



---

# Interface Specifications

## HKEX Orion Central Gateway - Securities Market (OCG-C)

### FIX Trading Protocol

---

Version 3.42  
~~23 September 2021~~ 19 July 2023

© Copyright 20213 HKEX  
All Rights Reserved

# Table of Contents

<b>1. Document Control .....</b>	<b>96</b>
1.1 Change History .....	96
<b>2. Introduction.....</b>	<b>118</b>
<b>3. Connectivity.....</b>	<b>129</b>
3.1 Session.....	129
3.2 Comp ID.....	129
3.3 IP Address and Port Numbers.....	129
3.4 Encryption .....	129
3.5 Password .....	1310
3.6 Change Password .....	1310
3.7 Failure and Recovery .....	1310
<b>4. Session Management.....</b>	<b>1411</b>
4.1 Establishing a FIX Session .....	1411
4.2 Message Sequence Numbers .....	1411
4.3 Heart Beat and Test Request.....	1512
4.4 Terminating a FIX Session .....	1512
4.5 Re-establishing a FIX Session .....	1512
4.6 Sequence Reset .....	1613
4.6.1 During a Session .....	1613
4.6.2 When starting a new Session .....	1613
4.6.2.1 Reset Initiated by the Client .....	1613
4.6.2.2 Reset Initiated by the OCG-C.....	1613
4.7 Fault Tolerance .....	1613
4.8 Checksum Validation .....	1714
<b>5. Recovery.....</b>	<b>1815</b>
5.1 General Message Recovery .....	1815
5.2 Resend Request.....	1815
5.3 Logon Message Processing – Next Expected Message Sequence .....	1815
5.4 Possible Duplicates .....	1916
5.5 Possible Resends .....	1916
5.5.1 Client Initiated Messages .....	1916
5.5.2 OCG-C Initiated Messages.....	1916
5.6 Gap Fills .....	1916
5.7 Transmission of Missed Messages.....	2017
<b>6. Service Description .....</b>	<b>2118</b>
6.1 Data Types .....	2118
6.2 Security Identification .....	2118
6.3 Party Identification .....	2118
6.4 Text Field .....	2219
6.5 Order Handling .....	2219
6.5.1 Order Types.....	2219
6.5.2 Validity Types .....	2219
6.5.3 Order, Quote, Trade and Execution Identifiers.....	2219
6.5.3.1 Client Order ID.....	2219
6.5.3.2 Quote Bid ID, Quote Offer ID and Quote Message ID .....	2219
6.5.3.3 Trade Report ID .....	2320
6.5.3.4 Order ID.....	2320

6.5.3.5	Trade ID	2320
6.5.3.6	Execution ID	2320
6.5.4	Order Submission	2320
6.5.4.1	Message Flow – New Order	2421
6.5.4.2	Message Flow – New Order – Aggressive SMP	2522
6.5.4.3	Message Flow – New Order – Passive SMP	2623
6.5.5	Cancellations	2623
6.5.5.1	Message Flow – Cancel Request	2724
6.5.6	Mass Cancellation	2724
6.5.6.1	Message Flow – Mass Cancel Request	2926
6.5.7	On Behalf Of (OBO) Cancellations	2926
6.5.7.1	OBO Cancel Order	2926
6.5.7.2	Message Flow – OBO Cancel Request	3027
6.5.7.3	OBO Mass Order Cancellation	3027
6.5.7.4	Message Flow – OBO Mass Cancel Request	3128
6.5.8	Amending an Order	3229
6.5.8.1	Message Flow – Amend Request – No Price Change + No Quantity Increase	3330
6.5.8.2	Message Flow – Amend Request – Change Price / Increase Quantity	3431
6.5.8.3	Message Flow – Amend Request – Aggressive SMP	3532
6.5.8.4	Message Flow – Amend Request – Passive SMP	3633
6.5.9	Cancel Auto-matched Trades	3633
6.5.10	Execution Reports	3734
6.5.11	Order Status	3734
6.6	Quote Handling	3835
6.6.1	Acknowledgement	3835
6.6.2	Execution	3835
6.6.3	Updating a Quote	3835
6.6.4	Message Flow	3936
6.6.5	Cancelling a Quote	4743
6.6.5.1	Message Flow	4844
6.7	Trade Report Handling	4945
6.7.1	Trade Acknowledgement	4945
6.7.1.1	Message Flow	5046
6.7.2	Trade Cancel	5046
6.7.3	Trade Cancel Acknowledgement	5046
6.7.3.1	Message Flow	5147
6.7.4	BCAN Field Submission by Purchasing Side	5147
6.7.5	BCAN Field Submission Acknowledgement	5147
6.7.5.1	Message Flow	5248
6.8	Odd Lot/Special Lot Order Handling	5248
6.8.1	Order Submission	5349
6.8.1.1	Message Flow – New Odd lot/Special lot Order	5349
6.8.2	Order Cancellation	5349
6.8.2.1	Message Flow – Cancel Request	5450
6.8.3	Order Amendment	5450
6.8.4	Trade Request	5450
6.8.4.1	Message Flow – Trade Request	5652
6.9	Message Rejection	5652
6.9.1	Session Level Reject	5652
6.9.2	Business Message Reject	5652
6.10	Cancel On Disconnect	5753
6.11	Message Rate Throttling	5753
6.12	Party Entitlements	5753
6.13	Self-matching Prevention	5853
6.13.1	SMP Handling for Order	5854
6.13.2	SMP Handling for Quote	5854
<b>7.</b>	<b>Message Definitions</b>	<b>6056</b>
7.1	Supported Message Types	6056

