	Binary Code	FIX Code	Description	Binary Code	Description
Cash	a	8	Order Acknowledgement	03	Ack

Merged Message				Target Optiq Message	
Market	Binary Code	FIX Code	Description	Binary Code	Description
Cash	E	8	Cancel/Replace Ack	03	Ack
Cash	6	8	Cancel Request Ack	03	Ack
Cash	5	8	Order Replaced	03	Ack
Cash	y	Uy	Generic Response	03	Ack
Cash	P	UP	One Sided Only Period Ack	03	Ack
Cash	O	UO	One Sided Only Period	32	Liquidity Provider command
Cash	D	D	New Order (Single)	01	New Order
	e				

## 6. FIX PROTOCOL (FIX 5.0) - CHANGES IN MESSAGES FOR OPTIQ

### 6.1 GENERAL NOTES & UPDATES


With migration to Optiq Euronext will upgrade its Cash FIX protocol to version 5.0. As Euronext Derivative markets are already using version 5.0 of FIX, this will further ensure harmonization of private message formats between Cash and Derivatives. The FIX message specifications will cover the details of the messages, fields and values. The combined Kinematics document will indicate the behaviour for FIX messages, and identify when it is to be the same as for SBE and when it will differ.

- The section below describes changes to the messages exchanged between client systems and the exchange. Short description of differences in behaviour is provided for those messages that have significant changes (and are listed in this section), including mapping of merged messages and identification of those being deprecated with Optiq. Comparison of Optiq FIX 5.0 to UTP FIX 4.2 message structures and values is provided in a dedicated section of this document.
- While attempts were made to keep in line with the guidelines identified by the FIX protocol v5.0, FIX messages in Optiq will also adhere to and use the same general Optiq concepts that have been defined elsewhere in this document, as well as in the other Optiq specifications and kinematics documents, and the specificities of the Euronext markets and services.
- In addition to changes required due to architecture of Optiq described in other sections of this document, the FIX messages and fields were updated to be as much as possible in line with the Binary protocol (SBE).
- The major changes expected to be included in the specifications and kinematics for the FIX protocol in Optiq are provided in a brief summary below.
  - Addition of new messages with enhancement of the Optiq system
  - New fields added to match new Optiq architecture, harmonization between Cash and Derivatives, and alignment with new binary protocol (SBE)
  - Inclusion of new fields required for
    - ◆ Technical Timestamps
    - ◆ MIFID II compliance and MIFID II specific services
  - Replacement of fields decommissioned since v 4.2 protocol with either defined fields and field group behaviour identified for v5.0 or required custom tags; e.g.
    - ◆ Field representing account type Rule80A {48} field is replaced with two fields *AccountCode* (6399) and *LPRole* (20021)
    - ◆ Field *ExecTransType* {20} is removed
  - Removal of unused or merged messages
- Data for Cross orders is moved to be managed via the *NoSides* (552) repeating group
- Identification of the Trading session will be provided via a same single field and the previously identified associated repeating group *NoTradingSessions* is removed
- Management of the updated mechanisms of Self-Trade Prevention (STP) and Cancel on Disconnect (CoD) will change the use of fields as following:
  - For STP: field *STPAggressorIndicator* (21015) will replace the use of field *STPIndicator*
  - For CoD: *CancelOnDisconnectionIndicator* (21018) is added to the message

For more details on changes in the services please refer to the dedicated sections within this document.

#### ■ Technical field changes

- In the Header the field *SenderLocationID* (142) will no longer be used in the FIX messages

 **Important note:** There are more individual details than those provided in the brief summary above, and some are further explained in the sub-sections of this document. However clients should review the Optiq message specifications and kinematics documents to obtain full description of the messages and values setup for Optiq.

## 6.2 MAPPING OF MESSAGES CCG FIX 4.2 TO OEG FIX 5.0

Table below provides the mapping of messages between CCG FIX 4.2 and OEG FIX 5.0 protocols. TCS messages are covered in a separate section within this document. More details on removed or merged messages are identified in a dedicated section in this document.

CCG FIX 4.2 – Label (ID)	OEG FIX 5.0 – Label (ID)	Notes
New Order Single (D)	NewOrderSingle (D)	
Order Cancel Request (F)	OrderCancelRequest (F)	
Order Mass Cancel Request (q)	OrderMassCancelRequest (q)	
Order Cancel/Replace Request (G)	OrderCancelReplaceRequest (G)	
Order Status Request (H)	OrderMassStatusRequest (AF)	
Price Input (UI)	PriceInput (UI)	
Bulk Quote (UB)	MassQuote (i)	
One Side Only Period (UO)	LiquidityProviderCommand (UZ)	Merged message
Liquidity Provider Command (UZ)	LiquidityProviderCommand (UZ)	
Bulk Quote Ack (UJ)	MassQuoteAck (b)	
One Side Only Period Ack (UP)	ExecutionReport (8)	Please review section on Ack harmonization
Request for Execution (UM)	RequestForExecution (UM)	
Quote Request (UL)	AskForQuote (UL)	
Execution Report (8)	ExecutionReport (8)	
Order Cancel Reject (9)	OrderCancelReject (9)	
Order Mass Cancel Report (r)	OrderMassCancelReport (r)	
Request Ack Message (Uy)	RequestAckMessage (Uy)	
Logon (A)	Logon (A)	
Heartbeat (0)	Heartbeat (0)	
Test Request (1)	Test Request (1)	
Resend Request (2)	Resend Request (2)	
Reject (3)	Reject (3)	
Logout (5)	Logout (5)	
Sequence Reset (4)	Sequence Reset (4)	
N/A	QuoteRequest (R)	New. Future Use for ETF MTF
N/A	QuoteRequestReject (AG)	New. Future Use for ETF MTF
N/A	RFQNotification (U35)	New. Future Use for ETF MTF
N/A	RFQMatchingStatus (U36)	New. Future Use for ETF MTF

N/A	UserNotification (CB)	New
N/A	OwnershipRequestAck (U29)	New
N/A	OwnershipRequest (U18)	New, replaces some of the functionality of CCG Order Status Request (H) message
Request for Size (Ur)	N/A	Removed
Request for Size Acknowledgement (Us)	N/A	Removed
One Side Only Period Notice (UN)	N/A	Removed
Trading Session Status (h)	N/A	Removed
Business Message Reject (j)	N/A	Removed

## 6.3 ADMINISTRATION MESSAGES

### 6.3.1 Logon (A)

- Behaviour of the message remains the same as in UTP and in line with FIX standard, and this message is used to both initiate the Logon by the client, and is also sent back to the client when the Logon is successful.
- 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. Null value can be provided as in UTP, to indicate to the Exchange that a message in the sequence is to be ignored.
- In Optiq Logon message will be enriched to allow clients to specify what type of behaviour they'd like to have for messages over the throttling limit: Queue or Reject using the field *QueueingIndicator* (21020) If nothing is specified, the system will assume that default setting of Reject is chosen. Clients can overwrite this setting on every logon into the system.
- Identification of individual physical connections & OE session ID  
 To trade on any of the Optiq segments, clients will need to establish one or more physical connections to partitions within the segment.  
 For each established physical connection clients will be able to construct and provide within the logon message the unique identifier, referred to elsewhere as OE Session ID, which will now be represented by two fields: *LogicalAccessID* (21021) and *OEPartitionID* (21019).
- Software Provider  
 To assist Euronext in providing the best possible level of service to its clients, knowing which provider's software a client is using improves aspects of conformance testing and assists in troubleshooting. To facilitate this an optional field *SoftwareProvider* (21050) is added in the Logon message, where clients may provide a free text description / name of the vendor that provides the software they use to connect and trade on Optiq.
- Technical field modifications:
  - DefaultAppVerID (1137) added in Optiq, and is always set to 9 = FIX50SP2
  - Heartbeat interval (108) - To improve performance predictability in Optiq field *HeartBtInt* (108) will always be set to the value defined by the exchange and provided in the connectivity documentation.

- ResetSeqNumFlag (141) will no longer be used in Optiq

---

### 6.3.2 Heartbeat (0)

Functionality of **Heartbeat** (0) message will predominantly remain the same. However, for efficiency reasons, maximum time for heartbeat interval will be restricted to a maximum value set by the Exchange. With this change clients will always set the value of the interval in the connectivity documentation. Message with any values outside of the those set per segment and not recognized by the exchange would be rejected.

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### 6.3.3 TestRequest (1)

The functionality for the **TestRequest** (1) message predominantly remains the same, however, as for the heartbeat messages, **TestRequest** (1) message will be subject to the imposed maximum interval identified by the Exchange.

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### 6.3.4 Reject (3)

In the FIX **Reject** (3) message the field *Text* (58) is removed and only the *SessionRejectReason* (373) will be kept for reporting of errors & rejections. In case of issues with specific fields the message follows the FIX standard of identifying the field impacted in the *RefTagID* (371) field.

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### 6.3.5 Logout (5)

In the FIX **Logout** (5) message the field *Text* (58) is replaced with the field *SessionStatus* (1409). In most cases sending of the Logout message will trigger Cancel on Disconnect (CoD) mechanism. Otherwise behaviour of the message remains unchanged.

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## 6.4 APPLICATION MESSAGES

The sections below describe the main technical and functional changes for the messages listed below. Mapping of fields between the existing CCG messages and the OEG messages with which they are being replaced are provided in dedicated section.

For the complete definition of message structures and field values, and to view the expected message behaviour clients should review the *Euronext Cash Markets - Optiq OEG Client Specifications – FIX 5.0 Interface* and the *Euronext Cash Markets - Optiq Kinematics Specifications* documents.

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### 6.4.1 NewOrderSingle (D)

The **NewOrderSingle** (D) message is used for similar functionality as in UTP, however it is updated to use fields within the FIX 5.0 standard and enriched to reflect the new fields required for the adjusted functionalities in Optiq, with key changes identified below:

- Management of values and associated functionalities that were provided via field ExecInstr are redistributed into a number of fields and repeating groups for management of Cross orders and future use Peg orders.
- Clearing data fields are moved to be managed using the fields of the NestedParties [*NoNestedPartyIDs* (539)] repeating group instead of the NoClearingEntries group
- In UTP two clearing data sets of data were included in the NewOrderSingle message for Cross orders, however cross orders are sent as a single message with both sides identified from a single Euronext Securities client. As such a single set of clearing data is expected provide sufficient information for this case on the Cash market.
- The changes to the acknowledgement of the New Order message is described in the sections for the harmonization of acknowledgement of private messages.
- For the information about the MIFID II shortcodes, associated fields and how they should be completed in different cases please refer to the dedicated MIFID II section and the description within the Optiq FIX 5.0 message specifications.
- “Future Use” fields present in this message: *PegPriceType* (1094), *PegOffsetValue* (211), *SelfMatchPreventionID* (2362), *QuoteReqID* (131), *RFQAnswerIndicator* (21037), *RFQConfirmationIndicator* (21038), *CustOrderCapacity* (582), *DarkExecutionInstruction* (20052), *UndisclosedIcebergType* (20005)

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#### 6.4.2 ExecutionReport (8)

The **ExecutionReport** (8) message is used for similar functionality as in UTP, however it is enhanced to incorporate the functionality of UTP message One Side Only Period Ack, in the acknowledgement message harmonization effort. To manage additional functionalities and updated to use fields within the FIX 5.0 standard and enriched to reflect the new fields required for the adjusted functionalities in Optiq, with key changes identified below:

- Enhancements in information provided in Execution Report for Trades include addition of the fields *ExecPhase* (21023), *TradeQualifier* (21080), *MinQty* (20), *TradeType* (21010)
- For the information about the MIFID II shortcodes, associated fields and how they should be completed in different cases please refer to the dedicated MIFID II section and the description within the Optiq FIX 5.0 message specifications.
- Enhancements in identifying acknowledgement messages includes the following changes:
  - Additional sub-types of acknowledgement and responses are included in the *ExecType* (150) field with Optiq to cover the cases identified in section within this document on harmonization of acknowledgement messages
  - Fields added to provide additional information as following:
    - ◆ *AckPhase* (21013) - provides indication of the trading phase during which the acknowledgement being reported has occurred
    - ◆ *AckQualifiers* (21014) – sends back to client to echo back Dark indicator, and Queueing indicator
    - ◆ *OrderPriority* (21004) for the order acknowledgement to indicate order priority
    - ◆ *QtyDelta* (8011) to indicate type of change in quantity
    - ◆ *OrderCapacity* (528) to indicate capacity of the firm placing the order
- Clearing data fields are moved to be managed using the fields of the NestedParties [*NoNestedPartyIDs* (539)] repeating group instead of the NoClearingEntries group
- Field *OrdRejReason* (103) is removed as the reasons for rejection would be provided by the error codes, the list of which is being enhanced to include more specific cases and provide more granularity

- Management of values and associated functionalities that were provided via field ExecInstr are redistributed into a number of fields to manage and repeating groups for management of Cross orders and future use Peg orders.
- **ExecutionReport** (8) message will be used in Drop Copy for cash markets to provide both Order and Trade information. Please review the Drop Copy section in this document for more information.
- As identified above, the identification of individual physical connections & OE session ID is represented in this message by two fields: *LogicalAccessID* (21021) and *OEPartitionID* (21019).
- Fields added to and to facilitate harmonization between the Cash and Derivative feeds are: *OtherLegLastPx* (651), *OtherLegSecurityID* (7773), *OtherLegReferenceNo* (7774), *OtherLegSecurityIDSource* (7489), *NoLegs* (555) repeating group, *LegSecurityIDSource* (602), *LegSecurityID* (602), *LegLastPx* (637), *LegLastQty*(1418), *LegSide* (1418)
- “Future Use” fields present in this message: *PegPriceType* (1094), *PegOffsetValue* (211), *SelfMatchPreventionID* (2362), *QuoteReqID* (131), *RFQAnswerIndicator* (21037), *RFQConfirmationIndicator* (21038), *CustOrderCapacity* (582), *DarkExecutionInstruction* (20052), and *PackageID* (5883)

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#### 6.4.3 OrderCancelReject (9)

The **OrderCancelReject** (9) message is used for similar functionality as in UTP, and is updated to use fields within the FIX 5.0 standard, and enriched to reflect the new fields required for the adjusted functionalities in Optiq, with key changes identified below. As in UTP the message is sent to provide rejection for functional reasons.

- The type of collar and the limit breached is indicated in the message in new conditional fields, in case orders are rejected due to a collar breach. For this reason two fields are added to the message *CollarRejType* (9962) and *BreachedCollarPrice* (21001).
- Fields *CxlRejReason* (102) and *Text* (58) are removed as the reasons for rejection would be provided by the error codes. The list of error messages associated to the Error codes in Optiq is made more granular and is provided in a dedicated *Euronext Cash Markets - Optiq & TCS Error List* document.
- Management of values and associated functionalities that were provided via field ExecInstr are redistributed into a number of fields to manage and repeating groups for management of Cross orders and future use Peg orders.

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#### 6.4.4 MassQuote (i)

**MassQuote** (i) message is replacing the UTP message Bulk Quote (UB) for similar functional uses, but with use of native FIX 5.0 message. In addition to the general Optiq modifications, like the new timestamp fields, EMM and SymbolIndex, the main changes in the message are listed below:

- The message has been updated with required fields and values to reflect Warrants changes and enhancements described in the Warrants Changes section with this document
- To address this the repeating group *NoQuoteEntries* is being replaced with the *NoQuoteSets* (296) repeating group and enhanced with the fields of that group designed for quotes.
- For the information about the MIFID II shortcodes, associated fields and how they should be completed in different cases please refer to the dedicated MIFID II section and the description within the Optiq FIX 5.0 message specifications.



- Clearing data fields are moved to be managed using the fields of the NestedParties [*NoNestedPartyIDs* (539)] repeating group instead of the NoClearingEntries group

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#### 6.4.5 MassQuoteAck (b)

**MassQuoteAck** (b) message is replacing the UTP message Bulk Quote Ack (UJ) for similar functional uses, but with use of a native FIX 5.0 message. In addition to the general Optiq modifications, like the new timestamp fields, EMM and SymbolIndex, the main changes in the message are listed below:

- The message has been updated with required fields and values to reflect Warrants changes and enhancements described in the Warrants Changes section with this document
- To address this the repeating group NoQuoteEntries is being replaced with the *NoQuoteSets* (296) repeating group and enhanced with the fields of that group designed for quotes.
- For the information about the MIFID II shortcodes, associated fields and how they should be completed in different cases please refer to the dedicated MIFID II section and the description within the Optiq FIX 5.0 message specifications.
- Clearing data fields are moved to be managed using the fields of the NestedParties [*NoNestedPartyIDs* (539)] repeating group instead of the NoClearingEntries group

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#### 6.4.6 OrderCancelRequest (F)

The **OrderCancelRequest** (F) message is used in a similar fashion as in UTP with key changes identified below.

- To improve system performance fields *OrdType* (40) and *Side* (54) are added to the **OrderCancelRequest** (F) message. If values in these fields do not match the original submission it will lead to the rejection of the message. 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.
- Clearing data fields are moved to be managed using the fields of the NestedParties [*NoNestedPartyIDs* (539)] repeating group instead of the NoClearingEntries group
- “Future Use” fields present in this message: *PegPriceType* (1094), *SelfMatchPreventionID* (2362), *DarkExecutionInstruction* (20052)

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#### 6.4.7 OrderCancelReplaceRequest (G)

The **OrderCancelReplaceRequest** (G) message is used in a similar fashion as in UTP with key changes identified below.

- As in other messages, management of values and associated functionalities that were provided via field ExecInstr are redistributed into a number of fields to manage and repeating groups for management of Cross orders and future use Peg orders.
- While some fields associated to it are present in the message structure, modification of various fields is no longer accepted in Optiq as described in the section Change in Modification Message Behavior within this document.
- For the information about the MIFID II shortcodes, associated fields and how they should be completed in different cases please refer to the dedicated MIFID II section and the description within the Optiq FIX 5.0 message specifications.

- Clearing data fields are moved to be managed using the fields of the NestedParties [*NoNestedPartyIDs* (539)] repeating group instead of the *NoClearingEntries* group
- “Future Use” fields present in this message: *PegPriceType* (1094), *PegOffsetValue* (211), *SelfMatchPreventionID* (2362), *DarkExecutionInstruction* (20052), *UndisclosedIcebergType* (20005)

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#### 6.4.8 OrderMassCancelReport (r)

The **OrderMassCancelReport** (r) message is used in a similar way to the one in UTP with key changes identified below.

- To improve identification of individual messages and events, the **OrderMassCancelReport** (r) message will be assigned an ID by the exchange and provided to client within the *MassActionReportID* (1369) field
- As the scope of **OrderMassCancelRequest** (q) message is modified to accommodate identification of cancellation for specific connection in line with connectivity changes in Optiq the **OrderMassCancelReport** (r) message is modified similarly. The field *CancelByLocationID* is replaced by the fields used to identify individual physical connections & OE session ID: *LogicalAccessID* (21021) and *OEPartitionID* (21019).

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#### 6.4.9 OrderMassCancelRequest (q)

The **OrderMassCancelRequest** (q) message is used in a similar fashion as in UTP with key changes identified below.

- The scope of **OrderMassCancelRequest** (q) message will allow, as currently the cancellation either for a specific instrument, or a group of instruments, with possibility of identifying other variables to refine that scope further. To allow for this with the connectivity changes in Optiq the field *CancelByLocationID* is replaced by the fields used to identify individual physical connections & OE session ID: *LogicalAccessID* (21021) and *OEPartitionID* (21019).
- For the information about the MIFID II shortcodes, associated fields and how they should be completed in different cases please refer to the dedicated MIFID II section and the description within the Optiq FIX 5.0 message specifications.

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#### 6.4.10 RequestAckMessage (Uy)

The **RequestAckMessage** (Uy) message is used for similar functionality as in UTP with key changes identified below.