7.2	In-bound Messages .....	6157
7.3	Out-bound Messages.....	6258
7.4	Message Header .....	6258
7.5	Message Trailer .....	6359
7.6	Administrative Messages.....	6359
7.6.1	Logon (A).....	6359
7.6.2	Logout (5).....	6460
7.6.3	Heartbeat (0).....	6561
7.6.4	Test Request (1) .....	6561
7.6.5	Resend Request (2) .....	6561
7.6.6	Reject (3) .....	6662
7.6.7	Sequence Reset (4).....	6763
7.7	Business Messages – Order Handling.....	6864
7.7.1	New Board Lot Order – Single (D) .....	6864
7.7.2	New Odd Lot/Special Lot Order – Single (D) .....	7066
7.7.3	Order Cancel Replace Request (G) .....	7268
7.7.4	Order Cancel Request (F) .....	7470
7.7.5	Mass Cancel Request (q) .....	7571
7.7.6	On Behalf Of Cancels.....	7672
7.7.6.1	OBO Cancel Request (F).....	7672
7.7.6.2	OBO Mass Cancel (q) .....	7874
7.7.7	Execution Report (8) .....	8076
7.7.7.1	Order Accepted .....	8076
7.7.7.2	Order Rejected .....	8278
7.7.7.3	Order Cancelled.....	8480
7.7.7.4	Order Cancelled – Unsolicited .....	8682
7.7.7.5	Order Expired .....	8884
7.7.7.6	OBO Cancel.....	9086
7.7.7.7	Order Replaced.....	9288
7.7.7.8	Trade (Board lot Order Executed) .....	9490
7.7.7.9	Trade (Auto-matched ) Cancelled.....	9793
7.7.7.10	Trade (Odd lot/Special lot Order Executed) .....	9995
7.7.7.11	Trade (Semi-auto-matched) Cancelled .....	10197
7.7.8	Cancel Reject (9) .....	10399
7.7.9	Order Mass Cancel Report (r) .....	105101
7.8	Business Messages – Quote Handling .....	106102
7.8.1	Quote (S) .....	106102
7.8.2	Quote Cancel (Z).....	108104
7.8.3	Quote Status Report (AI) .....	109105
7.9	Business Messages – Trade Handling .....	112408
7.9.1	Trade Capture Report – Off Exchange Trade .....	112408
7.9.1.1	New (AE).....	112408
7.9.1.2	Cancel (AE) .....	115411
7.9.1.3	New (AE) – BCAN Field Submission to Exchange by Purchasing Counterparty .....	116412
7.9.2	Trade Capture Report – Semi-automatic Odd lot/Special lot Trade .....	118114
7.9.2.1	New (AE).....	118114
7.9.3	Trade Capture – Confirmation/Acknowledgement.....	120116
7.9.3.1	Trade Accepted (AE) – Off Exchange Trade .....	120116
7.9.3.2	Trade Accepted (AE) – Semi-automatic Odd lot/Special lot Trade .....	123119
7.9.3.3	Trade Cancelled (AE) – Off Exchange Trade .....	125121
7.9.3.4	Trade Cancelled (AE) – Semi-automatic Odd lot/Special lot Trade .....	127123
7.9.3.5	Trade Capture Report Ack (AR) .....	128124
7.10	Entitlements .....	130126
7.10.1	Party Entitlement Request (CU) .....	130126
7.10.2	Party Entitlement Report (CV) .....	130126
7.11	Infrastructure .....	134130
7.11.1	Business Message Reject (j) .....	134130
7.11.2	User Request (BE) .....	134130
7.11.3	User Response (BF) .....	135131

<b>8. Data Dictionary</b>	<b>136132</b>
8.1 Session Level	136132
8.2 Business Level	141137
<b>Appendices</b>	<b>153149</b>
<b>A. Password Policy</b>	<b>154150</b>
<b>1. Document Control</b>	<b>6</b>
1.1 Change History	6
<b>2. Introduction</b>	<b>8</b>
<b>3. Connectivity</b>	<b>9</b>
3.1 Session	9
3.2 Comp ID	9
3.3 IP Address and Port Numbers	9
3.4 Encryption	9
3.5 Password	10
3.6 Change Password	10
3.7 Failure and Recovery	10
<b>4. Session Management</b>	<b>11</b>
4.1 Establishing a FIX Session	11
4.2 Message Sequence Numbers	11
4.3 Heart Beat and Test Request	12
4.4 Terminating a FIX Session	12
4.5 Re-establishing a FIX Session	12
4.6 Sequence Reset	13
4.6.1 During a Session	13
4.6.2 When starting a new Session	13
4.6.2.1 Reset Initiated by the Client	13
4.6.2.2 Reset Initiated by the OCG-C	13
4.7 Fault Tolerance	13
4.8 Checksum Validation	14
<b>5. Recovery</b>	<b>15</b>
5.1 General Message Recovery	15
5.2 Resend Request	15
5.3 Logon Message Processing – Next Expected Message Sequence	15
5.4 Possible Duplicates	16
5.5 Possible Resends	16
5.5.1 Client Initiated Messages	16
5.5.2 OCG-C Initiated Messages	16
5.6 Gap Fills	16
5.7 Transmission of Missed Messages	17
<b>6. Service Description</b>	<b>18</b>
6.1 Data Types	18
6.2 Security Identification	18
6.3 Party Identification	18
6.4 Text Field	19
6.5 Order Handling	19
6.5.1 Order Types	19
6.5.2 Validity Types	19
6.5.3 Order, Quote, Trade and Execution Identifiers	19
6.5.3.1 Client Order ID	19
6.5.3.2 Quote Bid ID, Quote Offer ID and Quote Message ID	20

6.5.3.3	Trade Report ID	20
6.5.3.4	Order ID	20
6.5.3.5	Trade ID	20
6.5.3.6	Execution ID	20
6.5.4	Order Submission	20
6.5.4.1	Message Flow – New Order	21
6.5.5	Cancellations	21
6.5.5.1	Message Flow – Cancel Request	22
6.5.6	Mass Cancellation	22
6.5.6.1	Message Flow – Mass Cancel Request	24
6.5.7	On Behalf Of (OBO) Cancellations	24
6.5.7.1	OBO Cancel Order	24
6.5.7.2	Message Flow – OBO Cancel Request	25
6.5.7.3	OBO Mass Order Cancellation	25
6.5.7.4	Message Flow – OBO Mass Cancel Request	26
6.5.8	Amending an Order	27
6.5.8.1	Message Flow – Amend Request – No Price Change + No Quantity Increase	28
6.5.8.2	Message Flow – Amend Request – Change Price / Increase Quantity	29
6.5.9	Cancel Auto-matched Trades	29
6.5.10	Execution Reports	30
6.5.11	Order Status	31
6.6	Quote Handling	31
6.6.1	Acknowledgement	31
6.6.2	Execution	31
6.6.3	Updating a Quote	31
6.6.4	Message Flow	32
6.6.5	Cancelling a Quote	35
6.6.5.1	Message Flow	36
6.7	Trade Report Handling	37
6.7.1	Trade Acknowledgement	37
6.7.1.1	Message Flow	38
6.7.2	Trade Cancel	38
6.7.3	Trade Cancel Acknowledgement	38
6.7.3.1	Message Flow	39
6.7.4	BCAN Field Submission by Purchasing Side	39
6.7.5	BCAN Field Submission Acknowledgement	39
6.7.5.1	Message Flow	40
6.8	Odd Lot/Special Lot Order Handling	40
6.8.1	Order Submission	41
6.8.1.1	Message Flow – New Odd lot/Special lot Order	41
6.8.2	Order Cancellation	41
6.8.2.1	Message Flow – Cancel Request	42
6.8.3	Order Amendment	42
6.8.4	Trade Request	42
6.8.4.1	Message Flow – Trade Request	44
6.9	Message Rejection	44
6.9.1	Session Level Reject	44
6.9.2	Business Message Reject	44
6.10	Cancel On Disconnect	45
6.11	Message Rate Throttling	45
6.12	Party Entitlements	45
<b>7</b>	<b>Message Definitions</b>	<b>46</b>
7.1	Supported Message Types	46
7.2	In-bound Messages	47
7.3	Out-bound Messages	48
7.4	Message Header	48
7.5	Message Trailer	49
7.6	Administrative Messages	49