- UTP messages *One Side Only Period* (UO) and *Liquidity Provider Command* (UZ) are merged into a single message **LiquidityProviderCommand** (UZ) in Optiq, as they provide similar services to the same population of clients. To address this change field *LPActionCode* (10076) is added to **RequestAckMessage** (Uy) message to provide required granularity in responding to the newly merged message.
- Field *Text* (58) is removed as the reasons for rejection would be provided by the error codes. The list of error messages associated to the Error codes in Optiq is made more granular and is provided in a dedicated *Euronext Cash Markets - Optiq & TCS Error List* document.

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#### 6.4.11 LiquidityProviderCommand (UZ)

In Optiq two UTP messages One Side Only Period (UO) and Liquidity Provider Command (UZ) are merged into a single message **LiquidityProviderCommand** (UZ) as they provide similar services to the same population of clients. The overall behaviour of the message remains largely the same. To address the merger of two messages into one field *LPActionCode* (10076) is enriched with new values to provide required granularity in submitting the associated requests via a single message.

Otherwise message has been adjusted to be FIX 5.0 compliant and match the overall technical and functional changes of Optiq.

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#### 6.4.12 OrderMassStatusRequest (AF)

In UTP, Order Status Request (H) is used for both order retransmission functionality and ownership migration between connections own by the same client. In Optiq they are processed separately and are based on two different messages.

In Optiq **OrderMassStatusRequest** (AF) message will only manage functionality of providing clients with status of their order, namely whether it is still active (present in the order book), or if it was partially executed.

The scope of the message is reduced to a single order identified by the OrderID (37)\_field. As the field OrderID (37) is used to target a specific order to obtain the status of, the field MassStatusReqID (584) is provided in the message to identify the message ID.

The granularity of the message is the Order ID and in response client will receive the **Execution Report** (8) message.

Client may refer to OEG FIX message specification document for the full description of the message structure and to Optiq OEG kinematics document for the details of the behaviour.

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#### 6.4.13 RequestForExecution (UM)

In Optiq **RequestForExecution** (UM) message remains very similar to how it is setup in UTP. Its structure is adjusted to match the rest of Optiq message structure and its behaviour is enhanced as described in the Warrants Changes section within this document.

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#### 6.4.14 AskForQuote (UL)

The UTP message Quote Request (UL) is renamed to **AskForQuote** to match its use, and keeps its identifier code (UL). Functionality and behaviour of the message remains largely the same. Structure of the message is adjusted to match Optiq structure, and values used to represent AFQ reasons in field AFQReason are updated to harmonize between SBE and FIX protocols

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#### 6.4.15 OwnershipRequest (U18)

This message is replacing part of the functionality that in UTP have been managed via Order Status Request (H) message. The message can be used by the clients to change the ownership of an active order from one OE Session to another belonging to the same Firm. Ownership of an order identifies the OE Session that will

receive all outbound messages associated to the targeted order. The scope of the ownership is executed per instrument [Symbol Index / *SecurityID* (48)] can be cover from a single order [identified by *OrderID* (37)] to all the orders of a specific OE Session, or a Logical Access ID.

As identified above, the identification of individual physical connections & OE session ID is represented in this message by two fields: *LogicalAccessID* (21021) and *OEPartitionID* (21019).

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#### 6.4.16 OwnershipRequestAck (U29)

This message is sent to [a] confirm receipt and processing of the **OwnershipRequest** (U18) message, and [b] the end of the ownership transfer processes. This is a new message created for this response and is sent twice. The information about the orders that are being transferred is provided via **Execution Report** (8) message(s). After all orders, even if there is only one, that were part of the ownership transfer processes are sent out, the second instance of the message is sent to confirm the successful change of ownership. The field *TotalAffectedOrders* (533) in initial acknowledgement message is set to -1, and in the second instance of this message this field contains the total number of orders that changed ownership.

As identified above, the identification of individual physical connections & OE session ID is represented in this message by two fields: *LogicalAccessID* (21021) and *OEPartitionID* (21019).

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### 6.5 MESSAGES ASSOCIATED TO NEW FUNCTIONALITIES (NEW MESSAGES)

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#### 6.5.1 QuoteRequest (R)

A new message added – for future use

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#### 6.5.2 QuoteRequestReject (AG) A new message added – for future use

#### 6.5.3 RFQNotification (U35) A new message added – for future use

#### 6.5.4 RFQMatchingStatus (U36) A new message added – for future use

#### 6.5.5 UserNotification (CB)

A new message added – please see section “MiFID II related Changes” for more information.

## 6.6 REMOVED FIX MESSAGES

### 6.6.1 Transformed / Removed Messages

Some of the functionalities existing in UTP are removed, or migrated to be provided via a different solution, and the associated messages are being removed. The table below identifies the messages removed and if they are being replaced, the method by which the functionality would be provided in Optiq.

Removed Functionality (FIX / SBE)	Change Description
Trading Session Status (h / h)	Trading session status (also known as the Class events) will change to be issued on Instrument level, and will only be disseminated as part of public message <b>Market Status Change</b> (1005) message. Please see Market data specifications for this message and the change highlights for step 1 (XDP vs. MDG) for more the mapping.
One-sided only Period Notice (UN / N)	Going forward this information will be provided in Market data only, as a value in the Market Status Change message, in the field Trading side
One-sided only Period Ack (UP / P)	Triggering of one-sided period by LP has been merged into the Liquidity Provider command, and the one-sided only period Ack will be communicated through the <b>Execution Report</b> (8) message in field <i>ExeType</i> (tag: 150)
Order Status Request (H / H)	Functionality has been split to be covered by two messages <b>Ownership Request</b> (U18) and <b>OrderMassStatusRequest</b> (AF)
Request For Size (Ur / r)	Functionality of Request for Size (RFS) is to be replaced with Request for Quote (RFQ) functionality, which is currently identified for Future Use
Request For Size Ack (Us / s)	Functionality of Request for Size (RFS) is to be replaced with Request for Quote (RFQ) functionality, which is currently identified for Future Use
TCSTRADEENTRY (UT / T)	Services associated to OTC Trade reporting previously supported by TCS are now managed in a different application and will not be made available via OEG dedicated to TCS. Due to this the associated TCS Trade messages have been removed. For more information please refer to the Euronext's website about APA/ARM services under MiFID II <a href="https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii">https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii</a>
TCSTRADEENTRYNOTICE (Ut / t)	Services associated to OTC Trade reporting previously supported by TCS are now managed in a different application and will not be made available via OEG dedicated to TCS. Due to this the associated TCS Trade messages have been removed. For more information please refer to the Euronext's website about APA/ARM services under MiFID II <a href="https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii">https://www.euronext.com/trading-services/euronexts-apa-arm-services-under-mifid-ii</a>
Business Message Reject (j)	Functional rejection of messages will be managed by other method, depending on the type of functionality.

### 6.6.2 Merged Messages

To reduce complexity and harmonize existing functionalities, a number of messages in Optiq are being merged. As a result the original “duplicate” messages are removed. The table below identifies the messages that are removed as part of the merger and the target messages into which they were incorporated in Optiq.

Merged Message				Target Optiq Message	
Market	FIX Code	Binary Code	Description	FIX Code	Description
Cash	<b>UN</b>	N	One Sided Period Notice	<b>UZ</b>	Liquidity Provider command
Cash	<b>Uy</b>	y	Generic Response	<b>3</b>	Ack
Cash	<b>UO</b>	O	One Sided Only Period	<b>UZ</b>	Liquidity Provider command
Cash	<b>UP</b>	P	One Sided Only Period Ack	<b>Uy</b>	Request Acknowledgement
Cash	<b>D</b>	D	New Order (Single)	<b>01</b>	New Order
		e			

## 7. SBE (BINARY) PROTOCOL: FIELD MAPPING

The tables below provide message by message detailed mapping of fields used in UTP Binary protocol to the messages in Optiq for SBE.

Field mapping identifies the new, modified or removed fields. Technical modifications to the messages (e.g. changes in the message header) assumed to be applicable to all functional messages. The column “Action” in the table indicates the type of change, Modification, new field or removal.

### General Notes

#### Conventions and Display :

In the following tables the changes are presented as described below :

CCG Logon (A)			Optiq Logon (100)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action

The type of change is indicated in the ‘Action’ column, and may indicated values represent the following:

- New: New field added in the messages
- Modified : The field is kept, but either its characteristics or list of possible values is modified
- Removed : The field is removed
- [blank]: If no changes impact the tag with Optiq no action is indicated in the Action column

#### Technical Timestamps:

Technical timestamps provided in Optiq are the same in both FIX and SBE protocols. Client may refer to the dedicated section and messages structure providing for the full description and details.

## 7.1 ADMINISTRATION MESSAGES

### 7.1.1 Logon (100)

CCG Logon (A)			Optiq Logon (100)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
NA	NA	NA	Logical Access ID	Numerical ID	From 0 to 2 <sup>32</sup> -1	Identifier of the Logical Access.	New
NA	NA	NA	OE Partition ID	Numerical ID	From 0 to 2 <sup>16</sup> -1	Identifies uniquely an OE Optiq partition by which the engine is reached.	New
LastMsgSeqNum	Int	Sequential	Last Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -1	Indicates the sequence number of the last message received by the Client from the Exchange on the OE Session.	Modified
NA	NA	NA	Software Provider	Text	(See field description)	Free text field entered by the client in the Logon (100) message, identifying the provider of the software used for exchange of messages for trading purposes.	New
NA	NA	NA	Queueing Indicator	Boolean	0 = False 1 = True	Indicates whether the client requests its orders to be queued or rejected in case of throttling. (0: False - Reject ; 1: True - Queue).	New
Header	Char	'A' Logon	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
UserName	String	Alphanumeric	NA	NA	NA	NA	Removed
Filler	String		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

### 7.1.2 Logon Reject (102)

CCG Logon Reject (I)			Optiq Logon Reject (102)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
NA	NA	NA	Exchange ID	Numerical ID	(See field description)	Identifies a physical Optiq partition.	New
NA	NA	NA	Logon Reject Code	Enumerated	1 = Unknown Connection Identifier 2 = System unavailable 3 = Invalid sequence	Provides the logon rejection reason.	New



CCG Logon Reject (I)			Optiq Logon Reject (102)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
					number 4 = Client session already logged on 5 = Client session disabled 6 = Invalid Queueing Indicator 7 = Invalid Logon format		
LastMsgSeqNumSent	Int	Sequential	Last Client Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -1	Indicates the sequence number of the last message received by the Exchange from the Client on the OE Session.	Modified
LastMsgSeqNumRcvd	Int	Sequential	Last Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -1	Indicates the sequence number of the last message received by the Client from the Exchange on the OE Session.	Modified
Header	Char	'1' Logon Reject	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
RejCode	Int	'0' = Success '1' = System unavailable '2' = Invalid sequence number '3' = Client session already exists '4' = Client session disabled '5' = Connection type mismatch	NA	NA	NA	NA	Removed
Text	String	Alphanumeric	NA	NA	NA	NA	Removed
Filler	Char		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2 APPLICATION MESSAGES

### 7.2.1 New Order (01)

CCG New Order (D) / (e)			Optiq New Order (01)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Client Message	Sequence	From 0 to 2 <sup>32</sup> -2	The Client Message Sequence	Modified

CCG New Order (D) / (e)			Optiq New Order (01)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
			Sequence Number			Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	
OnBehalfOfCompID	String	Firm ID	Firm ID	Alphanumeric ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	New
ClOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS 0...10 <sup>16</sup> -1 TCS	Client Order ID	Numerical ID	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
Side	Char	(see message structures) '0' = For Request for Size (r) messages only. '1' = Buy '2' = Sell '8' = Cross SP PM	Order Side	Enumerated	1 = Buy 2 = Sell 3 = Cross [i]	Indicates the side of the order.	Modified
OrderType	Char	'1' = Market SP PM '2' = Limit SP '3' = Stop RM / Stop on Quote NW '4' = Stop Limit RM / Stop on Quote Limit NW 'P' = Pegged NW BM PM	Order Type	Enumerated	1 = Market 2 = Limit 3 = Stop-market or Stop-market-on-quote [C] 4 = Stop-limit or Stop-limit-on-quote [C] 5 = Primary Peg [C] 6 = Market to limit	Type of Order.	Modified

CCG New Order (D) / (e)			Optiq New Order (01)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
		'K' = Market To Limit RM PM			7 = Market Peg (For Future Use, Pending Regulatory Approval) [C] 8 = Mid-Point Peg (For Future Use, Pending Regulatory Approval) [C] 9 = Average Price (For Future Use) [C] 10 = Iceberg [C]		
TimeInForce	Char	'0' = Day '1' = GTC (Good Till Cancel) RM PM '2' = VFA (Valid For Auction) RM '3' = IOC (Immediate Or Cancel) '4' = FOK (Fill Or Kill) RM '6' = GTD (Good Till Date) RM NW / GTT (Good Till Time) NW PM '7' = VFC (Valid For Closing auction) RM	Time In Force	Enumerated	0 = Day 1 = Good Till Cancel 2 = Valid for Uncrossing [C] 3 = Immediate or Cancel 4 = Fill or Kill [C] 5 = Good till Time [C] 6 = Good till Date 7 = Valid for Closing Uncrossing [C] 8 = Valid for Session [D]	Specifies the maximum validity of an order.	Modified
Price	Int	Price	Order Price	Price	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	Modified
OrderQty	Int	Quantity	Order Quantity	Quantity	From 0 to 2 <sup>64</sup> -2	Total order quantity, per quantity unit.(To be calculated with Quantity Decimals)	Modified
NA	NA	NA	ExecutionWithinFirmShortCode	Numerical ID	From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	New
NA	NA	NA	Trading Capacity	Enumerated	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	New
Rule80A	Char	'1' = Client '2' = House '3' = RLO RM '4' = RO RM '6' = Liquidity Provider RM PM NW '7' = Related Party '8' = Riskless Principal SP 'S' = SI Order RM	Account Type	Enumerated	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	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.	Modified

CCG New Order (D) / (e)			Optiq New Order (01)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
NA	NA	NA	LP Role	Enumerated	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	New
ExecInst	Char	'R' = Primary Peg RM 'P' = Market Peg RM 'X' = Cross SP 'M' = Mid-price Peg SP RM 'x' = Best-bid Peg SP 'z' = Best-offer Peg SP	Execution Instruction	Bitmap	0 = STP resting order [C] 1 = STP incoming order [C] 2 = Disclosed Quantity Randomization [C] 3 = Disabled Cancel On Disconnect Indicator 4 = RFQ Answer [C] 5 = RFQ Confirmation [C] 6 = Future use 1 7 = Future use 2	Field used as instruction for order handling. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	Modified
DarkIndicator	Char	'0' or null = No '1' = Yes	Dark Execution Instruction	Bitmap	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Future Dark Use 1 6 = Future Dark Use 2 7 = Future Dark Use 3	[N/A] Field used as instruction for dark order handling (For Future Use, Pending Regulatory Approval). Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	Modified
NA	NA	NA	MiFID Indicators	Bitmap	0 = DEA Indicator 1 = InvestmentAlgoIndicator 2 = ExecutionAlgoIndicator 3 = CommodityDerivativeIndicator 4 = Deferral Indicator	Field used as instruction for order handling. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	New
NA	NA	NA	STP ID	Numerical ID	From 0 to 2^16-1	[N/A] For Future Use.	New
FreeText	String	Any	Free Text	Text	(See field description)	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Modified
NA	NA	NA	InvestmentDecisionWFi rmShortCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	New
NA	NA	NA	NonExecutingBrokerSh ortCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	New
NA	NA	NA	ClientIdentificationShor tCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Client identification code.	New
StopPx	Int	Price	Stop Trigger Price	Price	From -2^63 to 2^63-1	Stop Trigger Price is mandatory for	Modified

CCG New Order (D) / (e)			Optiq New Order (01)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						stop orders.	
UndisclosedPrice	Int	Price	Undisclosed Price	Price	From -2^63 to 2^63-1	[N/A] Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)	Modified
MaxFloor	Int	Quantity (ignored if '0')	Disclosed Quantity	Quantity	From 0 to 2^64-1	Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)	Modified
MinQty	Int	Quantity	Minimum Order Quantity	Quantity	From 0 to 2^64-1	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).	Modified
NA	NA	NA	QuoteReqID	Numerical ID	From 0 to 2^64-1	[N/A] Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM. (For Future Use)	New
ExpireTime	String	MMDD or hhmmss (left-padded with blanks)	Order Expiration Time	Numerical ID	From 0 to 2^32-1	Field used as time of order expiration for GTT orders.	Modified
NA	NA	NA	Order Expiration Date	Date	From 0 to 2^16-1	Field used as date of order expiration for GTD orders.	New
PegDifference	Int	In New Order (D): '0' In New Order (e): 'Price difference value', '0' if not specified.	Peg Offset	Numerical ID	From -128 to 127	[N/A] Tick offset for a pegged order. (For Future Use)	Modified
TradingSessionID	String	'1' = Early session '2' = Core session '3' = Late session '12' = Early and Core sessions '13' = Early and Late sessions '23' = Core and Late sessions '123' = All sessions	Trading Session Validity	Bitmap	1 = Session 1 2 = Session 2 3 = Session 3	[N/A] Trading Session Validity. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	Modified
UndisclosedExecInst	Char	'L' = Limit 'M' = Peg Midpoint 'R' = Primary Peg 'P' = Market Peg	Undisclosed Iceberg Type	Enumerated	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	[N/A] Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity. (For Future Use, Pending Regulatory Approval)	Modified
NA	NA	NA	Triggered Stop Time In Force	Enumerated	0 = Day 1 = Good Till Cancel 6 = Good till Date	Specifies the maximum validity of an triggered stop order.	New
ClearingFirm	String	Firm ID (agreed upon clearing value)	Clearing Firm ID	Alphanumeric ID	(See field description)	Clearing firm ID.	Modified
ClientID	String	Alphanumeric	Client ID	Alphanumeric	(See field description)	Field used to identify the client	Modified

CCG New Order (D) / (e)			Optiq New Order (01)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
				al ID		(investor).	
Account	String	Alphanumeric	Account Number	Alphanumeric al ID	(See field description)	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Modified
TechnicalOrdType	Char	'I' = Index trading arbitrage 'P' = Portfolio strategy 'G' = Unwind order 'A' = Other orders (default) 'C' = Cross margining	Technical Origin	Enumerated	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	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.	Modified
OpenClose	Char	'O' = Open 'C' = Close	Open Close	Bitmap	0 = Field Actively Used 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]	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Modified
ClearingHandlingType	Char	(blank) = Systematic posting '0' = Manual mode '1' = Automatic extraction '2' = Automatic allocation	Clearing Instruction	Enumerated	0 = Process normally [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]	Clearing Instruction.	Modified
Rule80A_2	Char	(See field description)	Account Type Cross	Enumerated	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	Indicates the account type for which the sell side of a cross order is entered.	Modified
Header	Char	'D' New Order	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
DiscretionOffset	Int		NA	NA	NA	NA	Removed

CCG New Order (D) / (e)			Optiq New Order (01)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
DispRange	Int		NA	NA	NA	NA	Removed
PriceScale	Char	TCS '0'..'4' TCS '0'..'6'	NA	NA	NA	NA	Removed
DiscretionInst	Char		NA	NA	NA	NA	Removed
DiscretionPriceScale	Char		NA	NA	NA	NA	Removed
StopPxScale	Char	'0'..'4'	NA	NA	NA	NA	Removed
ExpireTimeFlag	Char	'D' = ExpireTime is a date RM NW 'T' = ExpireTime is a time NW	NA	NA	NA	NA	Removed
ConfirmFlag	Char	'0' = Not confirmed (default if not specified) '1' = Confirmed	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
Account_2	String	Alphanumerical	NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed
Filler	Char		NA	NA	NA	NA	Removed

## 7.2.2 Ack (03)

CCG Order Ack (a)			Optiq Ack (03)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Modified
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumeric ID	(See field description)	Identifier of the member firm that sends the message.	Modified
TransactTime	Int	Seconds since 01/01/1970 at 00:00 UTC; '-1' if not significant.	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Modified
NA	NA	NA	OEG IN From Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To ME	Epoch Time in	From 0 to 2 <sup>64</sup> -1	Gateway OUT time to ME (in ns),	New