7.6.1—Logon (A).....	49
7.6.2—Logout (5).....	50
7.6.3—Heartbeat (0).....	50
7.6.4—Test Request (1).....	50
7.6.5—Resend Request (2).....	51
7.6.6—Reject (3).....	51
7.6.7—Sequence Reset (4).....	52
7.7—Business Messages—Order Handling.....	53
7.7.1—New Board Lot Order—Single (D).....	53
7.7.2—New Odd Lot/Special Lot Order—Single (D).....	55
7.7.3—Order Cancel Replace Request (G).....	57
7.7.4—Order Cancel Request (F).....	59
7.7.5—Mass Cancel Request (q).....	60
7.7.6—On Behalf Of Cancels.....	62
7.7.6.1—OBO Cancel Request (F).....	62
7.7.6.2—OBO Mass Cancel (q).....	63
7.7.7—Execution Report (8).....	65
7.7.7.1—Order Accepted.....	65
7.7.7.2—Order Rejected.....	67
7.7.7.3—Order Cancelled.....	69
7.7.7.4—Order Cancelled—Unsolicited.....	71
7.7.7.5—Order Expired.....	73
7.7.7.6—OBO Cancel.....	75
7.7.7.7—Order Replaced.....	77
7.7.7.8—Trade (Board lot Order Executed).....	79
7.7.7.9—Trade (Auto matched) Cancelled.....	82
7.7.7.10—Trade (Odd lot/Special lot Order Executed).....	84
7.7.7.11—Trade (Semi-auto matched) Cancelled.....	86
7.7.8—Cancel Reject (9).....	88
7.7.9—Order Mass Cancel Report (r).....	90
7.8—Business Messages—Quote Handling.....	91
7.8.1—Quote (S).....	91
7.8.2—Quote Cancel (Z).....	93
7.8.3—Quote Status Report (AI).....	94
7.9—Business Messages—Trade Handling.....	96
7.9.1—Trade Capture Report—Off Exchange Trade.....	96
7.9.1.1—New (AE).....	96
7.9.1.2—Cancel (AE).....	99
7.9.1.3—New (AE)—BCAN Field Submission to Exchange by Purchasing Counterparty.....	101
7.9.2—Trade Capture Report—Semi-automatic Odd lot/Special lot Trade.....	102
7.9.2.1—New (AE).....	102
7.9.3—Trade Capture—Confirmation/Acknowledgement.....	105
7.9.3.1—Trade Accepted (AE)—Off Exchange Trade.....	105
7.9.3.2—Trade Accepted (AE)—Semi-automatic Odd lot/Special lot Trade.....	107
7.9.3.3—Trade Cancelled (AE)—Off Exchange Trade.....	109
7.9.3.4—Trade Cancelled (AE)—Semi-automatic Odd lot/Special lot Trade.....	111
7.9.3.5—Trade Capture Report Ack (AR).....	112
7.10—Entitlements.....	114
7.10.1—Party Entitlement Request (CU).....	114
7.10.2—Party Entitlement Report (CV).....	115
7.11—Infrastructure.....	118
7.11.1—Business Message Reject (j).....	118
7.11.2—User Request (BE).....	118
7.11.3—User Response (BF).....	119
<b>8.—Data Dictionary.....</b>	<b>120</b>
8.1—Session Level.....	120
8.2—Business Level.....	125

---

Appendices .....	137
A. Password Policy .....	138



## 1. Document Control

### 1.1 Change History

Version Number	Issue Date	Section Number	Status
1.0	31 October 2012	All	First Version
1.1	21 December 2012	<ul style="list-style-type: none"> <li>▪ 3.2 – Comp ID of HKEX</li> <li>▪ 3.6 – Password Policy</li> <li>▪ 5.7 – Transmission of missed messages</li> <li>▪ 7.7.6.4 – Order Cancelled – Unsolicited</li> <li>▪ 7.7.6.9 - Auto-matched Trade Cancelled</li> <li>▪ 7.7.7 – Cancel Reject</li> <li>▪ 7.9.1 – Trade Capture Report</li> <li>▪ 7.9.2 – Trade Capture – Confirmation/Acknowledgement</li> <li>▪ 7.10.2 – Party Entitlement Report</li> <li>▪ 8 – Data Dictionary</li> <li>▪ Appendix A – Password Policy</li> </ul>	Revised Version
1.2	25 March 2013	<ul style="list-style-type: none"> <li>▪ 3.4 – Encryption</li> <li>▪ 6.4 – Text Field</li> <li>▪ 6.5.3.3 – Trade Report ID</li> <li>▪ 6.5.8 – Amending an Order</li> <li>▪ 6.9 – Cancel on Disconnect</li> <li>▪ 7 – Message Definitions</li> <li>▪ 8 – Data Dictionary</li> </ul>	Revised Version
1.3	28 June 2013	<ul style="list-style-type: none"> <li>▪ 3.6 - Change Password</li> <li>▪ 6.2 – Security Identification</li> <li>▪ 6.3 – Party Identification</li> <li>▪ 6.5.3.1 – Client Order ID</li> <li>▪ 6.5.3.2 – Quote Bid, Quote Offer ID and Quote Message ID</li> <li>▪ 6.5.3.3 – Trade Report ID</li> <li>▪ 6.5.8 – Amending an Order</li> <li>▪ 6.6.4 - Message Flow</li> <li>▪ 7.7.1 – New Order – Single (D)</li> <li>▪ 7.7.2 – Order Cancel Replace Request (G)</li> <li>▪ 7.7.5.2 – OBO Mass Cancel (q)</li> <li>▪ 7.7.6.8 – Trade (Order Executed)</li> <li>▪ 7.7.7 – Cancel Reject (9)</li> <li>▪ 7.8.2 – Quote Cancel (Z)</li> <li>▪ 7.9.2.3 – Trade Report Ack (AR)</li> <li>▪ 8.2 - Business Level</li> </ul>	Revised Version
1.4	2 December 2013	Clarification of message fields and message handling: <ul style="list-style-type: none"> <li>▪ Section 3.4 - Encryption</li> <li>▪ Section 6 – Service Description</li> <li>▪ Section 7 – Message Format</li> <li>▪ Section 8 – Data Dictionary</li> </ul>	Revised Version