CCG Order Ack (a)			Optiq Ack (03)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
				Nanoseconds		measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	
NA	NA	NA	Book IN Time	Epoch Time in Nanoseconds	From 0 to 2^64-2	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	Book OUT Time	Epoch Time in Nanoseconds	From 0 to 2^64-1	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG IN From ME	Epoch Time in Nanoseconds	From 0 to 2^64-1	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To Member	Epoch Time in Nanoseconds	From 0 to 2^64-1	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
ClOrdID	Int	(see message structures) -2^63...2^63-1 TCS 0...10^16-1 TCS	Client Order ID	Numerical ID	From -2^63 to 2^63-1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
NA	NA	NA	Original Client Order ID	Numerical ID	From -2^63 to 2^63-1	Client order ID of the original order.	New
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2^32-2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
NA	NA	NA	Order Side	Enumerated	1 = Buy 2 = Sell 3 = Cross [i]	Indicates the side of the order.	New



CCG Order Ack (a)			Optiq Ack (03)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
NA	NA	NA	Ack Type	Enumerated	0 = New Order Ack 1 = Replace Ack 2 = Order Creation By Market Operations 3 = Stop Triggered Ack [C] 4 = Collar Confirmation Ack [C] 5 = Refilled Iceberg Ack [C] 6 = MTL Second Ack [C] 7 = Knock-In By Issuer (KIBI) Ack [C] 8 = Knock-Out By Issuer (KOB) Ack [C] 9 = Payment After Knock-Out (PAKO) Ack [C] 10 = Price Input Ack [C] 11 = RFQ Ack [C] 12 = Bid Only Ack [C] 13 = Offer Only Ack [C] 14 = Iceberg Transformed to Limit due to Minimum size [C] 15 = Ownership Request Ack [C] 16 = VFU/VFC Triggered Ack [C] 17 = Open Order Request Ack [C]	Indicates the type of the Ack message	New
NA	NA	NA	Ack Phase	Enumerated	1 = Continuous Trading Phase 2 = Call Phase 3 = Halt Phase [C] 4 = Closed Phase 5 = Trading At Last Phase 6 = Reserved 7 = Suspended	Indicates the trading phase during which the Matching Engine has processed the event that has triggered this Ack (03) message.	New
OrderID	Int	Alphanumeric	Order ID	Numerical ID	From 0 to 2 <sup>64</sup> -1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
NA	NA	NA	Order Priority	Numerical ID	From 0 to 2 <sup>64</sup> -1	Rank giving the priority of the order. The order with the lowest value of Order Priority has the highest priority.	New
NA	NA	NA	Order Price	Price	From -2 <sup>63</sup> to 2 <sup>63</sup> -1	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	New

CCG Order Ack (a)			Optiq Ack (03)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
NA	NA	NA	Order Quantity	Quantity	From 0 to 2^64-1	Total order quantity, per quantity unit. (To be calculated with Quantity Decimals)	New
DarkIcebergEligible	Char	'0' = No '1' = Yes	Ack Qualifiers	Bitmap	0 = Dark Indicator (For Future Use, Pending Regulatory Approval) 1 = Queue Indicator 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 7 = Future Ack Use 6	Field used to provide additional information on the corresponding order. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	Modified
Header	Char	'a' Order Ack	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

### 7.2.3 Fill (04)

CCG Order Fill (2)			Optiq Fill (04)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2^32-2	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Modified
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumeric ID	(See field description)	Identifier of the member firm that sends the message.	Modified
TransactTime	Int	Seconds since 01/01/1970 at 00:00 UTC; '-1' if not significant.	Trade Time	Epoch Time in Nanoseconds	From 0 to 2^64-2	Time of the trade.	Modified
NA	NA	NA	Book OUT Time	Epoch Time in Nanoseconds	From 0 to 2^64-1	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG IN From ME	Epoch Time in Nanoseconds	From 0 to 2^64-1	Gateway IN time from ME (in ns), measured when outbound message	New

CCG Order Fill (2)			Optiq Fill (04)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	
NA	NA	NA	OEG OUT To Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
CIOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS 0...10 <sup>16</sup> -1 TCS	Client Order ID	Numerical ID	From -2 <sup>63</sup> to 2 <sup>63</sup> -1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
Side	Char	(see message structures) '0' = For Request for Size (r) messages only. '1' = Buy '2' = Sell '8' = Cross SP PM	Order Side	Enumerated	1 = Buy 2 = Sell 3 = Cross [i]	Indicates the side of the order.	Modified
TransparencyInd	Char	'0' = Lit Trade / Regular Trade '1' = Dark trade with immediate publication '2' = Dark trade with deferred publication	Trade Type	Enumerated	1 = Conventional Trade (Cash and Derivatives) 2 = Large in Scale (LiS) Trade (Derivatives Only) 3 = Basis Trade (Derivatives Only) 4 = Large in Scale (LiS) Package Trade (Derivatives Only) 5 = Guaranteed Cross Trade (Cash and Derivatives) 6 = Against Actual Trade	Type of trade.	Modified

CCG Order Fill (2)			Optiq Fill (04)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
					(Derivatives Only) 7 = Asset Allocation Trade (Derivatives Only) 9 = Exchange for Swap Trade (Derivatives Only) 10 = Exchange for Physical Trade - Cash Leg (Cash Only) 11 = Strategy Leg Conventional Trade (Derivatives Only) 12 = Strategy Leg Large in Scale (LiS) Trade (Derivatives Only) 13 = Strategy Leg Basis Trade (Derivatives Only) 14 = Strategy Leg Guaranteed Cross Trade (Derivatives Only) 15 = Strategy Leg Against Actual Trade (Derivatives Only) 16 = Strategy Leg Asset Allocation Trade (Derivatives Only) 18 = Strategy Leg Exchange For Swap Trade (Derivatives Only) 19 = Strategy Leg Exchange For Physical Trade (Derivatives Only) 20 = BoB Trade (Cash Only) 22 = AtomX Trade (Derivatives Only) 24 = Trade Cancellation (Cash and Derivatives) 25 = Out of Market Trade (Cash Only) 26 = Delta Neutral Trade - Underlying Cash Leg (Cash Only) 27 = Market VWAP Operation Trade (Cash Only) 28 = Euronext Fund Service Trade (Cash Only) 29 = Secondary Listing Trade (Cash Only)		

CCG Order Fill (2)			Optiq Fill (04)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
					30 = Request for Cross Trade (Derivatives Only) 31 = Request for cross strategy Leg Trade (Derivatives Only) 32 = Trade Publication (Cash Only) 33 = Dark Trade (Cash Only) - For future use 34 = Delta Neutral Trade - Underlying Future Leg (Derivatives Only) 36 = Total Traded Volume (For future use) 37 = ETF-MTF NAV Trade (price in basis points) (Cash Only) - For future use 38 = ETF-MTF NAV Dark Trade (price in basis points) (Cash Only) - For future use		
NA	NA	NA	Trade Qualifier	Bitmap	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]	Trade Qualifier. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	New
OrderID	Int	Alphanumeric	Order ID	Numerical ID	From 0 to 2 <sup>64</sup> -2	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
LastPx	Int	Price	Last Traded Price	Price	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with the Price/Index Decimals).	Modified
LastShares	Int	Quantity	Last Traded Quantity	Quantity	From 0 to 2 <sup>64</sup> -2	The Last Traded Quantity indicates the quantity of last fill on an instrument (to be calculated with the Quantity Decimals).	Modified
NA	NA	NA	Leaves Quantity	Quantity	From 0 to 2 <sup>64</sup> -2	Indicates the remaining quantity of an order, i.e. the quantity open for further execution.	New
UTPEXID	Int	Numerical	Execution ID	Numerical ID	From 0 to 2 <sup>32</sup> -2	The Execution ID is unique per	Modified

CCG Order Fill (2)			Optiq Fill (04)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						instrument et 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.	
NA	NA	NA	Execution Phase	Enumerated	1 = Continuous Trading Phase 2 = Uncrossing Phase 3 = Trading At Last Phase 4 = Continuous Uncrossing Phase	Indicates the trading phase during which the trade has occurred.	New
IMSCompID	String	If the execution report is received from the CCG : Firm ID of the counterpart If the execution report is received from the CCG Drop Copy : '1' + 10 spaces = LCH '4' + 10 spaces = SIX '6' + 10 spaces = EuroCCP '7' + 10 spaces = Euroclear '8' + 10 spaces = X-Clear	Counterpart Firm ID	Alphanumeric ID	(See field description)	ID of the Counterpart Firm in specific cases.	Modified
NA	NA	NA	Underlying Last Traded Price	Price	From -2^63 to 2^63-1	[N/A] For Basis and Against Actual trades only: underlying cash leg price.	New
NA	NA	NA	Package ID	Alphanumeric ID	(See field description)	[N/A] ID used to link several Large in Scale (LiS) Package trades together.	New
NA	NA	NA	Underlying Instrument ID	Numerical ID	From 0 to 2^32-1	[N/A] The commodity key for the other component leg of an asset allocation or ISIN code for the underlying cash leg that is part of a Basis or Against Actuals trade.	New
NA	NA	NA	Leg Last Traded Price	Price	From -2^63 to 2^63-1	[N/A] Leg Last Traded Price	New
NA	NA	NA	Leg Last Traded Quantity	Quantity	From 0 to 2^64-1	[N/A] Leg Last Traded Quantity	New
NA	NA	NA	Leg Instrument ID	Numerical ID	From 0 to 2^32-1	[N/A] Numerical leg instrument identifier (SymbolIndex) valid for the life of the instrument.	New
NA	NA	NA	Leg Side	Enumerated	1 = Buy 2 = Sell	[N/A] Indicates the side of the trade leg.	New
Header	Char	'2' Order Fill	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
LastPxScale	Char	'0'..'4'	NA	NA	NA	NA	Removed

CCG Order Fill (2)			Optiq Fill (04)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
LiquidityIndicator	Char	(blank) = Uncrossing SP / Not provided 'A' = Add liquidity - passive 'R' = Remove liquidity - aggressive 'X' = Routed (Future use) 'O' = Cross SP, Opening trade SP or Trade creation by MO	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
Filler	String		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.4 Kill (05)

CCG Order Killed (4)			Optiq Kill (05)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Modified
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
TransactTime	Int	Seconds since 01/01/1970 at 00:00 UTC; '-1' if not significant.	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Modified
NA	NA	NA	OEG IN From Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To ME	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	Book IN Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Matching Engine IN time (in ns), time at which the corresponding inbound	New

CCG Order Killed (4)			Optiq Kill (05)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	
NA	NA	NA	Book OUT Time	Epoch Time in Nanoseconds	From 0 to 2^64-1	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG IN From ME	Epoch Time in Nanoseconds	From 0 to 2^64-1	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To Member	Epoch Time in Nanoseconds	From 0 to 2^64-1	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
ClOrdID	Int	(see message structures) -2^63...2^63-1 TCS 0...10^16-1 TCS	Client Order ID	Numerical ID	From -2^63 to 2^63-1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
NA	NA	NA	Original Client Order ID	Numerical ID	From -2^63 to 2^63-1	Client order ID of the original order.	New
OrderID	Int	Alphanumeric	Order ID	Numerical ID	From 0 to 2^64-2	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2^32-2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
OrdStatus	Char	'0' = New '1' = Partially filled '2' = Filled '3' = Done for Day	Kill Reason	Enumerated	1 = Order Cancelled by Client 2 = Order Expired 3 = Order Cancelled by	Order Kill Reason	Modified



CCG Order Killed (4)			Optiq Kill (05)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
		'4' = Cancelled '5' = Replaced '6' = Pending Cancel '8' = Rejected 'C' = Expired 'E' = Pending Replace 'S' = Cancelled by Market Operation 'O' = Eliminated by corporate event 'P' = Cancelled by STP 'Z' Too many collar breach attempts			Market Operations 4 = Order Eliminated due to Corporate Event 5 = Done for day 6 = Cancelled MTL in an empty Order Book [C] 7 = Cancelled by STP 8 = Remaining quantity killed (IOC) 9 = Beginning of PAKO Period [C] 11 = Order Cancelled due to Cancel On Disconnect Mechanism 12 = RFQ expired [C] 13 = RFQ partially or fully matched with other counterparts [C] 14 = RFQ cancelled by the issuer [C] 15 = RFQ Not matched due to issuer order's features [C] 16 = Quote cancelled due to Knock-Out [C] 17 = Order cancelled due to a Kill command		
Header	Char	'4' Order Killed	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.5 Cancel Replace (06)

CCG Cancel/Replace Order (G)			Optiq Cancel Replace (06)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Client Message Sequence Number	Sequence	From 0 to 2^32-2	The Client Message Sequence Number is mandatory for all	Modified

CCG Cancel/Replace Order (G)			Optiq Cancel Replace (06)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						inbound messages, but the consistency of the sequence is not checked by the Exchange.	
OnBehalfOfCompID	String	Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2^64-2	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	ExecutionWithinFirmShortCode	Numerical ID	From -2^31+1 to 2^31-1	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	New
NA	NA	NA	ClientIdentificationShortCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Client identification code.	New
ClOrdID	Int	(see message structures) -2^63...2^63-1 TCS 0...10^16-1 TCS	Client Order ID	Numerical ID	From -2^63+1 to 2^63-1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
OrderID	Int	Alphanumerical	Order ID	Numerical ID	From 0 to 2^64-1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
OrigClOrdID	Int	ClOrdID of the order to be modified / cancelled	Original Client Order ID	Numerical ID	From -2^63 to 2^63-1	Client order ID of the original order.	Modified
Price	Int	Price	Order Price	Price	From -2^63 to 2^63-1	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	Modified
OrderQty	Int	Quantity	Order Quantity	Quantity	From 0 to 2^64-2	Total order quantity, per quantity unit.(To be calculated with Quantity Decimals)	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2^32-2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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]	Defines the Exchange Market Mechanism applied on each platform.	New

CCG Cancel/Replace Order (G)			Optiq Cancel Replace (06)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
					99 = Not Applicable (For indices and iNAV) [C]		
Side	Char	(see message structures) '0' = For Request for Size (r) messages only. '1' = Buy '2' = Sell '8' = Cross SP PM	Order Side	Enumerated	1 = Buy 2 = Sell 3 = Cross [i]	Indicates the side of the order.	Modified
OrderType	Char	'1' = Market SP PM '2' = Limit SP '3' = Stop RM / Stop on Quote NW '4' = Stop Limit RM / Stop on Quote Limit NW 'P' = Pegged NW BM PM 'K' = Market To Limit RM PM	Order Type	Enumerated	1 = Market 2 = Limit 3 = Stop-market or Stop-market-on-quote [C] 4 = Stop-limit or Stop-limit-on-quote [C] 5 = Primary Peg [C] 6 = Market to limit 7 = Market Peg (For Future Use, Pending Regulatory Approval) [C] 8 = Mid-Point Peg (For Future Use, Pending Regulatory Approval) [C] 9 = Average Price (For Future Use) [C] 10 = Iceberg [C]	Type of Order.	Modified
TimeInForce	Char	'0' = Day '1' = GTC (Good Till Cancel) RM PM '2' = VFA (Valid For Auction) RM '3' = IOC (Immediate Or Cancel) '4' = FOK (Fill Or Kill) RM '6' = GTD (Good Till Date) RM NW / GTT (Good Till Time) NW PM '7' = VFC (Valid For Closing auction) RM	Time In Force	Enumerated	0 = Day 1 = Good Till Cancel 2 = Valid for Uncrossing [C] 3 = Immediate or Cancel 4 = Fill or Kill [C] 5 = Good till Time [C] 6 = Good till Date 7 = Valid for Closing Uncrossing [C] 8 = Valid for Session [D]	Specifies the maximum validity of an order.	Modified
Rule80A	Char	'1' = Client '2' = House '3' = RLO RM '4' = RO RM '6' = Liquidity Provider RM PM NW '7' = Related Party	Account Type	Enumerated	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	[N/A] Indicates the account type for which the order is entered. For example, an order can be entered for a client account, a house account or a liquidity provider account.	Modified

CCG Cancel/Replace Order (G)			Optiq Cancel Replace (06)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
		'8' = Riskless Principal SP 'S' = SI Order RM					
NA	NA	NA	LP Role	Enumerated	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	[N/A] Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	New
ExecInst	Char	'R' = Primary Peg RM 'P' = Market Peg RM 'X' = Cross SP 'M' = Mid-price Peg SP RM 'x' = Best-bid Peg SP 'z' = Best-offer Peg SP	Execution Instruction	Bitmap	0 = STP resting order [C] 1 = STP incoming order [C] 2 = Disclosed Quantity Randomization [C] 3 = Disabled Cancel On Disconnect Indicator 4 = RFQ Answer [C] 5 = RFQ Confirmation [C] 6 = Future use 1 7 = Future use 2	Field used as instruction for order handling. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	Modified
NA	NA	NA	Dark Execution Instruction	Bitmap	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Future Dark Use 1 6 = Future Dark Use 2 7 = Future Dark Use 3	[N/A] Field used as instruction for dark order handling (For Future Use, Pending Regulatory Approval). Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	New
NA	NA	NA	MiFID Indicators	Bitmap	0 = DEA Indicator 1 = InvestmentAlgoIndicator 2 = ExecutionAlgoIndicator 3 = CommodityDerivativeIndicator 4 = Deferral Indicator	Field used as instruction for order handling. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	New
NA	NA	NA	STP ID	Numerical ID	From 0 to 2 <sup>16</sup> -1	[N/A] For Future Use.	New
FreeText	String	Any	Free Text	Text	(See field description)	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Modified
StopPx	Int	Price	Stop Trigger Price	Price	From -2 <sup>63</sup> to 2 <sup>63</sup> -1	Stop Trigger Price is mandatory for stop orders.	Modified
PegDifference	Int	In New Order (D): '0' In New Order (e): 'Price difference value', '0' if not specified.	Peg Offset	Numerical ID	From -128 to 127	[N/A] Tick offset for a pegged order. (For Future Use)	Modified
NA	NA	NA	Undisclosed Price	Price	From -2 <sup>63</sup> to 2 <sup>63</sup> -1	[N/A] Optional price for the hidden part of an Iceberg order. (For Future	New

CCG Cancel/Replace Order (G)			Optiq Cancel Replace (06)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						Use, Pending Regulatory Approval)	
MaxFloor	Int	Quantity (ignored if '0')	Disclosed Quantity	Quantity	From 0 to 2^64-1	Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)	Modified
ExpireTime	String	MMDD or hhmmss (left-padded with blanks)	Order Expiration Time	Numerical ID	From 0 to 2^32-1	Field used as time of order expiration for GTT orders.	Modified
NA	NA	NA	Order Expiration Date	Date	From 0 to 2^16-1	Field used as date of order expiration for GTD orders.	New
TradingSessionID	String	'1' = Early session '2' = Core session '3' = Late session '12' = Early and Core sessions '13' = Early and Late sessions '23' = Core and Late sessions '123' = All sessions	Trading Session Validity	Bitmap	1 = Session 1 2 = Session 2 3 = Session 3	[N/A] Trading Session Validity. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	Modified
NA	NA	NA	Triggered Stop Time In Force	Enumerated	0 = Day 1 = Good Till Cancel 6 = Good till Date	Specifies the maximum validity of an triggered stop order.	New
NA	NA	NA	Undisclosed Iceberg Type	Enumerated	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	[N/A] Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity. (For Future Use, Pending Regulatory Approval)	New
ClearingFirm	String	Firm ID (agreed upon clearing value)	Clearing Firm ID	Alphanumerical ID	(See field description)	Clearing firm ID.	Modified
ClientID	String	Alphanumerical	Client ID	Alphanumerical ID	(See field description)	Field used to identify the client (investor).	Modified
Account	String	Alphanumerical	Account Number	Alphanumerical ID	(See field description)	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Modified
TechnicalOrdType	Char	'I' = Index trading arbitrage 'P' = Portfolio strategy 'G' = Unwind order 'A' = Other orders (default) 'C' = Cross margining	Technical Origin	Enumerated	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	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.	Modified
OpenClose	Char	'0' = Open 'C' = Close	Open Close	Bitmap	0 = Field Actively Used 1 = Leg 1 2 = Leg 2 [D] 3 = Leg 3 [D] 4 = Leg 4 [D]	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Modified