Version Number	Issue Date	Section Number	Status
1.5	20 June 2014	Odd lot/Special Lot functions added: <ul style="list-style-type: none"> <li>▪ 6.8 – Odd lot/Special lot Order Handling</li> <li>▪ 7.7.2 – New Odd lot/Special Lot Order</li> <li>▪ 7.7.7.10 – Trade (Odd lot/Special lot Order Executed)</li> <li>▪ 7.7.10.11 – Trade (Semi-auto-matched) Cancelled</li> <li>▪ 7.9 – Trade Capture Report – Semi-automatic Submission, Confirmation/Ack, and Cancellation</li> <li>▪ Data Dictionary</li> </ul>	
1.6	23 July 2015	Update (description only) for AMS Volatility Control Mechanism (VCM): <ul style="list-style-type: none"> <li>▪ 7.7.7.4 – Order Cancelled – Unsolicited</li> <li>▪ 8.2 – Business Level</li> </ul>	Revised Version
2.0	12 January 2017	Update for OTP-C	Revised Version
2.1	12 July 2017	7.7.7.4 Order Cancelled – Unsolicited Keep same message format as for AMS (no RejectText(1328) field).	Revised Version
2.2	29 June 2018	<ul style="list-style-type: none"> <li>• 6.5.3.4 Order ID</li> </ul> Update description for OBO Cancel due to obsolescence of terminal & OG devices. <ul style="list-style-type: none"> <li>• 6.5.7.3 OBO Mass Order Cancellation</li> </ul> Define the proper condition for the usage of OBO Mass Order Cancellation.	Revised Version
3.0	28 December 2020	Update for CMG migration: <ul style="list-style-type: none"> <li>• Global terminology change of OCG to CMG</li> <li>• Support RSA Padding scheme OAEP for password encryption in the Logon message</li> </ul>	Revised Version
3.1	13 August 2021	<ul style="list-style-type: none"> <li>• Update messages to provide HK Investor ID (BCAN Field)                             <ul style="list-style-type: none"> <li>○ New Order (Board lot or Odd lot)</li> <li>○ Quote</li> <li>○ Manual Trade</li> </ul> </li> <li>• Provide Aggressive/Passive Indicator for auto-matched trades</li> <li>• Increase the transaction time precision to microsecond</li> </ul>	Revised Version
3.1	23 September 2021	<ul style="list-style-type: none"> <li>• Change the name CMG to OCG-C</li> </ul>	Revised Version
<a href="#">3.2</a>	<a href="#">19 July 2023</a>	<a href="#">Add Self-matching Prevention (SMP) functionality</a>	<a href="#">Revised Version</a>

---

## 2. Introduction

This document describes the FIX interface protocol of the HKEX Orion Central Gateway - Securities Market (“OCG-C”), the market access platform for the Securities market.

The OCG-C provides a centralized, highly resilient, low latency, flexible and scalable platform for all Exchange Participants (EPs) to access HKEX securities trading system (“OTP-C”) for order, quote and trade management.

The terminology used, message format, message flow and event models described throughout this document are as per FIX 5.0 SP2 protocol specifications with HKEX specific extension packs.

---

HKEX and/or its subsidiaries endeavour to ensure the accuracy and reliability of the information provided, but do not guarantee its accuracy and reliability and accept no liability (whether in tort or contract or otherwise) for any loss or damage arising from any inaccuracy or omission or from any decision, action or non-action based on or in reliance upon information contained in this document.

No part of this document may be copied, distributed, transmitted, transcribed, stored in a retrieval system, translated into any human or computer language, or disclosed to third parties without written permission from HKEX.

HKEX reserves the right to amend any details in this document at any time, without notice.

## 3. Connectivity

### 3.1 Session

Exchange Participants connect their broker supplied systems (“BSS” or “Client”) to the OCG-C via subscription to one or more OCG-C “Session”. This connection is a standard TCP/IP point-to-point connection.

EPs are expected to pre-register at least one IP address using which a client from their end would establish a Trading Session with the OCG-C. EPs can optionally pre-register up to 3 additional IP addresses for each Session, for backup purposes.

A session can be established from only one of the pre-registered IP addresses for that session. EPs can pre-register any given IP address for more than one session such that the same BSS can be used to connect to OCG-C through one or more sessions.

### 3.2 Comp ID

The client should use the Comp ID provided by HKEX for each session in order to connect to the OCG-C. A single client may have multiple connections to the OCG-C i.e., multiple FIX sessions, each with its own Comp ID.

The messages sent to the OCG-C should contain the Comp ID assigned to the client in the field Comp ID in the header section.

Comp ID of the OCG-C, as set for TargetCompID of the client initiated messages & SenderCompID of the OCG-C initiated messages is “HKEXCO”.

### 3.3 IP Address and Port Numbers

A FIX client is expected to hunt for a connection point (IP Address and Port Number) within a pool of connection points provided by HKEX for the following OCG-C service.

At the time of the first logon for the day, the client is expected to attempt to connect to the first connection point within the pool. If this first attempt is not succeeded or if the connection is accepted but abruptly dropped by the OCG-C without any message before the Logon message can be exchanged, then the client is expected to continue attempting the connection points in the pool one by one in sequence until a successful connection and a FIX session can be established. If a session could not be established having attempted all the connection points in the pool, the client is expected to cycle back to the first connection point then and retry.

During a reconnection within the same day the client can attempt to connect to the identified connection point (IP and Port) through the connection hunting process in order to re-establish the session, before moving to the other connection point.

HKEX will provide this pool of IP address and Port numbers through a separate medium.

### 3.4 Encryption

The OCG-C interface protocol expects password and new password be encrypted when they are sent in the Logon message from the client to the OCG-C.

To encrypt the password, the client is expected to use a 2048-bit RSA ([http://en.wikipedia.org/wiki/RSA\\_\(algorithm\)](http://en.wikipedia.org/wiki/RSA_(algorithm))) public key circulated (through a different medium) by HKEX. The binary output of the RSA encryption must be represented in Big Endian (Padding scheme is PKCS #1 or OAEP) and then converted to an alphanumeric value by means

of standard base-64 encoding (<http://en.wikipedia.org/wiki/Base64>) when communicating with the OCG-C.

HKEX may periodically renew the public key used by the client and after a public key renewal; a client may continue to use the old key for a limited grace period. Both keys may be used during this time.

### 3.5 Password

The client should specify their password in the EncryptedPassword (1402) field of the Logon (35=A) message. This password must be in encrypted form.

The status of the password (i.e. whether it is accepted or rejected) will be specified in the SessionStatus (1409) field of the Logon (35=A) sent by the OCG-C to confirm the establishment of a FIX connection.

Repeated failures in password validation may force HKEX to lock the client; the EP is expected to contact HKEX to unlock the client and reset the password.

### 3.6 Change Password

Each new Comp ID will be assigned a password on registration. The client is expected to change the password upon first logon whenever a password is (re)issued by HKEX.

Password change request can be made together with Logon (35=A) request. The client should specify the encrypted new password in the EncryptedNewPassword (1404) field and the current encrypted password in the EncryptedPassword (1402) field.

The new password must comply with HKEX password policy (refer to [Appendix A](#)). The status of the new password (i.e. whether it is accepted or rejected) will be specified in the SessionStatus (1409) field of the Logon sent by the OCG-C to confirm the establishment of a FIX connection. The new password will, if accepted, be effective for subsequent logins.

The client is required to change the password periodically. HKEX will set expiry duration for the password without exemption; a reminder will be sent indicating that the password is to about to expire, through the Text (58) field in the Logon (35=A) response. Once the password has expired for a client, that client will not be allowed to logon, and the EP is required to contact HKEX to unlock and reset the client password.

### 3.7 Failure and Recovery

The system has been designed with fault tolerance and disaster recovery technology that ensures that trading should continue in the unlikely event of a process or server outage.

If the client is unexpectedly disconnected, it should attempt to re-connect to the OCG-C before attempting to follow the connection mechanism described in [Section 3.3](#).

## 4. Session Management

### 4.1 Establishing a FIX Session

Each client will use one of the IP address and port sets provided to establish a TCP/IP connection with the OCG-C. The client will initiate a FIX session at the start of each trading day by sending the Logon (35=A) message.

A client must identify itself by providing its Comp ID in SenderCompID (49) field. The OCG-C will validate this SenderCompID, password and IP address of the client.

Once the client is authenticated, the OCG-C will respond with a Logon (35=A) message with SessionStatus (1409) set to 0 = Session Active. If the client's Logon message included the field NewEncryptedPassword and the client is authenticated, the OCG-C will respond with a Logon message with SessionStatus (1409) set to 1 = Session Password Changed.

The client must wait for the Logon from the OCG-C before sending additional messages. If additional messages are received from the client before the exchange of Logon messages, the TCP/IP connection with the client will be disconnected.

If a logon attempt fails for the following reasons, the OCG-C will send a Logout (35=5) or a Reject (35=3) and then terminate the session:

- Password failure
- Comp ID is locked
- Logon is not permitted during this time

For all other reasons, including the following, the OCG-C will terminate the session without sending a Logout or Reject:

- Invalid Comp ID or IP address

If during a logon of a client (i.e., a Comp ID), the OCG-C receives a second connection attempt while a valid FIX session is already underway for that same Comp ID, the OCG-C will terminate both connections without sending a Logout or Reject message.

Inbound message sequence number will not be incremented if the connection is abruptly terminated due to the logon failure.

If a session level failure occurs due to a message sent by the client which contains a sequence number that is less than what is expected and the PossDup (43) is not set to Y = Yes, then the OCG-C will send a Logout message and terminate the FIX connection. In this scenario the inbound sequence number will not be incremented.

If the OCG-C does not respond to the session initiation (client initiated Logon message), the client is expected to wait for a time period of **60 seconds** prior to terminating the connection. The client is expected to retry session initiation after an elapsed time period of **60 seconds**.

If a client is disconnected abruptly or via a Logout message (35=5) from the OCG-C, the client is expected to wait for a time period of **10 seconds** prior to reconnecting to the OCG-C.

### 4.2 Message Sequence Numbers

As outlined in the FIX protocol, the client and OCG-C will each maintain a separate and independent set of incoming and outgoing message sequence numbers. Sequence numbers should be initialized to 1 (one) at the start of the day and be incremented throughout the session. Either side of a FIX session will track the:

- NextExpectedMsgSeqNum (789) (starting at 1)
- Next To Be Sent Message Sequence number (starting at 1); with respect to the contra-party.

Monitoring sequence numbers will enable parties to identify and react to missed messages and to gracefully synchronize applications when reconnecting during a FIX session.

Any message sent by either side of a FIX session will increment the sequence number unless explicitly specified for a given message type.

If any message sent by one side of a FIX session contains a sequence number that is LESS than the NextExpectedMsgSeqNum (789) then the other side of this session is expected to send a Logout message and terminate the FIX connection immediately, unless the PossDup flag is set to Y = Yes

A FIX session will not be continued to the next trading day. Both sides are expected to initialize (reset to 1) the sequence numbers at the start of each day. At the start of each trading day if the client starts with a sequence number greater than 1 then the OCG-C will terminate the session immediately without any further exchange of messages.

### 4.3 Heart Beat and Test Request

The client and the OCG-C will use the Heartbeat (35=0) message to monitor the communication line during periods of inactivity and to verify that the interfaces at each end are available.

The heartbeat interval as in HeartBtInt (108) is recommended to be set as **20 Seconds**.

The OCG-C will send a Heartbeat anytime it has not transmitted a message for the heartbeat interval. The client is expected to employ the same logic.

If the OCG-C detects inactivity for a period longer than **3 heartbeat intervals**, it will send a Test Request message to force a Heartbeat from the client. If a response to the Test Request (35=1) is not received within a reasonable transmission time (recommended being an elapsed time equivalent to 3 heartbeat intervals), the OCG-C will send a Logout (35=5) and break the TCP/IP connection with the client. The client is expected to employ similar logic if inactivity is detected on the part of the OCG-C.