CCG Cancel/Replace Order (G)			Optiq Cancel Replace (06)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
					5 = Leg 5 [D] 6 = Leg 6 [D] 7 = Leg 7 [D] 8 = Leg 8 [D] 9 = Leg 9 [D]		
ClearingHandlingType	Char	(blank) = Systematic posting '0' = Manual mode '1' = Automatic extraction '2' = Automatic allocation	Clearing Instruction	Enumerated	0 = Process normally [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]	Clearing Instruction.	Modified
Header	Char	'G' Cancel/Replace Order	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
MsgSeqNum	Int	Sequential.	NA	NA	NA	NA	Removed
DiscretionOffset	Int		NA	NA	NA	NA	Removed
DispRange	Int		NA	NA	NA	NA	Removed
Filler	Int		NA	NA	NA	NA	Removed
PriceScale	Char	TCS '0'..'4' TCS '0'..'6'	NA	NA	NA	NA	Removed
DiscretionInst	Char		NA	NA	NA	NA	Removed
DiscretionPriceScale	Char		NA	NA	NA	NA	Removed
StopPxScale	Char	'0'..'4'	NA	NA	NA	NA	Removed
ConfirmFlag	Char	'0' = Not confirmed (default if not specified) '1' = Confirmed	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
ExpireTimeFlag	Char	'D' = ExpireTime is a date RM NW 'T' = ExpireTime is a time NW	NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.6 Reject (07)

CCG Order Cancel/Replace Reject (8)			Optiq Reject (07)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Modified
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumeric ID	(See field description)	Identifier of the member firm that sends the message.	Modified
TransactTime	Int	Seconds since 01/01/1970 at 00:00 UTC; '-1' if not significant.	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Modified
NA	NA	NA	OEG IN From Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To ME	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	Book IN Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	Book OUT Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG IN From ME	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
ClOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS	Client Order ID	Numerical ID	From -2 <sup>63</sup> to 2 <sup>63</sup> -1	An identifier of a message assigned by the Client when submitting an order	Modified

CCG Order Cancel/Replace Reject (8)			Optiq Reject (07)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
		0...10^16-1 TCS				to the Exchange.	
NA	NA	NA	Order ID	Numerical ID	From 0 to 2^64-1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	New
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2^32-1	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
RejReason	Char	See 'UTP Error List' for possible values.	Rejected Message	Numerical ID	From 0 to 2^8-1	Provides the ID (Template ID) of the rejected message.	Modified
ErrorCode	Int	Numerical	Error Code	Numerical ID	From 0 to 2^16-2	Error code in case of rejection.	Modified
CollarRejType	Char	'H' = High collar 'L' = Low collar	Collar Rejection Type	Enumerated	1 = Low dynamic collar 2 = High dynamic collar	Hit collar type (high or low) in case of order rejection due to collar breach.	Modified
CollarRejPx	Int	Price	Breached Collar Price	Price	From -2^63 to 2^63-1	Breached collar price in case of collar rejection.	Modified
Header	Char	'8' Order Cancel/Replace Reject	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
OrigCLOrdID	Int	ClOrdID of the order to be modified / cancelled	NA	NA	NA	NA	Removed
RejType	Char	'1' = Order reject '2' = Cancel reject '3' = Replace reject	NA	NA	NA	NA	Removed
Text	String	Alphanumeric	NA	NA	NA	NA	Removed
CollarRejPxScale	Char	'0'..'4'	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
Filler	String		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed



## 7.2.7 Quotes (08)

CCG Bulk Quote (B)			Optiq Quotes (08)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Client Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Modified
OnBehalfOfCompID	String	Firm ID	Firm ID	Alphanumeric ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	New
ClOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS 0...10 <sup>16</sup> -1 TCS	Client Order ID	Numerical ID	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
NA	NA	NA	ExecutionWithinFirmShortCode	Numerical ID	From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	New
NA	NA	NA	Trading Capacity	Enumerated	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	New
Rule80A	Char	'1' = Client '2' = House '3' = RLO RM '4' = RO RM '6' = Liquidity Provider RM PM NW '7' = Related Party '8' = Riskless Principal SP 'S' = SI Order RM	Account Type	Enumerated	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	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.	Modified
NA	NA	NA	LP Role	Enumerated	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	New
NA	NA	NA	MiFID Indicators	Bitmap	0 = DEA Indicator 1 = InvestmentAlgoIndicator 2 = ExecutionAlgoIndicator 3 = CommodityDerivativeIndicator 4 = Deferral Indicator	Field used as instruction for order handling. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values	New

CCG Bulk Quote (B)			Optiq Quotes (08)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						provided in different positions.	
NA	NA	NA	RFE Answer	Boolean	0 = False 1 = True	Indicate whether the Quotes message is an answer to a RequestForExecution (34) message or not. (0: No [False] ; 1: Yes [True])	New
NA	NA	NA	InvestmentDecision WFirmShortCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Investment decision within firm, identifier of the trader or algorithm responsible for the investment decision.	New
NA	NA	NA	NonExecutingBroker ShortCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Non-executing broker, identifier of the non-executing broker.	New
NA	NA	NA	ClientIdentificationS hortCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Client identification code.	New
ClearingFirm	String	Firm ID (agreed upon clearing value)	Clearing Firm ID	Alphanumeric ID	(See field description)	Clearing firm ID.	Modified
ClientID	String	Alphanumeric	Client ID	Alphanumeric ID	(See field description)	Field used to identify the client (investor).	Modified
Account	String	Alphanumeric	Account Number	Alphanumeric ID	(See field description)	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Modified
TechnicalOrdType	Char	'I' = Index trading arbitrage 'P' = Portfolio strategy 'G' = Unwind order 'A' = Other orders (default) 'C' = Cross margining	Technical Origin	Enumerated	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	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.	Modified
OpenClose	Char	'O' = Open 'C' = Close	Open Close	Bitmap	0 = Field Actively Used 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]	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Modified
ClearingHandlingType	Char	(blank) = Systematic posting 'O' = Manual mode '1' = Automatic extraction '2' = Automatic allocation	Clearing Instruction	Enumerated	0 = Process normally [C] 8 = Manual mode 9 = Automatic posting mode 10 = Automatic give-up mode [C] 4008 = Automatic and account authorization [D] 4009 = Manual and account	Clearing Instruction.	Modified

CCG Bulk Quote (B)			Optiq Quotes (08)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
					authorization [D] 4010 = Give-up to single firm [D]		
FreeText	String	Any	Free Text	Text	(See field description)	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Modified
BidSize	Int	Quantity	Bid Quantity	Quantity	From 0 to 2 <sup>64</sup> -1	Quote bid quantity, (To be calculated with Quantity Decimals).	Modified
BidPx	Int	Price	Bid Price	Price	From -2 <sup>63</sup> to 2 <sup>63</sup> -1	Quote bid price, (To be calculated with Price/Index Level Decimals).	Modified
OfferSize	Int	Quantity	Offer Quantity	Quantity	From 0 to 2 <sup>64</sup> -1	Quote offer quantity, (To be calculated with Quantity Decimals).	Modified
OfferPx	Int	Price	Offer Price	Price	From -2 <sup>63</sup> to 2 <sup>63</sup> -1	Quote offer price, (To be calculated with Price/Index Level Decimals).	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
Header	Char	'B' Bulk Quote	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
MsgSeqNum	Int	Sequential.	NA	NA	NA	NA	Removed
RFEIndicator	Char	'0' = No (Default if not provided) '1' = Market animation quote '2' = RFE answer quote	NA	NA	NA	NA	Removed
NoQuoteEntries	Int	'1'..'150'	NA	NA	NA	NA	Removed
BidPxScale	Char	'0'..'4'	NA	NA	NA	NA	Removed
OfferPxScale	Char	'0'..'4'	NA	NA	NA	NA	Removed
Filler	String		NA	NA	NA	NA	Removed

CCG Bulk Quote (B)			Optiq Quotes (08)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.8 Quotes Ack (09)

CCG Bulk Quote Ack (J)			Optiq Quote Ack (09)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Modified
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	OEG IN From Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To ME	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	Book IN Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	Book OUT Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG IN From ME	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New

CCG Bulk Quote Ack (J)			Optiq Quote Ack (09)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						UTC).	
NA	NA	NA	OEG OUT To Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
ClOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS 0...10 <sup>16</sup> -1 TCS	Client Order ID	Numerical ID	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
Rule80A	Char	'1' = Client '2' = House '3' = RLO RM '4' = RO RM '6' = Liquidity Provider RM PM NW '7' = Related Party '8' = Riskless Principal SP 'S' = SI Order RM	Account Type	Enumerated	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	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.	Modified
NA	NA	NA	LP Role	Enumerated	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	New
NA	NA	NA	Bid Order ID	Numerical ID	From 0 to 2 <sup>64</sup> -1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	New
NA	NA	NA	Offer Order ID	Numerical ID	From 0 to 2 <sup>64</sup> -1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	New
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
NA	NA	NA	Buy Revision	Enumerated	0 = New	Indicates whether the bid quote is a	New

CCG Bulk Quote Ack (J)			Optiq Quote Ack (09)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
			Indicator		1 = Replacement 2 = Cancellation	new quote, a replacement of a previous quote or a cancellation.	
NA	NA	NA	Sell Revision Indicator	Enumerated	0 = New 1 = Replacement 2 = Cancellation	Indicates whether the offer quote is a new quote, a replacement of a previous quote or a cancellation.	New
BidErrorCode	Int	Numerical	Bid Error Code	Numerical ID	From 0 to 2 <sup>16</sup> -1	Error code returned when quote contains an invalid bid.	Modified
OfferErrorCode	Int	Numerical	Offer Error Code	Numerical ID	From 0 to 2 <sup>16</sup> -1	Error code returned when a quote contains an invalid offer. See Error List for details of error codes.	Modified
Header	Char	'J' Bulk Quote Ack	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
Account	String	Alphanumeric	NA	NA	NA	NA	Removed
TechnicalOrdType	Char	'I' = Index trading arbitrage 'P' = Portfolio strategy 'G' = Unwind order 'A' = Other orders (default) 'C' = Cross margining	NA	NA	NA	NA	Removed
ClearingFirm	String	Firm ID (agreed upon clearing value)	NA	NA	NA	NA	Removed
ClientID	String	Alphanumeric	NA	NA	NA	NA	Removed
FreeText	String	Any	NA	NA	NA	NA	Removed
OpenClose	Char	'O' = Open 'C' = Close	NA	NA	NA	NA	Removed
ClearingHandlingType	Char	(blank) = Systematic posting '0' = Manual mode '1' = Automatic extraction '2' = Automatic allocation	NA	NA	NA	NA	Removed
Filler	Char		NA	NA	NA	NA	Removed
NoQuoteEntries	Int	'1'..'150'	NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.9 Cancel Request (12)

CCG Order Cancel Request (F)			Optiq Cancel Request (12)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Client Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	The Client Message Sequence Number is mandatory for all inbound	Modified

CCG Order Cancel Request (F)			Optiq Cancel Request (12)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						messages, but the consistency of the sequence is not checked by the Exchange.	
OnBehalfOfComplID	String	Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	ExecutionWithinFirmShortCode	Numerical ID	From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	New
NA	NA	NA	ClientIdentificationShortCode	Numerical ID	From -2 <sup>31</sup> to 2 <sup>31</sup> -1	MiFID II short code, Client identification code.	New
ClOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS 0...10 <sup>16</sup> -1 TCS	Client Order ID	Numerical ID	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
OrderID	Int	Alphanumerical	Order ID	Numerical ID	From 0 to 2 <sup>64</sup> -1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
OrigClOrdID	Int	ClOrdID of the order to be modified / cancelled	Original Client Order ID	Numerical ID	From -2 <sup>63</sup> to 2 <sup>63</sup> -1	Client order ID of the original order.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
Side	Char	(see message structures) '0' = For Request for Size (r) messages only. '1' = Buy '2' = Sell	Order Side	Enumerated	1 = Buy 2 = Sell 3 = Cross [i]	Indicates the side of the order.	Modified

CCG Order Cancel Request (F)			Optiq Cancel Request (12)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
		'8' = Cross SP PM					
NA	NA	NA	Order Type	Enumerated	1 = Market 2 = Limit 3 = Stop-market or Stop-market-on-quote [C] 4 = Stop-limit or Stop-limit-on-quote [C] 5 = Primary Peg [C] 6 = Market to limit 7 = Market Peg (For Future Use, Pending Regulatory Approval) [C] 8 = Mid-Point Peg (For Future Use, Pending Regulatory Approval) [C] 9 = Average Price (For Future Use) [C] 10 = Iceberg [C]	Type of Order.	New
Header	Char	'F' Order Cancel Request	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
TechnicalOrdType	Char	'I' = Index trading arbitrage 'P' = Portfolio strategy 'G' = Unwind order 'A' = Other orders (default) 'C' = Cross margining	NA	NA	NA	NA	Removed
ClassID	String	Alphanumeric	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
CancelByLocationID	String	OnBehalfOfLocationID value	NA	NA	NA	NA	Removed
Rule80A	Char	'1' = Client '2' = House '3' = RLO RM '4' = RO RM '6' = Liquidity Provider RM PM NW '7' = Related Party '8' = Riskless Principal SP 'S' = SI Order RM	NA	NA	NA	NA	Removed
Filler	Char		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed



## 7.2.10 Mass Cancel Ack (14)

CCG Bulk Cancel Ack Report (K)			Optiq Mass Cancel Ack (14)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Modified
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
TransactTime	Int	Seconds since 01/01/1970 at 00:00 UTC; '-1' if not significant.	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	Modified
NA	NA	NA	OEG IN From Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway IN time from member (in ns), measured when inbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To ME	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	Book IN Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	Book OUT Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG IN From ME	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
ClOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS	Client Order ID	Numerical ID	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	An identifier of a message assigned by the Client when submitting an order	Modified

CCG Bulk Cancel Ack Report (K)			Optiq Mass Cancel Ack (14)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
		0...10 <sup>16</sup> -1 TCS				to the Exchange.	
TotalAffectedOrders	Int	'0'..'1010-1' ('-1' upon request acknowledgement)	Total Affected Orders	Numerical ID	From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1	Number of orders affected following a global request. It is set to -1 to indicate that the request is processed.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -1	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
ClassID	String	Alphanumeric	Instrument Group Code	Alphanumeric ID	(See field description)	Instrument Trading Group / Class Identifier.	Modified
Side	Char	(see message structures) '0' = For Request for Size (r) messages only. '1' = Buy '2' = Sell '8' = Cross SP PM	Order Side	Enumerated	1 = Buy 2 = Sell 3 = Cross [i]	Indicates the side of the order.	Modified
NA	NA	NA	Logical Access ID	Numerical ID	From 0 to 2 <sup>32</sup> -1	Identifier of the Logical Access.	New
CancelByLocationID	String	OnBehalfOfLocationID value	OE Partition ID	Numerical ID	From 0 to 2 <sup>16</sup> -1	Identifies uniquely an OE Optiq partition by which the engine is reached.	Modified
NA	NA	NA	Contract ID	Alphanumeric ID	From 0 to 2 <sup>32</sup> -1	[N/A] Identifier of a derivatives contract (Symbol Index).	New
NA	NA	NA	Maturity	Date	(See field description)	[N/A] Scope of active orders to be cancelled according the selected maturity, expressed in YYYYMMDD format.	New
Rule80A	Char	'1' = Client '2' = House '3' = RLO RM '4' = RO RM '6' = Liquidity Provider RM PM NW	Account Type	Enumerated	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product	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.	Modified

CCG Bulk Cancel Ack Report (K)			Optiq Mass Cancel Ack (14)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
		'7' = Related Party '8' = Riskless Principal SP 'S' = SI Order RM			Market Maker [C]		
NA	NA	NA	Option Type	Enumerated	1 = Call 2 = Put	[N/A] Type of the option.	New
Header	Char	'K' Bulk Cancel Ack Report	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
OrderID	Int	Alphanumerical	NA	NA	NA	NA	Removed
TechnicalOrdType	Char	'I' = Index trading arbitrage 'P' = Portfolio strategy 'G' = Unwind order 'A' = Other orders (default) 'C' = Cross margining	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
Filler	Char		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.11 Open Order Request (15)

CCG Order Status Request (H)			Optiq Open Order Request (15)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Client Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Modified
OnBehalfOfCompID	String	Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	ExecutionWithinFirmShortCode	Numerical ID	From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the	New

CCG Order Status Request (H)			Optiq Open Order Request (15)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						execution making.	
NA	NA	NA	ClientIdentificationShortCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Client identification code.	New
ClOrdID	Int	(see message structures) -2^63...2^63-1 TCS 0...10^16-1 TCS	Client Order ID	Numerical ID	From -2^63+1 to 2^63-1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
OrderID	Int	Alphanumeric	Order ID	Numerical ID	From 0 to 2^64-1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
NA	NA	NA	Original Client Order ID	Numerical ID	From -2^63 to 2^63-1	Client order ID of the original order.	New
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2^32-2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
Header	Char	'H' Order Status Request	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
Side	Char	(see message structures) '0' = For Request for Size (r) messages only. '1' = Buy '2' = Sell '8' = Cross SP PM	NA	NA	NA	NA	Removed
FilterOnGatewayID	String	Gateway ID	NA	NA	NA	NA	Removed
FilterOnLocationID	String	Firm's front-end server ID	NA	NA	NA	NA	Removed
Filler	String		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.12 Trade Bust – Cancellation Notification (19)

CCG Bust/Correct (C)			Optiq Trade Bust Notification (19)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Modified
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Book IN Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	Book OUT Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG IN From ME	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
NA	NA	NA	OEG OUT To Member	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -1	Order Entry Gateway OUT time to member (in ns), measured when outbound message leaves the gateway (Time in number of nanoseconds since 01/01/1970 UTC).	New
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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-	Defines the Exchange Market Mechanism applied on each platform.	New

CCG Bust/Correct (C)			Optiq Trade Bust Notification (19)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
					exchange trade reports 7 = Derivative On Exchange Off book [D] 8 = ETF MTF - NAV Central Order Book [C] 99 = Not Applicable (For indices and iNAV) [C]		
UTPEXID	Int	Numerical	Execution ID	Numerical ID	From 0 to 2 <sup>32</sup> -2	The Execution ID is unique per instrument et 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.	Modified
LastPx	Int	Price	Last Traded Price	Price	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with the Price/Index Decimals).	Modified
LastShares	Int	Quantity	Last Traded Quantity	Quantity	From 0 to 2 <sup>64</sup> -2	The Last Traded Quantity indicates the quantity of last fill on an instrument (to be calculated with the Quantity Decimals).	Modified
Header	Char	'C' Bust/Correct	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
CIOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS 0...10 <sup>16</sup> -1 TCS	NA	NA	NA	NA	Removed
TransactTime	Int	Seconds since 01/01/1970 at 00:00 UTC; '-1' if not significant.	NA	NA	NA	NA	Removed
LastPxScale	Char	'0'..'4'	NA	NA	NA	NA	Removed
TradeChangeType	Char	'1' = Trade busted '2' = Trade corrected	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
Filler	String		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.13 Price input (28)

CCG Price Input (I)			Optiq PriceInput (28)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Client Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Modified
OnBehalfOfCompID	String	Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2 <sup>64</sup> -2	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	ExecutionWithinFirmShortCode	Numerical ID	From -2 <sup>31</sup> +1 to 2 <sup>31</sup> -1	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	New
NA	NA	NA	ClientIdentificationShortCode	Numerical ID	From -2 <sup>31</sup> to 2 <sup>31</sup> -1	MiFID II short code, Client identification code.	New
ClOrdID	Int	(see message structures) -2 <sup>63</sup> ...2 <sup>63</sup> -1 TCS 0...10 <sup>16</sup> -1 TCS	Client Order ID	Numerical ID	From -2 <sup>63</sup> +1 to 2 <sup>63</sup> -1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
InputPxType	Char	'V' = Valuation trade 'A' = Alternative Indicative Price (AIP) 'R' = Reference Price	Input Price Type	Enumerated	1 = Valuation Price 2 = Alternative Indicative Price (AIP)	Type of input price.	Modified

CCG Price Input (I)			Optiq PriceInput (28)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
Price	Int	Price	Price	Price	From -2^63 to 2^63-1	Price per unit of quantity (to be calculated with the Price/Index Level Decimals).	Modified
Header	Char	'I' Price Input	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
PriceScale	Char	TCS '0'..'4' TCS '0'..'6'	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
Filler	String		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.14 Liquidity Provider Command (32)

CCG Liquidity Provider Command (Z)			Optiq Liquidity Provider Command (32)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Client Message Sequence Number	Sequence	From 0 to 2^32-2	The Client Message Sequence Number is mandatory for all inbound messages, but the consistency of the sequence is not checked by the Exchange.	Modified
OnBehalfOfCompID	String	Firm ID	Firm ID	Alphanumeric ID	(See field description)	Identifier of the member firm that sends the message.	Modified
NA	NA	NA	Message Sending Time	Epoch Time in Nanoseconds	From 0 to 2^64-2	Indicates the time of message transmission, the consistency of the time provided is not checked by the Exchange. (Time in number of nanoseconds since 01/01/1970 UTC)	New
NA	NA	NA	ExecutionWithinFirmShortCode	Numerical ID	From -2^31+1 to 2^31-1	MiFID II short code, Execution within firm, identifier of the trader or algorithm responsible for the execution making.	New
NA	NA	NA	ClientIdentificationShortCode	Numerical ID	From -2^31 to 2^31-1	MiFID II short code, Client identification code.	New
ClOrdID	Int	(see message structures) -2^63...2^63-1 TCS 0...10^16-1 TCS	Client Order ID	Numerical ID	From -2^63+1 to 2^63-1	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2^32-2	Exchange identification code of the	Modified



CCG Liquidity Provider Command (Z)			Optiq Liquidity Provider Command (32)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
LPActionCode	Char	'1' = Knock-In By Issuer (KIBI) '2' = Knock-Out By Issuer (KOBI) '3' = Payment After Knock-Out (PAKO)	LP Action Code	Enumerated	1 = Knock-In By Issuer (KIBI) 2 = Knock-Out By Issuer (KOBI) 3 = Payment After Knock-Out (PAKO) 4 = Bid Only 5 = Offer Only	Action the LP wants to apply on the specified instrument of warrant type.	Modified
Header	Char	'Z' Liquidity Provider Command	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

### 7.2.15 Ask for Quotes (33)

CCG Quote Request (L)			Optiq Ask For Quote (33)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	Indicates the Message Sequence Number per OE Session. (for	Modified

CCG Quote Request (L)			Optiq Ask For Quote (33)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
						messages sent by the Exchange)	
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2^32-2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
AFQReason	Char	'A' = Quote cancelled by the Liquidity Provider 'C' = Quote cancelled by Market Control 'M' = No quote M minutes before an auction 'S' = No quote S seconds before an auction 'X' = Quote completely matched	AFQ Reason	Enumerated	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	Reason why the AFQ (33) has been sent.	Modified
Header	Char	'L' Quote Request	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 7.2.16 Request For Execution (34)

CCG Request For Execution (M)			Optiq Request For Execution (34)				Changes Summary
Field	Format	Values	SBE Field	Format	Values	Description	Action
MsgSeqNum	Int	Sequential.	Message Sequence Number	Sequence	From 0 to 2 <sup>32</sup> -2	Indicates the Message Sequence Number per OE Session. (for messages sent by the Exchange)	Modified
DeliverToCompID	String	(see message structures) Input messages: ignored Output messages: Firm ID	Firm ID	Alphanumerical ID	(See field description)	Identifier of the member firm that sends the message.	Modified
Symbol	String	ISIN or ISIN-like	Symbol Index	Numerical ID	From 0 to 2 <sup>32</sup> -2	Exchange identification code of the instrument.	Modified
NA	NA	NA	EMM	Enumerated	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
Header	Char	'M' Request for Execution	NA	NA	NA	NA	Removed
ProtocolVersion	Char	'4' = Extended protocol with TCS support	NA	NA	NA	NA	Removed
MsgLen	Int	0..216-1	NA	NA	NA	NA	Removed
MIC	String	ISO 10383 standard	NA	NA	NA	NA	Removed
Currency	String	ISO 4217 standard	NA	NA	NA	NA	Removed
Filler	Char		NA	NA	NA	NA	Removed
ETX	Char		NA	NA	NA	NA	Removed

## 8. FIX PROTOCOL (FIX 5.0): FIELD MAPPING

The tables below provide message by message detailed mapping of UTP FIX 4.2 fields to the messages in Optiq for FIX 5.0.

### General Notes

#### Conventions and display :

In the following tables the changes are presented as described below :

CCG Message Header				Optiq Header					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action

The type of change is indicated in the 'Action' column, and may indicated values represent the following:

- New: New field added in the messages
- Modified : The tag is kept but the field is modified, either in terms of format or values or name.
- Removed : The field is removed.
- [blank]: If no changes impact the tag with Optiq no action is indicated in the Action column

#### Field Length:

Clients migrating from existing 4.2 Cash implementation of FIX protocol, should note that length of fields in most cases have been aligned to fit with the length identified for the Optiq SBE protocol and are covered in the FIX protocol specifications. Cases where fields increased in length should not carry a large impact for clients. In some cases, however, these changes in length mean that fields have reduced in length, and should be closely reviewed for compliance, as sending of larger values would result in rejection of messages.

#### Values:

- In an effort to harmonize protocols between the Cash and Derivatives markets, values of certain fields are combined
- Some fields are enriched with new, additional values for compliance with MIFID II and Optiq specific requirements

- In order to guarantee consistency between messages in SBE and FIX protocols values in some fields are restricted to a specific sub-set out of the overall scope allowed for by the FIX protocol. This should ensure that clients submitting data in one format (e.g. in SBE for order entry) and consuming it in another (e.g. FIX for Drop Copy) would continue to receive consistent data.

#### Technical Timestamps:

Technical timestamps provided in Optiq are the same in both FIX and SBE protocols. Client may refer to the dedicated section and messages structure providing for the full description and details.

## 8.1 ADMINISTRATION MESSAGES & HEADER

### 8.1.1 Header

CCG Message Header				Optiq Header					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
8	BeginString	String	Cf. FIX 4.2.	8	BeginString	String	FIXT.1.1 (Always unencrypted, must be first field in message)	Beginning of message identifier.	Modified
9	BodyLength	Int	Integer	9	BodyLength	Length	Integer	Message length including header, body and trailer.	Modified
35	MsgType	String	Administrative messages: 'A', '0', '1', '2', '3', '4', '5' Inbound application messages: 'D', 'F', 'G', 'H', 'q', 'UB', 'UI', 'UO', 'UD', 'UT', 'UF', 'Ur' Outbound application messages: '8', '9', 'h', 'j', 'r', 'U3', 'UL', 'UM', 'UN', 'UP', 'Uy', 'Up', 'Ua', 'U8', 'Ut', 'Uj', 'Us'	35	MsgType	String	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 = MassQuoteAcknowledgement i = MassQuote q = OrderMassCancelRequest r = OrderMassCancelReport AF =	Message type.	Modified

CCG Message Header				Optiq Header					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							OrderMassStatusRequest AG = QuoteRequestReject CB = UserNotification U18 = OwnershipRequest U29 = OwnershipRequestAck U35 = RFQNotification U36 = RFQMatchingStatus UI = PriceInput UM = RequestForExecution UL = AskForQuote UZ = LiquidityProviderCommand Uy = RequestAckMessage		
34	MsgSeqNum	Int	Sequential integer.	34	MsgSeqNum	SeqNum	From 0 to 2^32-1	The MsgSeqNum is mandatory for all inbound messages.	Modified
49	SenderCompID	String	Inbound: Firm ID Outbound: 'EURONEXT'	49	SenderCompID	String	Inbound: Firm ID Outbound: Exchange ID	Identifier of the member firm that sends the message.	Modified
56	TargetCompID	String	(see message structures) Inbound: 'EURONEXT' Outbound: Firm ID	56	TargetCompID	String	Inbound: Exchange ID Outbound: Firm ID	Message receptor ID.	Modified
115	OnBehalfOfCompID	String	Firm ID	115	OnBehalfOfCompID	String	Inbound: Firm ID Outbound: Not used	ID of the issuing firm when the message is sent through a third party.	Modified
128	DeliverToCompID	String	Firm ID	128	DeliverToCompID	String	Inbound: Not used Outbound: Firm ID	ID of the receiving firm when the message is sent through a third party.	Modified
43	PossDupFlag	Bool	'N' Original transmission (default) 'Y' Possible duplicate	43	PossDupFlag	Boolean	N = Original transmission (default) Y = Possible duplicate	Identifies if a message is being retransmitted or not.	Modified
97	PossResend	Bool	'N' Original transmission 'Y' Possible resend	97	PossResend	Boolean	N = Original transmission Y = Possible resend	Indicates if the message contains information that was already sent under a different sequence number.	Modified
52	SendingTime	TmSt	YYYYMMDD-hh:mm:ss	52	SendingTime	UTCTimestamp	YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	Modified
NA	NA	NA	NA	122	OrigSendingTime	UTCTimestamp	YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Original time (in ns) of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New

CCG Message Header				Optiq Header					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
142	SenderLocationID	String	Front-end server ID (agreed with Exchange)	NA	NA	NA	NA	NA	Removed

### 8.1.2 Logon (A)

CCG Logon (A)				Optiq Logon (A)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
108	HeartBtInt	Int	Numerical	108	HeartBtInt	Int	Numerical	Heartbeat interval (in seconds).	Modified
NA	NA	NA	NA	98	EncryptMethod	Int	Always set to 0 (No encryption)	Method of encryption for the new FIX session	New
NA	NA	NA	NA	21019	OEPartitionID	Int	From 0 to 2 <sup>16</sup> -1	Identifies uniquely an OE Optiq partition by which the engine is reached.	New
NA	NA	NA	NA	21021	LogicalAccessID	Int	From 0 to 2 <sup>32</sup> -1	Identifier of the Logical Access.	New
789	NextExpectedMsgSeqNum	Int	Integer	789	NextExpectedMsgSeqNum	SeqNum	Integer	Indicates the sequence number plus one (+1) of the last message received by the Client from the Exchange on the OE Session.	Modified
NA	NA	NA	NA	21020	QueueingIndicator	Int	0 = False 1 = True	Indicates whether the client requests its orders to be queued or rejected in case of throttling. (0: False - Reject ; 1: True - Queue).	New
NA	NA	NA	NA	1137	DefaultAppVerID	String	9 = FIX50SP2	Specifies the service pack release being applied, by default, to the message at the session level	New
NA	NA	NA	NA	21050	SoftwareProvider	String	Free text field	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.	New
98	EncryptMethod	Int	'0' None/other	NA	NA	NA	NA	NA	Removed
141	ResetSeqNumFlag	Bool	'N' No reset (default)	NA	NA	NA	NA	NA	Removed

CCG Logon (A)				Optiq Logon (A)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
			'Y' Reset sequence numbers						

### 8.1.3 ResendRequest (2)

CCG Resend Request (2)				Optiq Resend Request (2)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
7	BeginSeqNo	Int	Integer	7	BeginSeqNo	SeqNum	From 1 to 2^32-2	Message sequence number for first message.	Modified
16	EndSeqNo	Int	Integer	16	EndSeqNo	SeqNum	From 0 to 2^32-2	Message sequence number for last message	Modified

### 8.1.4 Reject (3)

CCG Reject (3)				Optiq Reject (3)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
45	RefSeqNum	Int	Integer	45	RefSeqNum	SeqNum	Positive Integer. From 1 to 9 999 999 998.	Reference sequence number of the rejected message.	Modified
371	RefTagID	Int	Integer	371	RefTagID	Int	Integer	The tag number of the FIX field being referenced.	
372	RefMsgType	String	Value received in the rejected inbound message, if any.	372	RefMsgType	String	Value received in the rejected inbound message, if any	The MsgType (35) of the FIX message being referenced.	
373	SessionRejectReason	Int	(See field description)	373	SessionRejectReason	Int	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	Session reject reason code.	Modified



CCG Reject (3)				Optiq Reject (3)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							8 = Signature problem 9 = ComplID problem 10 = SendingTime Accuracy 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(36) too low 99 = Other		
58	Text	String	Alphanumeric	NA	NA	NA	NA	NA	Removed

### 8.1.5 SequenceRequest (4)

CCG Sequence Reset (4)				Optiq Sequence Reset (4)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
36	NewSeqNo	Int	Integer	36	NewSeqNo	SeqNum	From 1 to 2^32-2	New sequence number.	Modified
123	GapFillFlag	Bool	'N' Sequence reset, ignore MsgSeqNum 'Y' Gap fill message, MsgSeqNum field valid	123	GapFillFlag	Boolean	N = Sequence reset Y = Gap fill message	Purpose of sequence reset.	

### 8.1.6 Logout (5)

CCG Logout (5)				Optiq Logout (5)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	1409	SessionStatus	Int	4 = Session logout complete 5 = Invalid username or password	Provides the code associated to the reason for the logout.	New

CCG Logout (5)				Optiq Logout (5)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							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		
58	Text	String	Alphanumeric	NA	NA	NA	NA	NA	Removed

## 8.2 APPLICATION MESSAGES

### 8.2.1 NewOrderSingle (D)

CCG New Order Single (D)				Optiq New Order Single (D)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
60	TransactTime	TmSt	YYYYMMDD-hh:mm:ss	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	Modified
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	Exchange identification code of the instrument, represented by SecurityID. This identifier is unique per triplet: MIC, ISIN and currency. The	Modified

CCG New Order Single (D)				Optiq New Order Single (D)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								correspondence between the SecurityID and the instrument characteristics is provided in the standing data messages and associated files.	
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
44	Price	Price	Price	44	Price	Price	From -2^63 to 2^63-1	Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).	Modified
38	OrderQty	Qty	Quantity	38	OrderQty	Qty	From 0 to 2^64-1	Total order quantity, per quantity unit (to be calculated with Quantity Decimals).	Modified
40	OrdType	Char	(See field description)	40	OrdType	Char	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]	Type of Order.	Modified

CCG New Order Single (D)				Optiq New Order Single (D)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							T = Average Price (For Future Use) [C] X = Iceberg [C]		
59	TimeInForce	Char	(See field description)	59	TimeInForce	Char	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]	Specifies the maximum validity of an order.	Modified
336	TradingSessionID	String	(See field description)	336	TradingSessionID	String	101 = Session 1 102 = Session 2 103 = Session 3 123 = All Sessions	Trading session validity.	Modified
NA	NA	NA	NA	29	LastCapacity	Char	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	New
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New

CCG New Order Single (D)				Optiq New Order Single (D)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
10077	STPIndicator	Int	'0' or null – STP Deactivated '1' – STP Activated Other values are rejected.	21015	STPAggressorIndicator	Int	0 = Cancel resting order [C] 1 = Cancel incoming order [C] 9 = Disable STP [C]	Field used as instruction for order handling.	Modified
NA	NA	NA	NA	21016	DisclosedQtyRandIndicator	Int	0 = No 1 = Yes	Indicates whether the client requests or not a randomization for the disclosed quantity of his iceberg order.	New
NA	NA	NA	NA	21018	CancelOnDisconnectionIndicator	Int	0 = Per Default Configuration 1 = Order not in the scope of Cancel On Disconnect	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)	New
NA	NA	NA	NA	1094	PegPriceType	Int	2 = Mid-price peg (midprice of inside quote) (For Future Use, Pending Regulatory Approval) [C] 4 = Market peg (For Future Use, Pending Regulatory Approval) [C] 5 = Primary peg (primary market - buy at bid or sell at offer) [C]	Defines the type of the peg order.	New
211	PegDifference	PrOff	'0'	211	PegOffsetValue	Int	From -128 to 127	Tick offset for a pegged order. (For Future Use)	Modified
NA	NA	NA	NA	20052	DarkExecutionInstruction	MultipleCharValue	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type	Field used as instruction for dark order handling (For Future Use, Pending Regulatory Approval). This field can contain up to 8 values, space delimited, provided in different positions.	New

CCG New Order Single (D)				Optiq New Order Single (D)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							5 = Future Dark Use 1 6 = Future Dark Use 2 7 = Future Dark Use 3		
NA	NA	NA	NA	1724	OrderOrigination	Int	5 = Order received from a direct access or sponsored access customer	Identifies the origin of the order.	New
NA	NA	NA	NA	2593	NoOrderAttributes	NumInGroup	From 0 to 2	Number of order attribute entries.	New
NA	NA	NA	NA	2594	OrderAttributeType	Int	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	The type of order attribute.	New
NA	NA	NA	NA	2595	OrderAttributeValue	String	Y = Yes	The value associated with the order attribute type specified in OrderAttributeType (2594).	New
NA	NA	NA	NA	2362	SelfMatchPreventionID	String	From 0 to 2^16-1	For Future Use.	New
99	StopPx	Price	Price	99	StopPx	Price	From -2^63 to 2^63-1	Stop Trigger Price is mandatory for stop orders.	Modified
NA	NA	NA	NA	20004	UndisclosedPrice	Price	From -2^63 to 2^63-1	Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)	New
111	MaxFloor	Qty	Quantity (ignored if '0')	1138	DisplayQty	Qty	From 0 to 2^64-1	Maximum number of quantity units to be shown to market participants (Iceberg Order).	Modified
110	MinQty	Qty	Quantity	110	MinQty	Qty	Value '0' by default and depending to a minimum value for the given instrument and/or market type	Minimum quantity to be executed upon order entry (else the order is rejected).	Modified
126	ExpireTime	TmSt	YYYYMMDD-hh:mm:ss	126	ExpireTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999	Field used as time of order expiration for GTT orders (Format: YYYYMMDD-HH:MM:SS.ssssssss).	Modified

CCG New Order Single (D)				Optiq New Order Single (D)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							(nanoseconds)		
432	ExpireDate	Date	YYYYMMDD	432	ExpireDate	LocalMktDate	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31	Field used as date of order expiration (last day the order can trade) for GTD orders(Format: YYYYMMDD).	Modified
NA	NA	NA	NA	20005	UndisclosedIcebergType	Int	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Order handling related to the undisclosed part of an iceberg order eligible to a matching in the Dark pool of liquidity. (For Future Use, Pending Regulatory Approval)	New
NA	NA	NA	NA	20175	TriggeredStopTimeInForce	Char	0 = Day 1 = Good Till Cancel 6 = Good till Date	Specifies the maximum validity of an triggered stop order.	New
NA	NA	NA	NA	131	QuoteReqID	String	From 0 to 2^64-1	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM. (For Future Use)	New
NA	NA	NA	NA	21037	RFQAnswerIndicator	Int	0 = No 1 = Yes	Indicates whether the message is, or not, a quote sent as an answer to a QuoteRequest (R) message. (For Future Use)	New
NA	NA	NA	NA	21038	RFQConfirmationIndicator	Int	0 = No 1 = Yes	Indicates whether the message is, or not, an order sent as a confirmation of a QuoteRequest (R) message. (For Future Use)	New
NA	NA	NA	NA	552	NoSides	NumInGroup	From 1 to 2	Number of sides.	New
54	Side	Char	'1' Buy '2' Sell '8' Cross SP PM	54	Side	Char	1 = Buy 2 = Sell	Indicates the side of the order.	Modified
9938	ClearingHandlingType	Char	(blank) Systematic posting '0' Manual mode '1' Automatic extraction '2' Automatic allocation	577	ClearingInstruction	Int	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]	Clearing Instruction.	Modified