### 4.4 Terminating a FIX Session

Session termination can be initiated by either the OCG-C or the client by sending a Logout message. Upon receiving the Logout request, the contra party will respond with a Logout message signifying a Logout reply. Upon receiving the Logout reply, the receiving party will terminate the connection.

If the contra-party does not reply with either a Resend Request or a Logout reply, the Logout initiator should wait for **60 seconds** prior to terminating the connection.

The client is expected to terminate each FIX connection at the end of each trading day before the OCG-C service is shut down. However, all open FIX connections will be terminated (a Logout message will be sent) by the OCG-C when its service is shut down. Under exceptional circumstances the OCG-C may initiate the termination of a connection during the trading day by sending the Logout message.

If, during the exchange of Logout messages, the client or the OCG-C detects a sequence gap, it should send a Resend Request.

### 4.5 Re-establishing a FIX Session

If a FIX connection is terminated during the trading day it may be re-established via an exchange of Logon messages.

Once the FIX session is re-established, the message sequence numbers will continue from the last message successfully transmitted prior to the termination.

## 4.6 Sequence Reset

The sequence reset could be done in two modes;

### 1. Gap-fill mode:

Gap-fill mode is expected to be used by one side when skipping session level messages which can be ignored by the other side.

### 2. Reset mode:

Reset mode is used only in exceptional scenarios to indicate a reset in the session's starting sequence number. This mode can ONLY be used by the OCG-C. Client initiated resets would be rejected by the OCG-C.

Following scenarios exist:

### 4.6.1 During a Session

The OCG-C and the client may use the Sequence Reset (35=4) message in Gap Fill mode if either side wishes to increase the expected incoming sequence number of the other party.

The OCG-C may also use the Sequence Reset message in Sequence Reset mode if it wishes to increase the expected incoming sequence number of the other party. The Sequence Reset mode should only be used to recover from an emergency situation. It should not be relied upon as a regular practice.

### 4.6.2 When starting a new Session

#### 4.6.2.1 Reset Initiated by the Client

Reset sequence (reset to 1) through the Logon Message will not be facilitated by the OCG-C. In order to reset the sequence (reset to 1), the client should manually inform the HKEX Operations Desk.

#### 4.6.2.2 Reset Initiated by the OCG-C

The system has been designed with fault tolerance and disaster recovery technology that should ensure that the OCG-C retains its incoming and outgoing message sequence numbers for each client in the unlikely event of an outage. However, the client is required to support a manual request by HKEX to initialize sequence numbers prior to the next login attempt.

## 4.7 Fault Tolerance

After a failure on client side or on OCG-C side, the client is expected to be able to continue the same session.

In case of a catastrophic scenario, the OCG-C will restart from a higher sequence number considering the previous session or may start from sequence number 1.

If the sequence number is reset to 1 by the OCG-C, all previous messages will not be available for the client side.

The client and the OCG-C are expected to negotiate on the NextExpectedMsgSeqNum (789) and Next To Be Received Sequence number through an alternate medium prior to initiating the new session (Manually setting the sequence number for both ends after having a direct communication with the client).



---

## 4.8 Checksum Validation

The OCG-C performs a checksum validation on all incoming messages into the input services. Incoming messages that fail the checksum validation will be rejected and the connection will be dropped by the OCG-C without sending a logout.

Conversely, in case of a checksum validation failure, the client is expected to drop the connection and take any appropriate action before reconnecting.

Messages that fail the checksum validation should not be processed.

## 5. Recovery

### 5.1 General Message Recovery

- A gap is identified when an incoming message sequence number is found to be greater than NextExpectedMsgSeqNum (789).
- The Resend Request will indicate the BeginSeqNo (7) and EndSeqNo (16) of the message gap identified and when replying to a Resend Request, the messages are expected to be sent strictly honouring the sequence.
- If messages are received outside of the BeginSeqNo and EndSeqNo, then the recovering party is expected to queue those messages until the gap is recovered.

During the message recovery process, the recovering party will increment the *Next Expected Sequence* number accordingly based on the messages received. If messages applicable to the message gap are received out of sequence then the recovering party will drop these messages.

- The party requesting the Resend Request can specify "0" in the EndSeqNo to indicate that they expect the sender to send ALL messages starting from the BeginSeqNo.

In this scenario, if the recovering party receives messages with a sequence greater than the *BeginSeqNo*, out of sequence, the message will be ignored.

- Administrative messages such as Sequence Reset, Heartbeat and Test Request which can be considered irrelevant for a retransmission could be skipped using the Sequence Reset message in gap-fill mode.

Note that the OCG-C expects the client to skip Sequence Reset messages when replying to a Resend Request at all times.

- When resending messages, the OCG-C would use either PossDup or PossResend flag to indicate whether the messages were retransmitted earlier.

If PossDup flag is set to Y = Yes, it indicates that the same message with the given sequence number with the same business content may have been transmitted earlier.

In the case where PossResend flag is set to Y = Yes, it indicates that the same business content may have been transmitted previously but under the different message sequence number. In this case business contents needs to be processed to identify the resend. For example, in Execution Reports the ExecID (17) may be used for this purpose.

### 5.2 Resend Request

The client may use the Resend Request message to recover any lost messages. This message may be used in one of three modes:

- (i) To request a single message. The BeginSeqNo and EndSeqNo should be the same.
- (ii) To request a specific range of messages. The BeginSeqNo should be the first message of the range and the EndSeqNo should be the last of the range.
- (iii) To request all messages after a particular message. The BeginSeqNo should be the sequence number immediately after that of the last processed message and the EndSeqNo should be zero (0).

### 5.3 Logon Message Processing – Next Expected Message Sequence

The session initiator should supply the NextExpectedMsgSeqNum (789) the value next expected from the session acceptor in MsgSeqNum (34). The session acceptor should validate the logon request including that NextExpectedMsgSeqNum (789) does not represent a gap. It then constructs its logon response with NextExpectedMsgSeqNum (789) containing the value next expected from the session initiator in MsgSeqNum (34) having incremented the number above the logon request if that was the sequence expected.

The session initiator must wait until the logon response is received in order to submit application messages. Once the logon response is received, the initiator must validate that NextExpectedMsgSeqNum (789) does not represent a gap.

In case of gap detection from either party (lower than the next to be assigned sequence) recover all messages<sup>1</sup> from the last message delivered prior to the logon through the specified NextExpectedMsgSeqNum (789) sending them in order, then gap fill over the sequence number used in logon and proceed sending newly queued messages with a sequence number one higher than the original logon.