CCG New Order Single (D)				Optiq New Order Single (D)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							4009 = Manual and account authorization [D] 4010 = Give-up to single firm [D]		
9952	FreeText	String	Alphanumerical	58	Text	String	Alphanumeric	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Modified
1	Account	String	Alphanumerical	1	Account	String	Alphanumeric	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Modified
47	Rule80A	Char	(See field description)	6399	AccountCode	Int	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	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.	Modified
NA	NA	NA	NA	20021	LPRole	Int	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	New
9941	TechnicalOrdType	Char	(See field description)	9941	TechnicalOrdType	Char	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	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.	Modified
77	OpenClose	Char	'O' Open 'C' Close	7443	PostingAction	MultipleCharValue	0 = Field Actively Used 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]	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	Modified



CCG New Order Single (D)				Optiq New Order Single (D)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	582	CustOrderCapacity	Int	1 = For own account 2 = For clearing members house account 3 = For account of another member present 4 = For any other customer account	Type of customer trading	New
NA	NA	NA	NA	539	NoNestedPartyIDs	NumInGroup	From 0 to 5	Number of NestedPartyID entries.	New
NA	NA	NA	NA	524	NestedPartyID	String	Alphanumeric	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).	New
NA	NA	NA	NA	525	NestedPartyIDSource	Char	D = Proprietary / Custom code P = Short code identifier	Source of NestedPartyID value.	New
NA	NA	NA	NA	538	NestedPartyRole	Int	3 = Client ID 4 = Clearing Firm 26 = Correspondent Broker 122 = Investment decision maker	Identifies the type or role of the NestedPartyID (524) specified.	New
NA	NA	NA	NA	2384	NestedPartyRoleQualifier	Int	3 = General clearing member 4 = Individual clearing member 22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of NestedPartyRole(538).	New
18	ExecInst	Char	(See field description)	NA	NA	NA	NA	NA	Removed
9930	ConfirmFlag	Char	'0' Not confirmed (default) '1' Confirmed	NA	NA	NA	NA	NA	Removed
9949	MIC	String	ISO 10383 standard	NA	NA	NA	NA	NA	Removed
15	Currency	String	ISO 4217 standard	NA	NA	NA	NA	NA	Removed
9933	NoClearingEntries	Int	'1' or '2'	NA	NA	NA	NA	NA	Removed
109	ClientID	String	Alphanumerical	NA	NA	NA	NA	NA	Removed
439	ClearingFirm	String	Firm ID (agreed upon clearing value)	NA	NA	NA	NA	NA	Removed
386	NoTradingSessions	Int	'1'..'3'	NA	NA	NA	NA	NA	Removed

## 8.2.2 ExecutionReport (8)

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
60	TransactTime	TmSt	YYYYMMDD-hh:mm:ss	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	Modified
NA	NA	NA	NA	21005	ClientMessageSendingTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	5979	OEGINFromMember	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7764	OEGOUTtoME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21002	BookINTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21003	BookOUTTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7765	OEGINFromME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss =	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format:	New

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							000000000-999999999 (nanoseconds)	YYMMDD-HH:MM:SS.ssssssss).	
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
41	OrigClOrdID	String	ClOrdID of the order to be modified / cancelled	41	OrigClOrdID	String	From -2^63 to 2^63-1	Client order ID of the original order.	Modified
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
37	OrderID	String	Alphanumeric	37	OrderID	String	From 0 to 2^64-2	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
39	OrdStatus	Char	(See field description)	39	OrdStatus	Char	0 = New 1 = Partially filled 2 = Filled 3 = Done for Day 4 = Cancelled 5 = Replaced	Order status.	Modified

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							8 = Rejected C = Expired F = Trade H = Cancel Trade I = Order Status M = RFQ expired [C] N = RFQ partially or fully matched with other counterparts [C] O = RFQ cancelled by the issuer [C] P = RFQ Not matched due to issuer order's features [C] Q = VFA VFC Triggered Ack [C] R = OrderMassStatusRequest Ack [C] S = Stop Triggered Ack [C] T = MTL Second Ack [C] Z = Message Rejected		
NA	NA	NA	NA	21004	OrderPriority	Int	From 0 to 2^64-1	Rank giving the priority of the order. The order with the lowest value of OrderPriority has the highest priority.	New
NA	NA	NA	NA	20052	DarkExecutionInstruction	MultipleCharValue	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Future Dark Use 1 6 = Future Dark Use 2 7 = Future Dark Use 3	Field used as instruction for dark order handling (For Future Use, Pending Regulatory Approval). This field can contain up to 8 values, space delimited, provided in different positions.	New
44	Price	Price	Price	44	Price	Price	From -2^63 to 2^63-1	Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).	Modified
38	OrderQty	Qty	Quantity	38	OrderQty	Qty	From 0 to 2^64-1	Total order quantity, per quantity unit (to be calculated with Quantity Decimals).	Modified
31	LastPx	Price	Price	31	LastPx	Price	From -2^63+1 to 2^63-1	The Last Traded Price indicates the price of last fill on an instrument (to be calculated with Price/Index Level Decimals).	Modified
32	LastShares	Qty	Quantity	32	LastQty	Qty	From 0 to 2^64-1	The LastQty indicates the quantity of the last fill on an	Modified

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								instrument (to be calculated with Quantity Decimals).	
151	LeavesQty	Qty	Quantity	151	LeavesQty	Qty	From 0 to 2^64-1	Indicates the remaining quantity of an order, i.e. the quantity open for further execution (to be calculated with Quantity Decimals).	Modified
17	ExecID	String	Sequential	17	ExecID	String	From 0 to 2^32-1	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.	Modified
150	ExecType	Char	(See field description)	150	ExecType	Char	0 = New 1 = Partially filled 2 = Filled 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] l = OrderMassStatusRequest Ack [C] C = Expired F = Trade G = Trade Creation by Market Operation H = Cancel Trade I = Order Status L = Triggered or Activated by	Describes the specific ExecutionReport while OrdStatus (39) will always identify the current order status (e.g. Partially Filled).	Modified

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							System O = Eliminated by corporate event P = Cancelled by Member Risk Manager (For Future Use) Q = RFQ expired (For Future Use) [C] R = RFQ partially or fully matched with other counterparts (For Future Use) [C] S = RFQ cancelled by the issuer (For Future Use) [C] T = RFQ Not matched due to issuer order's features (For Future Use) [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		
99	StopPx	Price	Price	99	StopPx	Price	From -2^63 to 2^63-1	Stop Trigger Price is mandatory for stop orders.	Modified
NA	NA	NA	NA	20004	UndisclosedPrice	Price	From -2^63 to 2^63-1	Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)	New
111	MaxFloor	Qty	Quantity (ignored if '0')	1138	DisplayQty	Qty	From 0 to 2^64-1	Maximum number of quantity units to be shown to market participants (Iceberg Order).	Modified
NA	NA	NA	NA	20005	UndisclosedIcebergType	Int	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity. (For Future Use, Pending Regulatory Approval)	New
NA	NA	NA	NA	20175	TriggeredStopTimeInForce	Char	0 = Day 1 = Good Till Cancel	Specifies the maximum validity of an triggered stop	New

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							6 = Good till Date	order.	
NA	NA	NA	NA	131	QuoteReqID	String	From 0 to 2 <sup>64</sup> -1	Numerical RFQ identifier assigned by the matching engine, unique per instrument and EMM. (For Future Use)	New
NA	NA	NA	NA	21037	RFQAnswerIndicator	Int	0 = No 1 = Yes	Indicates whether the message is, or not, a quote sent as an answer to a QuoteRequest (R) message. (For Future Use)	New
NA	NA	NA	NA	21038	RFQConfirmationIndicator	Int	0 = No 1 = Yes	Indicates whether the message is, or not, an order sent as a confirmation of a QuoteRequest (R) message. (For Future Use)	New
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New
NA	NA	NA	NA	1724	OrderOrigination	Int	5 = Order received from a direct access or sponsored access customer	Identifies the origin of the order.	New
NA	NA	NA	NA	2593	NoOrderAttributes	NumInGroup	From 0 to 2	Number of order attribute entries.	New
NA	NA	NA	NA	2594	OrderAttributeType	Int	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	The type of order attribute.	New
NA	NA	NA	NA	2595	OrderAttributeValue	String	Y = Yes	The value associated with the order attribute type specified in OrderAttributeType (2594).	New
NA	NA	NA	NA	29	LastCapacity	Char	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	New

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	110	MinQty	Qty	Value '0' by default and depending to a minimum value for the given instrument and/or market type	Minimum quantity to be executed upon order entry (else the order is rejected).	New
NA	NA	NA	NA	21013	AckPhase	Char	1 = Continuous Trading Phase 2 = Call Phase 3 = Halt Phase [C] 4 = Closed Phase 5 = Trading At Last Phase 6 = Reserved 7 = Suspended	Indicates the trading phase during which the Matching Engine has processed the event that has triggered this ExecutionReport (8) message.	New
NA	NA	NA	NA	21014	AckQualifiers	MultipleCharValue	0 = Dark Indicator (For Future Use) 1 = Queue Indicator 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 7 = Future Ack Use 6	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.	New
NA	NA	NA	NA	21010	TradeType	Int	1 = Conventional Trade (Cash and Derivatives) 2 = Large in Scale (LiS) Trade (Derivatives Only) 3 = Basis Trade (Derivatives Only) 4 = Large in Scale (LiS) Package Trade (Derivatives Only) 5 = Guaranteed Cross Trade (Cash and Derivatives) 6 = Against Actual Trade (Derivatives Only) 7 = Asset Allocation Trade (Derivatives Only) 9 = Exchange for Swap Trade (Derivatives Only) 10 = Exchange for Physical Trade - Cash Leg (Cash Only) 11 = Strategy Leg Conventional Trade (Derivatives Only) 12 = Strategy Leg Large in Scale (LiS) Trade (Derivatives Only) 13 = Strategy Leg Basis Trade (Derivatives Only)	Type of trade.	New



CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							14 = Strategy Leg Guaranteed Cross Trade (Derivatives Only) 15 = Strategy Leg Against Actual Trade (Derivatives Only) 16 = Strategy Leg Asset Allocation Trade (Derivatives Only) 18 = Strategy Leg Exchange For Swap Trade (Derivatives Only) 19 = Strategy Leg Exchange For Physical Trade (Derivatives Only) 20 = BoB Trade (Cash Only) 21 = SI Trade (Cash Only) 22 = AtomX Trade (Derivatives Only) 24 = Trade Cancellation (Cash and Derivatives) 25 = Out of Market Trade (Cash Only) 26 = Delta Neutral Trade - Underlying Cash Leg (Cash Only) 27 = Market VWAP Operation Trade (Cash Only) 28 = Euronext Fund Service Trade (Cash Only) 29 = Secondary Listing Trade (Cash Only) 30 = Request for Cross Trade (Derivatives Only) 31 = Request for cross strategy Leg Trade (Derivatives Only) 32 = Trade Publication (Cash Only) 33 = Dark Trade (Cash Only) - For future use 34 = Delta Neutral Trade - Underlying Future Leg (Derivatives Only) 36 = Total Traded Volume (For future use) 37 = ETF-MTF NAV Trade (price in basis points) (Cash Only) - For future use 38 = ETF-MTF NAV Dark Trade (price in basis points) (Cash		

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							Only) - For future use		
NA	NA	NA	NA	21023	ExecPhase	Char	1 = Continuous Trading Phase 2 = Uncrossing Phase 3 = Trading At Last Phase 4 = Continuous Uncrossing Phase	Indicates the trading phase during which the trade has occurred.	New
NA	NA	NA	NA	21080	TradeQualifier	MultipleCharValue	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]	Trade Qualifier. This field can contain up to 7 values, space delimited, provided in different positions.	New
375	ContraBroker	String	Firm ID	375	ContraBroker	String	From 0 to 2^64-2	ID of the Counterpart Firm in specific cases.	Modified
NA	NA	NA	NA	651	UnderlyingLastPx	Price	From -2^63 to 2^63-1	For Basis and Against Actual trades only: underlying cash leg price (to be calculated with Price/Index Level Decimals).	New
NA	NA	NA	NA	5883	PackageID	String	Alphanumeric	ID used to link several Large in Scale (LiS) Package trades together.	New
NA	NA	NA	NA	21019	OEPartitionID	Int	From 0 to 2^16-1	Identifies uniquely an OE Optiq partition by which the engine is reached.	New
NA	NA	NA	NA	21021	LogicalAccessID	Int	From 0 to 2^32-1	Identifier of the Logical Access.	New
NA	NA	NA	NA	7773	OtherLegSecurityID	Int	From 0 to 2^32-1	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.	New
NA	NA	NA	NA	555	NoLegs	NumInGroup	From 0 to 9	Number of legs for the requested strategy.	New
NA	NA	NA	NA	603	LegSecurityIDSource	String	8 = Symbol Index	Gives the type of LegSecurityID.	New
NA	NA	NA	NA	602	LegSecurityID	String	From 0 to 2^32-1	Numerical leg instrument identifier (SecurityID) valid for	New

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								the life of the instrument.	
NA	NA	NA	NA	637	LegLastPx	Price	From -2^63 to 2^63-1	Leg last traded price (to be calculated with Price/Index Level Decimals).	New
NA	NA	NA	NA	1418	LegLastQty	Qty	For derivatives markets only	Leg last traded quantity (to be calculated with Quantity Decimals).	New
NA	NA	NA	NA	624	LegSide	Char	1 = Buy 2 = Sell	Indicates the side of the trade leg.	New
19	ExecRefID	String	Alphanumerical	19	ExecRefID	String	Sequential number. From 0 to 2^32-2	The ExecRefID is an unique identifier of a trade per instrument. This field is provided in case of trade cancellation.	Modified
432	ExpireDate	Date	YYYYMMDD	432	ExpireDate	LocalMktDate	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31	Field used as date of order expiration (last day the order can trade) for GTD orders(Format: YYYYMMDD).	Modified
14	CumQty	Qty	Quantity	14	CumQty	Qty	From 0 to 2^64-2	Cumulated quantity (to be calculated with Quantity Decimals).	Modified
336	TradingSessionID	String	(See field description)	336	TradingSessionID	String	101 = Session 1 102 = Session 2 103 = Session 3 123 = All Sessions	Trading session validity.	Modified
40	OrdType	Char	(See field description)	40	OrdType	Char	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 (For Future Use) [C] X = Iceberg [C]	Type of Order.	Modified
59	TimeInForce	Char	(See field description)	59	TimeInForce	Char	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]	Specifies the maximum validity of an order.	Modified

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							S = Valid for Session [D]		
NA	NA	NA	NA	8011	QtyDelta	Int	Positive in the OrderQty has increased, negative if it has decreased	Change in OrderQty as a result of an OrderCancelReplaceRequest (G).	New
NA	NA	NA	NA	528	OrderCapacity	Char	1 = Initiator 2 = Reactor 3 = Undefined	Designates the capacity of the firm placing the order.	New
NA	NA	NA	NA	552	NoSides	NumInGroup	From 1 to 2	Number of sides.	New
54	Side	Char	'1' Buy '2' Sell	54	Side	Char	1 = Buy 2 = Sell	Indicates the side of the order.	Modified
9938	ClearingHandlingType	Char	(blank) Systematic posting '0' Manual mode '1' Automatic extraction '2' Automatic allocation	577	ClearingInstruction	Int	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]	Clearing Instruction.	Modified
9952	FreeText	String	Alphanumerical	58	Text	String	Alphanumeric	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Modified
1	Account	String	Alphanumerical	1	Account	String	Alphanumeric	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Modified
47	Rule80A	Char	(See field description)	6399	AccountCode	Int	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	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.	Modified
NA	NA	NA	NA	20021	LPRole	Int	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	New
994	TechnicalOrdType	Char	(See field description)	9941	TechnicalOrdType	Char	1 = Index trading arbitrage	Indicates the origin of the	Modified

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
1							2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	
77	OpenClose	Char	'O' Open 'C' Close	7443	PostingAction	MultipleCharValue	0 = Field Actively Used 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]	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	Modified
NA	NA	NA	NA	582	CustOrderCapacity	Int	1 = For own account 2 = For clearing members house account 3 = For account of another member present 4 = For any other customer account	Type of customer trading	New
NA	NA	NA	NA	539	NoNestedPartyIDs	NumInGroup	From 0 to 5	Number of NestedPartyID entries.	New
NA	NA	NA	NA	524	NestedPartyID	String	Alphanumeric	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).	New
NA	NA	NA	NA	525	NestedPartyIDSource	Char	D = Proprietary / Custom code P = Short code identifier	Source of NestedPartyID value.	New
NA	NA	NA	NA	538	NestedPartyRole	Int	3 = Client ID 4 = Clearing Firm 26 = Correspondent Broker 122 = Investment decision maker	Identifies the type or role of the NestedPartyID (524) specified.	New
NA	NA	NA	NA	2384	NestedPartyRoleQualifier	Int	3 = General clearing member 4 = Individual clearing member 22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of NestedPartyRole(538).	New
NA	NA	NA	NA	7489	OtherLegSecurityIDSource	Char	8 = Symbol Index	Defines the value of the field OtherLegSecurityID.	New
NA	NA	NA	NA	7774	OtherLegReferenceNo	String	Free text	Free text providing an identifying reference for the cash leg.	New

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
126	ExpireTime	TmSt	YYYYMMDD-hh:mm:ss	126	ExpireTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 00000000-999999999 (nanoseconds)	Field used as time of order expiration for GTT orders (Format: YYYYMMDD-HH:MM:SS.ssssssss).	Modified
NA	NA	NA	NA	21015	STPAggressorIndicator	Int	0 = Cancel resting order [C] 1 = Cancel incoming order [C] 9 = Disable STP [C]	Field used as instruction for order handling.	New
NA	NA	NA	NA	2362	SelfMatchPreventionID	String	From 0 to 2^16-1	For Future Use.	New
NA	NA	NA	NA	21016	DisclosedQtyRandIndicator	Int	0 = No 1 = Yes	Indicates whether the client requests or not a randomization for the disclosed quantity of his iceberg order.	New
NA	NA	NA	NA	21018	CancelOnDisconnectIndicator	Int	0 = Per Default Configuration 1 = Order not in the scope of Cancel On Disconnect	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)	New
NA	NA	NA	NA	1094	PegPriceType	Int	2 = Mid-price peg (midprice of inside quote) (For Future Use, Pending Regulatory Approval) [C] 4 = Market peg (For Future Use, Pending Regulatory Approval) [C] 5 = Primary peg (primary market - buy at bid or sell at offer) [C]	Defines the type of the peg order.	New
211	PegDifference	PrOff	'0'	211	PegOffsetValue	Int	From -128 to 127	Tick offset for a pegged order. (For Future Use)	Modified
NA	NA	NA	NA	21040	IDCCP	Char	1 = LCH.Clearnet SA 2 = EuroCCP 3 = LCH Ltd. 4 = X-Clear	Clearing House code attached to a firm.	New
9955	ErrorCode	Int	Numerical	9955	ErrorCode	Int	From 0 to 2^16-1	Error code in case of rejection.	Modified
9962	CollarRejType	Char	'L' Low collar 'H' High collar	9962	CollarRejType	Char	1 = Low dynamic collar 2 = High dynamic collar	Hit collar type (high or low) in case of order rejection due to	Modified

CCG Execution Report (8)				Optiq Execution Report (8)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								collar breach.	
9963	CollarRejPx	Price	Price	21001	BreachedCollarPrice	Price	From -2^63 to 2^63-1	Breached collar price in case of collar rejection (to be calculated with Price/Index Level Decimals).	Modified
20	ExecTransType	Char	(See field description)	NA	NA	NA	NA	NA	Removed
103	OrdRejReason	Int	(See field description)	NA	NA	NA	NA	NA	Removed
6	AvgPx	Price	Price	NA	NA	NA	NA	NA	Removed
18	ExecInst	Char	(See field description)	NA	NA	NA	NA	NA	Removed
109	ClientID	String	Alphanumerical	NA	NA	NA	NA	NA	Removed
439	ClearingFirm	String	Firm ID (agreed upon clearing value)	NA	NA	NA	NA	NA	Removed
9731	UTPEXID	Int	Numerical	NA	NA	NA	NA	NA	Removed
9730	LiquidityIndicator	Char	'A' Add liquidity - passive 'R' Remove liquidity - aggressive 'X' Routed (Future use) 'O' Cross SP, Opening trade SP or Trade creation by MO	NA	NA	NA	NA	NA	Removed
382	NoContraBrokers	Int	'1'	NA	NA	NA	NA	NA	Removed
9949	MIC	String	ISO 10383 standard	NA	NA	NA	NA	NA	Removed
15	Currency	String	ISO 4217 standard	NA	NA	NA	NA	NA	Removed