Neither side should generate a resend request based on MsgSeqNum (34) of the incoming Logon message but should expect any gaps to be filled automatically by following the Next Expected Sequence processing described above<sup>1</sup>.

Note that indicating the NextExpectedMsgSeqNum (789) in the Logon (35=A) is mandatory.

## 5.4 Possible Duplicates

The OCG-C handles possible duplicates according to the FIX protocol. The client and the OCG-C use the PossDupFlag (43) field to indicate that a message may have been previously transmitted with the same MsgSeqNum (34).

## 5.5 Possible Resends

### 5.5.1 Client Initiated Messages

The OCG-C does not handle possible resends for the client-initiated messages (e.g., New Order, Quote, etc.) and the message will be processed without considering the value in the PossResend (97) field. Any message with duplicate ClOrdID (11) will be rejected based on the Client Order ID uniqueness check and messages which conform to the uniqueness check will be processed as normal messages.

### 5.5.2 OCG-C Initiated Messages

The OCG-C may use the PossResend (97) field to indicate that an application message may have already been sent under a different MsgSeqNum (34). The client should validate the contents (e.g., ExecID (17)) of such a message against those of messages already received during the current trading day to determine whether the new message should be ignored or processed.

## 5.6 Gap Fills

The following messages are expected to be skipped using gap-fills when being retransmitted:

1. Logon
2. Logout
3. Heartbeat
4. Test Request

<sup>1</sup> During the period where the OCG-C is resending messages to the client, the OCG-C does not allow another Resend Request from the client. If a new Resend Request is received during this time, the OCG-C will terminate the session immediately without sending the Logout message.

5. Resent Request
6. Sequence Reset

All other messages are expected to be replayed within a retransmission.

## **5.7 Transmission of Missed Messages**

The Execution Report, Order Mass Cancel Report, Quote Status Report, Trade Capture Reports/Acks, Business Message Reject and Reject messages generated during a period when a client is disconnected from the OCG-C will be sent to the client when it next reconnects. In the unlikely event the disconnection was due to an outage of the OCG-C, Business Message Reject and Reject messages may not be retransmitted and the messages which will be retransmitted will include a PossResend (97) set to Y = Yes.

## 6. Service Description

### 6.1 Data Types

Data Types used are based on the published standard FIX specifications.

### 6.2 Security Identification

Instruments will be identified using the SecurityID (48) field. It is required to specify SecurityIDSource (22) as Exchange Symbol (8) and SecurityExchange (207) as XHKG (FIX exchange code for HKEX). Security ID (48) with leading zeroes will not be accepted.

### 6.3 Party Identification

Party Identification is defined as follows:

ID	Description	FIX Tag and Value
Broker ID <sup>1</sup>	Identifier of the member the interest is submitted under	PartyRole (452)=1 and PartyID (448)
Submitting Broker ID	Identifier of the entering member the interest is submitted under, if different from Broker ID mentioned above	PartyRole (452)=36 and PartyID (448)
Contra Broker ID	Identifier of the Contra member the interest is submitted under	PartyRole (452)=17 and PartyID (448)
BS User ID <sup>2</sup>	The location ID of the member as referred to by Broker ID or Submitting Broker ID	PartyRole (452)=75 and PartyID (448)
BCAN Field <sup>3</sup> (BCAN stands for Broker-to-Client Assigned Number)	Identifier for the client of the member that the interest is submitted under	PartyRole (452)=3 and PartyID (448)

Notes:

1. Any Broker ID with leading zeroes will be rejected
2. BS User ID if specified would be restricted to numeric digits only with possible range of values being 1 to 99,999,999; a value with leading zeroes will be rejected.
3. The BCAN Field should consist of a 6-alphanumeric CE number assigned by the SFC, a separator ".", followed by a BCAN which is a randomly assigned number not exceeding 10 digits. For example, if the CE number of a Relevant Regulated Intermediary and the BCAN assigned to the client are ABC123 and 0000002568 respectively, then "ABC123.2568" should be set out in the BCAN Field when submitting the order to SEHK. It should be noted that the BCAN Field would not be echoed back in any of the Execution Report or Trade Capture Report messages.

CE Number Format:

- 6 alphanumeric CE number

Separator Format:

- A full stop character, i.e. "."

BCAN Format:

- An integer of up to 10 digits that is randomly assigned number and ranges from 100 to 9,999,999,999. 0 to 99 are reserved.
- Leading zero is not allowed.
- Specific reserved BCAN values (after the relevant CE no.):

- 1 - sell only client
- 2 - aggregated order or aggregated off-exchange trade

## 6.4 Text Field

The Text (58) field sent in any business message from a client will be used as Broker Comment/Broker Reference field, and may not contain more than 10 characters; if the Text field contains more than this permitted number of characters, the additional characters will be truncated.

Additionally, this text field is expected to contain only printable characters excluding any punctuation mark.

## 6.5 Order Handling

### 6.5.1 Order Types

The client may submit the following order types:

Order Type	Description	FIX Tag and Value
Market	An order that will execute at the best available prices until it is fully filled. Any remainder will be expired.	OrderType (40) =1
Limit	An order that will execute at or better than the specified price. The remainder, if any, is added to the order book or expired in terms of its TimeInForce (59)	OrderType (40) =2

### 6.5.2 Validity Types

The client may submit the following validity types:

Validity Type	Description	FIX Tag and Value
Day	An order that will expire at the end of the day.	TimeInForce (59) = 0 (Default)
Immediate or Cancel (IOC)	An order that will be executed on receipt and the remainder, if any, immediately expired.	TimeInForce (59)= 3
Fill or Kill (FOK)	An order that will be fully executed on receipt or immediately expired	TimeInForce (59)= 4
At Crossing	An order submitted during an Auction	TimeInForce (59)= 9

### 6.5.3 Order, Quote, Trade and Execution Identifiers

#### 6.5.3.1 Client Order ID

The client must ensure each ClOrdID (11) to be unique per Submitting Broker ID as an identifier of the order. The client should comply with the FIX protocol and ensure uniqueness of Client Order IDs across all messages (e.g., New Order, Cancel Request, etc.) across trading days sent under a particular Submitting Broker ID, However during the initial launch (and until further notice) the uniqueness is required to be within a trading day and the contents of Client Order ID would be restricted to numeric digits only with possible range of values being 1 to 99,999,999. Client order IDs with leading zeroes will be rejected by OCG-C.