### 8.2.3 MassQuote (i)

CCG Bulk Quote (UB)				Optiq Mass Quote (i)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	117	QuoteID	String	From -2^63+1 to 2^63-1	Quote identifier.	New
11	ClOrdID	String	Alphanumerical	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client	Modified

CCG Bulk Quote (UB)				Optiq Mass Quote (i)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								when submitting an order to the Exchange.	
NA	NA	NA	NA	29	LastCapacity	Char	1 = Dealing on own account (DEAL) 2 = Matched principal (MTCH) 3 = Any other capacity (AOTC)	Indicates whether the order submission results from trading as matched principal, on own account or as any other capacity.	New
47	Rule80A	Char	(See field description)	6399	AccountCode	Int	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	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.	Modified
NA	NA	NA	NA	20021	LPRole	Int	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	New
NA	NA	NA	NA	1724	OrderOrigination	Int	5 = Order received from a direct access or sponsored access customer	Identifies the origin of the order.	New
NA	NA	NA	NA	2593	NoOrderAttributes	NumInGroup	From 0 to 2	Number of order attribute entries.	New
NA	NA	NA	NA	2594	OrderAttributeType	Int	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	The type of order attribute.	New
NA	NA	NA	NA	2595	OrderAttributeValue	String	Y = Yes	The value associated with the order attribute type specified in OrderAttributeType (2594).	New
NA	NA	NA	NA	20022	RFEAnswer	Int	0 = False 1 = True	Indicate whether the MassQuote (i) message is an answer to a RequestForExecution (UM) message or not. (0: No [False] ; 1: Yes [True])	New
9938	ClearingHandlingType	Char	(blank) Systematic posting '0' Manual mode '1' Automatic extraction '2' Automatic allocation	577	ClearingInstruction	Int	0 = Process normally (formerly Systematic posting) [C] 8 = Manual mode 9 = Automatic posting mode 10 = Automatic give-up mode [C] 4008 = Automatic and	Clearing Instruction.	Modified



CCG Bulk Quote (UB)				Optiq Mass Quote (i)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							account authorization [D] 4009 = Manual and account authorization [D] 4010 = Give-up to single firm [D]		
9952	FreeText	String	Alphanumeric	58	Text	String	Alphanumeric	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	New
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New
NA	NA	NA	NA	539	NoNestedPartyIDs	NumInGroup	From 0 to 5	Number of NestedPartyID entries.	New
NA	NA	NA	NA	524	NestedPartyID	String	Alphanumeric	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).	New
NA	NA	NA	NA	525	NestedPartyIDSource	Char	D = Proprietary / Custom code P = Short code identifier	Source of NestedPartyID value.	New
NA	NA	NA	NA	538	NestedPartyRole	Int	3 = Client ID 4 = Clearing Firm 26 = Correspondent Broker 122 = Investment decision maker	Identifies the type or role of the NestedPartyID (524) specified.	New
NA	NA	NA	NA	2384	NestedPartyRoleQualifier	Int	3 = General clearing member 4 = Individual clearing member 22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of NestedPartyRole(538).	New
1	Account	String	Alphanumeric	1	Account	String	Alphanumeric	Account Number. Client account number identifying the investor's account. This field is part of the clearing	Modified

CCG Bulk Quote (UB)				Optiq Mass Quote (i)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								aggregate.	
9941	TechnicalOrdType	Char	(See field description)	9941	TechnicalOrdType	Char	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	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.	Modified
77	OpenClose	Char	'O' Open 'C' Close	7443	PostingAction	MultipleCharValue	0 = Field Actively Used 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]	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	Modified
NA	NA	NA	NA	296	NoQuoteSets	NumInGroup	From 1 to 150	The number of sets of quotes in the message	New
NA	NA	NA	NA	302	QuoteSetID	String	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 <sup>32</sup> -1	Unique ID for the Quote set	New
NA	NA	NA	NA	304	TotNoQuotEntries	Int	Always equal to NoQuoteEntries	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.	New
295	NoQuoteEntries	Int	'1'..'150'	295	NoQuoteEntries	NumInGroup	Always set to 1	Number of entries in Quotes repeating group.	Modified
NA	NA	NA	NA	299	QuoteEntryID	String	From 0 to 2 <sup>32</sup> -2	Uniquely identifies the quote across the complete set of all quotes for a given quote provider.	New
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2 <sup>32</sup> -1	Exchange identification code of the instrument, represented by SecurityID. This identifier is unique per triplet: MIC, ISIN and currency. The	Modified

CCG Bulk Quote (UB)				Optiq Mass Quote (i)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								correspondence between the SecurityID and the instrument characteristics is provided in the standing data messages and associated files.	
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
134	BidSize	Qty	Quantity	134	BidSize	Qty	From 0 to 2^64-1	Quote bid quantity (to be calculated with Quantity Decimals).	Modified
132	BidPx	Price	Price	132	BidPx	Price	From -2^63 to 2^63-1	Quote bid price (to be calculated with Price/Index Level Decimals).	Modified
135	OfferSize	Qty	Quantity	135	OfferSize	Qty	From 0 to 2^64-1	Quote offer quantity (to be calculated with Quantity Decimals).	Modified
133	OfferPx	Price	Price	133	OfferPx	Price	From -2^63 to 2^63-1	Quote offer price (to be calculated with Price/Index Level Decimals).	Modified
439	ClearingFirm	String	Firm ID (agreed upon clearing value)	NA	NA	NA	NA	NA	Removed
109	ClientID	String	Alphanumerical	NA	NA	NA	NA	NA	Removed

## 8.2.4 MassQuoteAck (b)

CCG Bulk Quote Ack (UJ)				Optiq Mass Quote Ack (b)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21005	ClientMessageSendingTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	5979	OEGINFromMember	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21002	BookINTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21003	BookOUTTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7765	OEGINFromME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7764	OEGOUTToME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-	New

CCG Bulk Quote Ack (UJ)				Optiq Mass Quote Ack (b)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							999999999 (nanoseconds)	HH:MM:SS.ssssssss).	
NA	NA	NA	NA	117	QuoteID	String	From -2^63+1 to 2^63-1	Quote identifier.	New
NA	NA	NA	NA	297	QuoteStatus	Int	0 = Accepted 5 = Rejected	Status of the mass quote acknowledgement.	New
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
47	Rule80A	Char	(See field description)	6399	AccountCode	Int	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	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.	Modified
NA	NA	NA	NA	20021	LPRole	Int	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	Liquidity Provider Role identifies the type of the Liquidity Provider when AccountCode is equal to "Liquidity Provider".	New
9938	ClearingHandlingType	Char	(blank) Systematic posting '0' Manual mode '1' Automatic extraction '2' Automatic allocation	577	ClearingInstruction	Int	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]	Clearing Instruction.	Modified
1	Account	String	Alphanumeric	1	Account	String	Alphanumeric	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Modified
9941	TechnicalOrdType	Char	(See field description)	9941	TechnicalOrdType	Char	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	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.	Modified

CCG Bulk Quote Ack (UJ)				Optiq Mass Quote Ack (b)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
77	OpenClose	Char	'O' Open 'C' Close	7443	PostingAction	MultipleCharValue	0 = Field Actively Used 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]	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	Modified
NA	NA	NA	NA	296	NoQuoteSets	NumInGroup	From 1 to 150	The number of sets of quotes in the message	New
NA	NA	NA	NA	302	QuoteSetID	String	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	Unique ID for the Quote set	New
NA	NA	NA	NA	304	TotNoQuotEntries	Int	Always equal to NoQuoteEntries	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.	New
295	NoQuoteEntries	Int	'1'..'150'	295	NoQuoteEntries	NumInGroup	Always set to 1	Number of entries in Quotes repeating group.	Modified
NA	NA	NA	NA	299	QuoteEntryID	String	From 0 to 2^32-2	Uniquely identifies the quote across the complete set of all quotes for a given quote provider.	New
NA	NA	NA	NA	1747	BidQuoteID	String	From 0 to 2^64-1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	New
NA	NA	NA	NA	1748	OfferQuoteID	String	From 0 to 2^64-1	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	New
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	Exchange identification code of the instrument, represented by SecurityID. This identifier is unique per triplet: MIC, ISIN and	Modified

CCG Bulk Quote Ack (UJ)				Optiq Mass Quote Ack (b)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								currency. The correspondence between the SecurityID and the instrument characteristics is provided in the standing data messages and associated files.	
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
9934	BidErrorCode	Int	Numerical	9934	BidErrorCode	Int	From 0 to 2^16-1	Error code returned when quote contains an invalid bid.	Modified
9935	OfferErrorCode	Int	Numerical	9935	OfferErrorCode	Int	From 0 to 2^16-1	Error code returned when a quote contains an invalid offer. See Error List for details of error codes.	Modified
NA	NA	NA	NA	21008	BuyRevisionIndicator	Int	0 = New 1 = Replacement 2 = Cancellation	Indicates whether the bid quote is a replacement of a previous quote, or not. ( 1: Replacement ; 0: New).	New
NA	NA	NA	NA	21009	SellRevisionIndicator	Int	0 = New 1 = Replacement 2 = Cancellation	Indicates whether the offer quote is a new quote, a replacement of a previous quote or a cancellation.	New
439	ClearingFirm	String	Firm ID (agreed upon clearing value)	NA	NA	NA	NA	NA	Removed
109	ClientID	String	Alphanumeric	NA	NA	NA	NA	NA	Removed
9952	FreeText	String	Alphanumeric	NA	NA	NA	NA	NA	Removed

## 8.2.5 OrderCancelRequest (F)

CCG Order Cancel Request (F)				Optiq Order Cancel Request (F)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
37	OrderID	String	Alphanumeric	37	OrderID	String	From 0 to 2^64-2	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
41	OrigClOrdID	String	ClOrdID of the order to be modified / cancelled	41	OrigClOrdID	String	From -2^63 to 2^63-1	Client order ID of the original order.	Modified
NA	NA	NA	NA	54	Side	Char	1 = Buy 2 = Sell	Indicates the side of the order.	New
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New



CCG Order Cancel Request (F)				Optiq Order Cancel Request (F)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	40	OrdType	Char	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 (For Future Use) [C] X = Iceberg [C]	Type of Order.	New
NA	NA	NA	NA	1094	PegPriceType	Int	2 = Mid-price peg (midprice of inside quote) (For Future Use, Pending Regulatory Approval) [C] 4 = Market peg (For Future Use, Pending Regulatory Approval) [C] 5 = Primary peg (primary market - buy at bid or sell at offer) [C]	Defines the type of the peg order.	New
9949	MIC	String	ISO 10383 standard	NA	NA	NA	NA	NA	Removed
15	Currency	String	ISO 4217 standard	NA	NA	NA	NA	NA	Removed

## 8.2.6 OrderCancelReplaceRequest (G)

CCG Order Cancel/Replace Request (G)				Optiq Order Cancel/Replace Request (G)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
37	OrderID	String	Alphanumeric	37	OrderID	String	From 0 to 2^64-2	Numerical order identifier	Modified

CCG Order Cancel/Replace Request (G)				Optiq Order Cancel/Replace Request (G)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								assigned by the matching engine, unique per instrument and EMM.	
41	OrigClOrdID	String	ClOrdID of the order to be modified / cancelled	41	OrigClOrdID	String	From -2^63 to 2^63-1	Client order ID of the original order.	Modified
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New
NA	NA	NA	NA	539	NoNestedPartyIDs	NumInGroup	From 0 to 5	Number of NestedPartyID entries.	New
NA	NA	NA	NA	524	NestedPartyID	String	Alphanumeric	Party identifier/code. See NestedPartyIDSource (525) and NestedPartyRole (538).	New
NA	NA	NA	NA	525	NestedPartyIDSource	Char	D = Proprietary / Custom code P = Short code identifier	Source of NestedPartyID value.	New
NA	NA	NA	NA	538	NestedPartyRole	Int	3 = Client ID 4 = Clearing Firm 26 = Correspondent Broker 122 = Investment decision maker	Identifies the type or role of the NestedPartyID (524) specified.	New
NA	NA	NA	NA	2384	NestedPartyRoleQualifier	Int	3 = General clearing member 4 = Individual clearing member 22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of NestedPartyRole(538).	New
44	Price	Price	Price	44	Price	Price	From -2^63 to 2^63-1	Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).	Modified
38	OrderQty	Qty	Quantity	38	OrderQty	Qty	From 0 to 2^64-1	Total order quantity, per quantity unit (to be calculated with Quantity	Modified

CCG Order Cancel/Replace Request (G)				Optiq Order Cancel/Replace Request (G)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								Decimals).	
40	OrdType	Char	(See field description)	40	OrdType	Char	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 (For Future Use) [C] X = Iceberg [C]	Type of Order.	Modified
54	Side	Char	'1' Buy '2' Sell	54	Side	Char	1 = Buy 2 = Sell	Indicates the side of the order.	Modified
59	TimeInForce	Char	(See field description)	59	TimeInForce	Char	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]	Specifies the maximum validity of an order.	Modified
10077	STPIndicator	Int	'0' or null – STP Deactivated '1' – STP Activated Other values are rejected.	21015	STPAggressorIndicator	Int	0 = Cancel resting order [C] 1 = Cancel incoming order [C] 9 = Disable STP [C]	Field used as instruction for order handling.	Modified
NA	NA	NA	NA	21016	DisclosedQtyRandIndicator	Int	0 = No 1 = Yes	Indicates whether the client requests or not a randomization for the disclosed quantity of his iceberg order.	New
NA	NA	NA	NA	21018	CancelOnDisconnectionIndicator	Int	0 = Per Default Configuration 1 = Order not in the scope of Cancel On Disconnect	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	New

CCG Order Cancel/Replace Request (G)				Optiq Order Cancel/Replace Request (G)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								Cancel On Disconnect - Order is to be persisted)	
NA	NA	NA	NA	1094	PegPriceType	Int	2 = Mid-price peg (midprice of inside quote) (For Future Use, Pending Regulatory Approval) [C] 4 = Market peg (For Future Use, Pending Regulatory Approval) [C] 5 = Primary peg (primary market - buy at bid or sell at offer) [C]	Defines the type of the peg order.	New
211	PegDifference	PrOff	'0'	211	PegOffsetValue	Int	From -128 to 127	Tick offset for a pegged order. (For Future Use)	Modified
NA	NA	NA	NA	20052	DarkExecutionInstruction	MultipleCharValue	0 = Dark Indicator 1 = Deferred Trade Indicator 2 = Displayed Order Interaction 3 = Sweep Order Indicator 4 = Minimum Quantity Type 5 = Future Dark Use 1 6 = Future Dark Use 2 7 = Future Dark Use 3	Field used as instruction for dark order handling (For Future Use, Pending Regulatory Approval). This field can contain up to 8 values, space delimited, provided in different positions.	New
NA	NA	NA	NA	1724	OrderOrigination	Int	5 = Order received from a direct access or sponsored access customer	Identifies the origin of the order.	New
NA	NA	NA	NA	2593	NoOrderAttributes	NumInGroup	From 0 to 2	Number of order attribute entries.	New
NA	NA	NA	NA	2594	OrderAttributeType	Int	0 = Aggregated order 1 = Pending allocation 3 = Risk reduction order	The type of order attribute.	New
NA	NA	NA	NA	2595	OrderAttributeValue	String	Y = Yes	The value associated with the order attribute type specified in OrderAttributeType (2594).	New
NA	NA	NA	NA	2362	SelfMatchPreventionID	String	From 0 to 2^16-1	For Future Use.	New
9952	FreeText	String	Alphanumeric	58	Text	String	Alphanumeric	Free Text is manually entered by the trader	New

CCG Order Cancel/Replace Request (G)				Optiq Order Cancel/Replace Request (G)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								issuing the order. This field is part of the clearing aggregate.	
99	StopPx	Price	Price	99	StopPx	Price	From -2^63 to 2^63-1	Stop Trigger Price is mandatory for stop orders.	Modified
NA	NA	NA	NA	20004	UndisclosedPrice	Price	From -2^63 to 2^63-1	Optional price for the hidden part of an Iceberg order. (For Future Use, Pending Regulatory Approval)	New
111	MaxFloor	Qty	Quantity (ignored if '0')	1138	DisplayQty	Qty	From 0 to 2^64-1	Maximum number of quantity units to be shown to market participants (Iceberg Order).	Modified
126	ExpireTime	TmSt	YYYYMMDD-hh:mm:ss	126	ExpireTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Field used as time of order expiration for GTT orders (Format: YYYYMMDD-HH:MM:SS.ssssssss).	Modified
432	ExpireDate	Date	YYYYMMDD	432	ExpireDate	LocalMktDate	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31	Field used as date of order expiration (last day the order can trade) for GTD orders (Format: YYYYMMDD).	Modified
336	TradingSessionID	String	(See field description)	336	TradingSessionID	String	101 = Session 1 102 = Session 2 103 = Session 3 123 = All Sessions	Trading session validity.	Modified
NA	NA	NA	NA	20175	TriggeredStopTimeInForce	Char	0 = Day 1 = Good Till Cancel 6 = Good till Date	Specifies the maximum validity of an triggered stop order.	New
NA	NA	NA	NA	20005	UndisclosedIcebergType	Int	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity. (For Future Use, Pending Regulatory Approval)	New
1	Account	String	Alphanumeric	1	Account	String	Alphanumeric	Account Number. Client account number identifying the investor's account. This field is part of the clearing aggregate.	Modified

CCG Order Cancel/Replace Request (G)				Optiq Order Cancel/Replace Request (G)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
9941	TechnicalOrdType	Char	(See field description)	9941	TechnicalOrdType	Char	1 = Index trading arbitrage 2 = Portfolio strategy 3 = Unwind order 4 = Other orders (default) 5 = Cross margining	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.	Modified
77	OpenClose	Char	'0' Open 'C' Close	7443	PostingAction	MultipleCharValue	0 = Field Actively Used 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]	Posting action code (Open/Close) for the order. This field is part of the clearing aggregate.	Modified
9938	ClearingHandlingType	Char	(blank) Systematic posting '0' Manual mode '1' Automatic extraction '2' Automatic allocation	577	ClearingInstruction	Int	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]	Clearing Instruction.	Modified
9930	ConfirmFlag	Char	'0' Not confirmed (default) '1' Confirmed	9930	ConfirmFlag	Char	0 = Not confirmed (default) 1 = Confirmed	Indicates if the order entry or modification is confirmed by the broker issuing the order or not.	Modified
18	ExecInst	Char	(See field description)	NA	NA	NA	NA	NA	Removed
109	ClientID	String	Alphanumeric	NA	NA	NA	NA	NA	Removed
439	ClearingFirm	String	Firm ID (agreed upon clearing value)	NA	NA	NA	NA	NA	Removed
9949	MIC	String	ISO 10383 standard	NA	NA	NA	NA	NA	Removed
15	Currency	String	ISO 4217 standard	NA	NA	NA	NA	NA	Removed
386	NoTradingSessions	Int	'1'..'3'	NA	NA	NA	NA	NA	Removed
47	Rule80A	Char	(See field description)	NA	NA	NA	NA	NA	Removed

## 8.2.7 OrderCancelReject (9)

CCG Order Cancel Reject (9)				Optiq Order Cancel Reject (9)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	21005	ClientMessageSendingTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	5979	OEGINFromMember	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7764	OEGOUTToME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21002	BookINTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21003	BookOUTTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7765	OEGINFromME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order	Modified



CCG Order Cancel Reject (9)				Optiq Order Cancel Reject (9)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								assigned by the Client when submitting an order to the Exchange.	
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2 <sup>32</sup> -1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
37	OrderID	String	Alphanumeric	37	OrderID	String	From 0 to 2 <sup>64</sup> -2	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
9955	ErrorCode	Int	Numerical	9955	ErrorCode	Int	From 0 to 2 <sup>16</sup> -1	Error code in case of rejection.	Modified
434	CxlRejResponseTo	Char	'1' Cancel Order request '2' Cancel/Replace Order request	434	CxlRejResponseTo	Char	1 = OrderCancelRequest (F) 2 = OrderCancelReplaceRequest (G) 3 = MassQuote (i) 4 = OrderMassCancelRequest (q)	Origin of cancellation rejection	Modified
NA	NA	NA	NA	9962	CollarRejType	Char	1 = Low dynamic collar 2 = High dynamic collar	Hit collar type (high or low) in case of order rejection	New

CCG Order Cancel Reject (9)				Optiq Order Cancel Reject (9)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								due to collar breach.	
NA	NA	NA	NA	21001	BreachedCollarPrice	Price	From -2^63 to 2^63-1	Breached collar price in case of collar rejection (to be calculated with Price/Index Level Decimals).	New
39	OrdStatus	Char	(See field description)	39	OrdStatus	Char	0 = New 1 = Partially filled 2 = Filled 3 = Done for Day 4 = Cancelled 5 = Replaced 8 = Rejected C = Expired F = Trade H = Cancel Trade I = Order Status M = RFQ expired [C] N = RFQ partially or fully matched with other counterparts [C] O = RFQ cancelled by the issuer [C] P = RFQ Not matched due to issuer order's features [C] Q = VFA VFC Triggered Ack [C] R = OrderMassStatusRequest Ack [C] S = Stop Triggered Ack [C] T = MTL Second Ack [C] Z = Message Rejected	Order status.	Modified
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
41	OrigClOrdID	String	ClOrdID of the order to be modified / cancelled	NA	NA	NA	NA	NA	Removed
18	ExecInst	Char	(See field description)	NA	NA	NA	NA	NA	Removed
58	Text	String	Alphanumeric	NA	NA	NA	NA	NA	Removed
102	CxlRejReason	Int	'0' Too late to cancel '1' Unknown order '2' Broker option '3' Order already in Pending Cancel or	NA	NA	NA	NA	NA	Removed

CCG Order Cancel Reject (9)				Optiq Order Cancel Reject (9)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
			Pending Replace status						

## 8.2.8 RequestAckMessage (Uy)

CCG Request Ack Message (Uy)				Optiq Request Ack Message (Uy)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21005	ClientMessageSendingTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	5979	OEGINFromMember	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7764	OEGOUTToME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21002	BookINTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21003	BookOUTTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-	Matching Engine OUT time (in ns), when message	New

CCG Request Ack Message (Uy)				Optiq Request Ack Message (Uy)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	
NA	NA	NA	NA	7765	OEGINFromME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
372	RefMsgType	String	Value received in the rejected inbound message, if any.	372	RefMsgType	String	Value received in the rejected inbound message, if any	The MsgType (35) of the FIX message being referenced.	Modified
9955	ErrorCode	Int	Numerical	9955	ErrorCode	Int	From 0 to 2^16-1	Error code in case of	Modified

CCG Request Ack Message (Uy)				Optiq Request Ack Message (Uy)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								rejection.	
NA	NA	NA	NA	10076	LPActionCode	Char	1 = Knock-In By Issuer (KIBI) 2 = Knock-Out By Issuer (KOB) 3 = Payment After Knock-Out (PAKO) 4 = Bid Only 5 = Offer Only 6 = Price Input	Action the LP wants to apply on the specified instrument of warrant type.	New
58	Text	String	Alphanumeric	NA	NA	NA	NA	NA	Removed

### 8.2.9 AskForQuote (UL)

CCG Quote Request (UL)				Optiq Ask For Quote (UL)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2 <sup>32</sup> -1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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	Defines the Exchange Market Mechanism applied on each platform.	New

CCG Quote Request (UL)				Optiq Ask For Quote (UL)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							7 = Derivative On Exchange Off book [D] 8 = ETF MTF - NAV Central Order Book [C] 99 = Not Applicable (For indices and iNAV) [C]		
9939	AFQReason	Char	(See field description)	9939	AFQReason	Char	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	Reason why the AskForQuote (UL) has been sent.	Modified

### 8.2.10 PriceInput (UI)

CCG Price Input (UI)				Optiq Price Input (UI)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order	Modified

CCG Price Input (UI)				Optiq Price Input (UI)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
								assigned by the Client when submitting an order to the Exchange.	
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
44	Price	Price	Price	44	Price	Price	From -2^63 to 2^63-1	Instrument price per quantity unit (to be calculated with Price/Index Level Decimals).	Modified
9950	InputPxType	Char	‘V’ Valuation trade ‘A’ Alternative Indicative Price (AIP) ‘R’ Reference Price	9950	InputPxType	Char	1 = Valuation Price 2 = Alternative Indicative Price (AIP)	Type of input price.	Modified
9949	MIC	String	ISO 10383 standard	NA	NA	NA	NA	NA	Removed
15	Currency	String	ISO 4217 standard	NA	NA	NA	NA	NA	Removed

## 8.2.11 LiquidityProviderCommand (UZ)

CCG Liquidity Provider Command (UZ)				Optiq Liquidity Provider Command (UZ)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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]	Defines the Exchange Market Mechanism applied on each platform.	New



CCG Liquidity Provider Command (UZ)				Optiq Liquidity Provider Command (UZ)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							8 = ETF MTF - NAV Central Order Book [C] 99 = Not Applicable (For indices and iNAV) [C]		
10076	LPActionCode	Char	'1' Knock-In By Issuer (KIBI) '2' Knock-Out By Issuer (KOBI) '3' Payment After Knock-Out (PAKO)	10076	LPActionCode	Char	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	Action the LP wants to apply on the specified instrument of warrant type.	Modified
9949	MIC	String	ISO 10383 standard	NA	NA	NA	NA	NA	Removed
15	Currency	String	ISO 4217 standard	NA	NA	NA	NA	NA	Removed

## 8.2.12 OrderMassStatusRequest (AF)

CCG Order Status Request (H)				Optiq Order Mass Status Request (AF)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New
11	ClOrdID	String	Alphanumerical	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified

CCG Order Status Request (H)				Optiq Order Mass Status Request (AF)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
37	OrderID	String	Alphanumeric	37	OrderID	String	From 0 to 2^64-2	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Modified
NA	NA	NA	NA	41	OrigClOrdID	String	From -2^63 to 2^63-1	Client order ID of the original order.	New
NA	NA	NA	NA	584	MassStatusReqID	String	User-defined value	Client ID for the Order Mass Status Request.	New
NA	NA	NA	NA	585	MassStatusReqType	Int	101 = Status of a single order	Mass status request type.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
9956	FilterOnGatewayID	String	Gateway ID (agreed with Exchange)	NA	NA	NA	NA	NA	Removed
9957	FilterOnLocationID	String	Firm's front-end server ID	NA	NA	NA	NA	NA	Removed
9949	MIC	String	ISO 10383 standard	NA	NA	NA	NA	NA	Removed
15	Currency	String	ISO 4217 standard	NA	NA	NA	NA	NA	Removed

## 8.2.13 OrderMassCancelRequest (q)

CCG Order Mass Cancel Request (q)				Optiq Order Mass Cancel Request (q)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	453	NoPartyIDs	NumInGroup	From 1 to 3, depending on the message	Number of PartyID entries.	New
NA	NA	NA	NA	448	PartyID	String	Alphanumeric	Party identifier/code. See PartyIDSource (447) and PartyRole (452).	New
NA	NA	NA	NA	447	PartyIDSource	Char	P = Short code identifier	Source of PartyID value.	New
NA	NA	NA	NA	452	PartyRole	Int	1 = Executing Firm 3 = Client ID 12 = Executing Trader	Identifies the type or role of the PartyID (448) specified.	New
NA	NA	NA	NA	2376	PartyRoleQualifier	Int	22 = Algorithm 23 = Firm or legal entity 24 = Natural person	Used to further qualify the value of PartyRole(452).	New
11	ClOrdID	String	Alphanumerical	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
NA	NA	NA	NA	530	MassCancelRequestType	Char	1 = Cancel orders for a security A = Cancel orders for a security group	Scope of orders already in COB to be cancelled only for them having the selected maturity.	New
9945	ClassID	String	Alphanumerical	9945	ClassID	String	Alphanumeric	Instrument Trading Group / Class Identifier.	Modified
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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]	Defines the Exchange Market Mechanism applied on each platform.	New

CCG Order Mass Cancel Request (q)				Optiq Order Mass Cancel Request (q)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							8 = ETF MTF - NAV Central Order Book [C] 99 = Not Applicable (For indices and iNAV) [C]		
54	Side	Char	'1' Buy '2' Sell	54	Side	Char	1 = Buy 2 = Sell	Indicates the side of the order.	Modified
NA	NA	NA	NA	21019	OEPartitionID	Int	From 0 to 2^16-1	Identifies uniquely an OE Optiq partition by which the engine is reached.	New
9960	CancelByLocationID	String	OnBehalfOfLocationID value	21021	LogicalAccessID	Int	From 0 to 2^32-1	Identifier of the Logical Access.	Modified
NA	NA	NA	NA	1214	DerivativeSymbol	String	From 0 to 2^32-1	Identifier of a derivatives contract (Symbol Index).	New
NA	NA	NA	NA	1323	DerivativePutOrCall	Int	1 = Call 2 = Put	Type of the option.	New
NA	NA	NA	NA	60	TransactTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
47	Rule80A	Char	(See field description)	6399	AccountCode	Int	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C] 8 = Structured Product Market Maker [C]	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.	Modified
NA	NA	NA	NA	1303	MaturityMonthYearFormat	Int	0 = YearMonth (only default)	Defines the format of MaturityMonthYear.	New
NA	NA	NA	NA	200	MaturityMonthYear	MonthYear	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31	Scope of active orders to be cancelled according to the selected maturity, expressed in YYYYMMDD format.	New
9941	TechnicalOrdType	Char	(See field description)	NA	NA	NA	NA	NA	Removed

## 8.2.14 OrderMassCancelReport (r)

CCG Order Mass Cancel Report (r)				Optiq Order Mass Cancel Report (r)					Changes Summary
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Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
NA	NA	NA	NA	21005	ClientMessageSendingTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Indicates the time of inbound message transmission (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	5979	OEGINFromMember	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Order Entry Gateway IN time from member (in nanoseconds), measured when inbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7764	OEGOUTToME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Gateway OUT time to ME (in ns), measured when inbound message leaves the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21002	BookINTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	21003	BookOUTTime	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Matching Engine OUT time (in ns), when message leaves the Matching Engine (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
NA	NA	NA	NA	7765	OEGINFromME	UTCTimestamp	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31, HH = 00-23, MM = 00-59, SS = 00-59, ssssssss = 000000000-999999999 (nanoseconds)	Gateway IN time from ME (in ns), measured when outbound message enters the gateway (Format: YYYYMMDD-HH:MM:SS.ssssssss).	New
11	ClOrdID	String	Alphanumeric	11	ClOrdID	String	From -2^63 to 2^63-1	An identifier of an Order assigned by the Client when submitting an order to the Exchange.	Modified
533	TotalAffectedOrders	Int	'0'..'1010-1' or '-1' upon request	533	TotalAffectedOrders	Int	From -2^31 to 2^31-1	Number of orders affected following a global request. It is set	Modified

CCG Order Mass Cancel Report (r)				Optiq Order Mass Cancel Report (r)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
			acknowledgement					to -1 to indicate that the request is processed.	
9945	ClassID	String	Alphanumeric	9945	ClassID	String	Alphanumeric	Instrument Trading Group / Class Identifier.	Modified
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	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] 99 = Not Applicable (For indices and iNAV) [C]	Defines the Exchange Market Mechanism applied on each platform.	New
54	Side	Char		54	Side	Char	1 = Buy 2 = Sell	Indicates the side of the order.	Modified
NA	NA	NA	NA	21019	OEPartitionID	Int	From 0 to 2^16-1	Identifies uniquely an OE Optiq partition by which the engine is reached.	New
9960	CancelByLocationID	String	OnBehalfOfLocationID value	21021	LogicalAccessID	Int	From 0 to 2^32-1	Identifier of the Logical Access.	Modified
NA	NA	NA	NA	1214	DerivativeSymbol	String	From 0 to 2^32-1	Identifier of a derivatives contract (Symbol Index).	New
NA	NA	NA	NA	1323	DerivativePutOrCall	Int	1 = Call 2 = Put	Type of the option.	New
47	Rule80A	Char	(See field description)	6399	AccountCode	Int	1 = Client 2 = House 4 = RO [C] 6 = Liquidity Provider 7 = Related Party [C]	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	Modified

CCG Order Mass Cancel Report (r)				Optiq Order Mass Cancel Report (r)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							8 = Structured Product Market Maker [C]	account.	
NA	NA	NA	NA	1303	MaturityMonthYearFormat	Int	0 = YearMonth (only default)	Defines the format of MaturityMonthYear.	New
NA	NA	NA	NA	200	MaturityMonthYear	MonthYear	Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31	Scope of active orders to be cancelled according to the selected maturity, expressed in YYYYMMDD format.	New
NA	NA	NA	NA	1369	MassActionReportID	String	Value provided by the Trading Engine	Exchange allocated order mass cancel report ID.	New
530	MaxCancelRequestType	Char	'7' Cancel all orders belonging to the specified class or symbol '8' Cancel all orders matching specified criteria	530	MassCancelRequestType	Char	1 = Cancel orders for a security A = Cancel orders for a security group	Scope of orders already in COB to be cancelled only for them having the selected maturity.	Modified
NA	NA	NA	NA	531	MassCancelResponse	Char	1 = Cancel orders for a security A = Cancel orders for a security group	Specifies the action taken by counterparty order handling system as a result of the OrderMassCancelRequest (AF).	New
9941	TechnicalOrdType	Char	(See field description)	NA	NA	NA	NA	NA	Removed

### 8.2.15 RequestForExecution (UM)

CCG Request For Execution (UM)				Optiq Request For Execution (UM)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
55	Symbol	String	ISIN or ISIN-like	48	SecurityID	String	From 0 to 2^32-1	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.	Modified
NA	NA	NA	NA	22	SecurityIDSource	String	8 = Symbol Index	Gives the type of SecurityID.	New
NA	NA	NA	NA	20020	EMM	Int	1 = Cash and Derivative Central Order Book (COB)	Defines the Exchange Market Mechanism applied on each	New

CCG Request For Execution (UM)				Optiq Request For Execution (UM)					Changes Summary
Tag	Field	Format	Values	Tag	Field	Format	Values	Description	Action
							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] 99 = Not Applicable (For indices and iNAV) [C]	platform.	



## APPENDIX A: REVIEW LOG, DOCUMENT HISTORY, SIGN-OFF

### REVIEW LOG

DOCUMENT NAME	Euronext Cash Markets – Optiq® CCG to OEG Change Highlights
PROJECT NAME	Optiq
LOCATION	
VERSION NUMBER	

### DOCUMENT HISTORY

REVISION NO./ VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
1.2.0	11/10/2017	ITS	<p>Updated release for Phase 2 migration to Optiq, covering the following changes:</p> <ul style="list-style-type: none"> <li>- Added section “<u>Change in Modification (Cancel / Replace) message behavior</u>” and made associated updates to the Cancel / Replace message</li> <li>- Peg orders flagged for Future Use</li> <li>- List of possible Ack Types and their mapping are updated with new values for “Order Creation by MO” / “Bid Only / Offer Only Ack” / “Ownership Request Ack”, and clarified mapping to FIX tags</li> <li>- Drop Copy section updated, to indicate availability in FIX protocol only, and adjustments in the scope of the service</li> <li>- Order ID section updated to include behaviour in FIX</li> <li>- Sections Extended Fill (29) and Extended Response (16) removed from SBE protocol. Drop Copy service will no longer be support SBE protocol and Ownership Request will replied by an Ack (03) message</li> <li>- For improved readability sections providing technical details for SBE and FIX are reorganized to segregate description of changes and message by message comparison &amp; mapping of fields.</li> <li>- Sections previously called “<u>Technical Messages</u>” are renamed to “<u>Administration Messages</u>”</li> <li>- Messages NewOrderMiFIDExtension (U02) and NewOrderMiFIDExtensionAck (U30) removed as they will no longer be used.</li> <li>- ETF MTF related messages Quotes Request (10), RFQ Notification (35), RFQ Matching Status (36) added to the document, however are for Future Use</li> <li>- Added clarification on management of “<u>Minimum amount check of Iceberg orders</u>”</li> <li>- Added clarification for the Cancel on Disconnect mechanism</li> <li>- Updated section on improved Timestamp fields with clarifications</li> <li>- Added section for Ownership Request (18) and Ownership Request Ack (17) messages</li> <li>- Added mapping of Kill reasons to existing OrdStatus for the Kill (05) message</li> <li>- Added sections “<u>Mapping of messages CCG Binary to OEG SBE</u>” and “<u>Mapping of messages CCG FIX 4.2 to OEG FIX 5.0</u>”</li> <li>- Added clarification on RFE mechanism</li> <li>- Updated section “MiFID II related Changes” to</li> </ul>

REVISION NO./ VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
			<ul style="list-style-type: none"> <li>○ Included FIX references</li> <li>○ Updated notes on process of implementation</li> <li>○ Added a section on new message User Notification (39 / FIX CB)</li> <li>- Update of section “<u>Dissemination of Day Order Cancellation at the Close of Business</u>” – removed references to EOD application files</li> <li>- Section “<u>Public &amp; Private feed reconciliation</u>” renamed “<u>Reconciling Orders in Public &amp; Private Feeds</u>”</li> <li>- Removed references to Routing info</li> <li>- General formatting, spelling and grammar corrections throughout the doc</li> <li>- Addition of value in field Account Type - 8 for Structured Product Market Maker</li> <li>- Regrouped “new” messages into section Messages Associated to New Functionalities (New Messages) for each protocol</li> <li>- Modified the Tick Size and Number of decimals section with minor clarification</li> <li>- Addition of FIX message comparison of messages and field changes, including newly added messages for FIX: Sequence Reset (FIX 4)</li> <li>- Added section “Future Use”</li> <li>- Update to the sections about the TCS scope and messages <ul style="list-style-type: none"> <li>○ Section “TCS &amp; Transaction Reporting” renamed to “Trade Confirmation System (TCS)” and updated with clarifications</li> <li>○ Reference to the MIFID II services removed, due to their migration into Saturn</li> <li>○ Added a section “<u>Fields for Cross declarations</u>”</li> </ul> </li> <li>- Removed references to the order entry for segment “TCS &amp; Transaction Reporting”</li> <li>- Field Mapping tables in SBE adjusted to provide CCG field on the left, and Optiq fields on the right</li> </ul>
1.1.0	16/03/2017	ITS	<p>Updated release, covering the following changes:</p> <ul style="list-style-type: none"> <li>- Addition of fields and clarification on functionality Updates of Logon message</li> <li>- Addition of fields and clarification of processes, and expectations for the MIFID II impacts in most “regular” incoming as well as in the Extended messages, and guidelines on value population</li> <li>- Addition of TCS / Transaction Reporting specific and associated messages</li> <li>- Updated description of the Self-Trade Prevention (STP) mechanism</li> <li>- Addition of section for Order Ownership &amp; migration management</li> <li>- Adjustments to the Peg &amp; Iceberg orders on the Lit market</li> <li>- Clarification of the changes on the LP Quote driven instruments of the Warrants &amp; Certificates segment</li> <li>- Clarification of the DropCopy services</li> <li>- Tick size &amp; decimals</li> <li>- Updates to the sections on (1) collars (2) elimination of orders (3) Error codes (4) Transformed messages</li> <li>- Added User notification message</li> <li>- Removal of the MDG associated changes &amp; impacts removed. These are covered in the Change highlights dedicated to MDG</li> <li>- Maintenance changes since v1.0 (formatting changes, fields details, conditions, descriptions and their values) &amp; updates to</li> </ul>

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			Work in progress section
1.0.0	27/10/2016	ITS	First Release

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