#### 6.5.3.2 Quote Bid ID, Quote Offer ID and Quote Message ID

The client must ensure BidID (390), OfferID (1867) and QuoteMsgID (1166) to be unique per Submitting Broker ID as an identifier of the quote. Like ClOrdID (11) the client should comply

with the FIX protocol and ensure uniqueness of these IDs across all messages sent under a particular Submitting Broker ID. Quote Bid ID, Quote Offer ID or Quote Message ID with leading zeroes will be rejected by OCG-C.

The client must, in terms of the FIX protocol, specify:

- BidID and OfferID when submitting a Quote
- QuoteMsgID when submitting a Quote Cancel

BidID, OfferID and QuoteMsgID will be treated the same as ClOrdID from the perspective of uniqueness, contents and restrictions.

### 6.5.3.3 Trade Report ID

The client must ensure each TradeReportID (571) to be unique per Submitting Broker ID as an identifier of the trade in the Trade Capture Reports sent by the client. Like ClOrdID (11) the client should comply with the FIX protocol and ensure uniqueness of Trade Report IDs sent in the Trade Capture Reports under a particular Submitting Broker ID.

A TradeReportID is required to be unique within a trading day and the contents of this ID would be restricted to numeric digits only with possible range of values being 1 to 99,999,999. However, TradeReportID need not be unique across all ClOrdID equivalent fields (such as BidID, OfferID, QuoteMsgID etc). Trade Report IDs with leading zeroes will be rejected by OCG-C.

### 6.5.3.4 Order ID

The OCG-C will use the OrderID (37) field of the Execution Report (35=8) to keep track of orders with the trading system.

In terms of the FIX protocol, unlike ClOrdID which requires a chaining through cancel/replace requests and cancel requests, the OrderID of an order will remain constant throughout its life. However with the OCG-C, when a cancel/replace request results in a successful cancel/replace order in the market, the replaced order will be assigned a new OrderID.

The client has the option to either specify the OrderID when submitting a Cancel Request or a Cancel/Replace Request or not. However, in the event where the client is submitting a Cancel Request on behalf of another OCG-C session, the OrderID must be specified in the Cancel Request message.

### 6.5.3.5 Trade ID

The OCG-C will use the TradeID (1003) field of the Trade Capture Report (35=AE) to identify a trade in the event that the client requests to cancel/reject reported off-exchange trade (subject to applicable rules).

### 6.5.3.6 Execution ID

The OCG-C will use the ExecID (17) field to affix a unique identifier for each Execution Report. ExecID value will be unique per trading day.

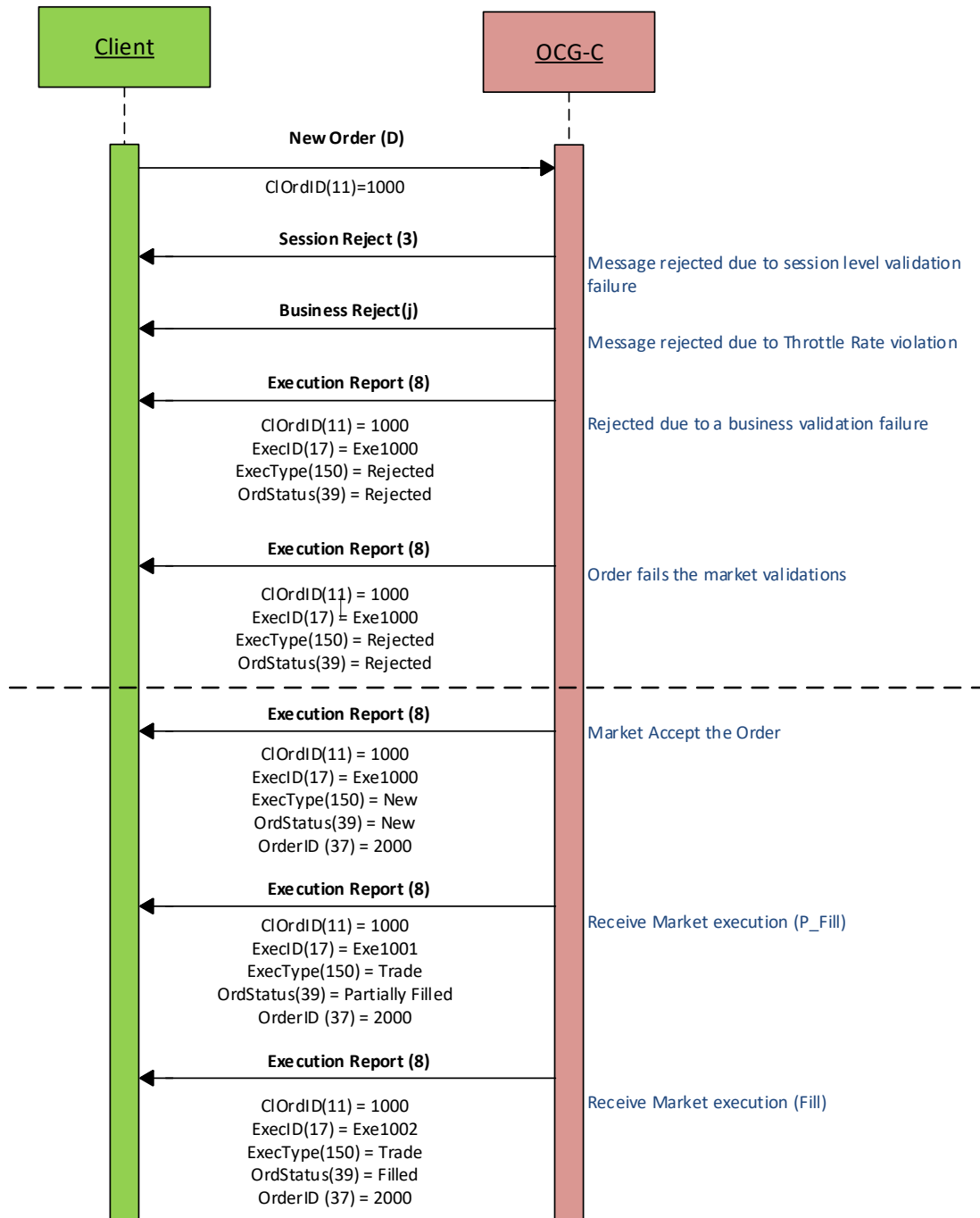
## 6.5.4 Order Submission

Single sided orders can be submitted into the OCG-C using the New Order (35=D) and the updates to the order submitted will be published in the form of Execution Reports (35=8).

The client must specify the ClOrdID (11) when submitting a New Order message.

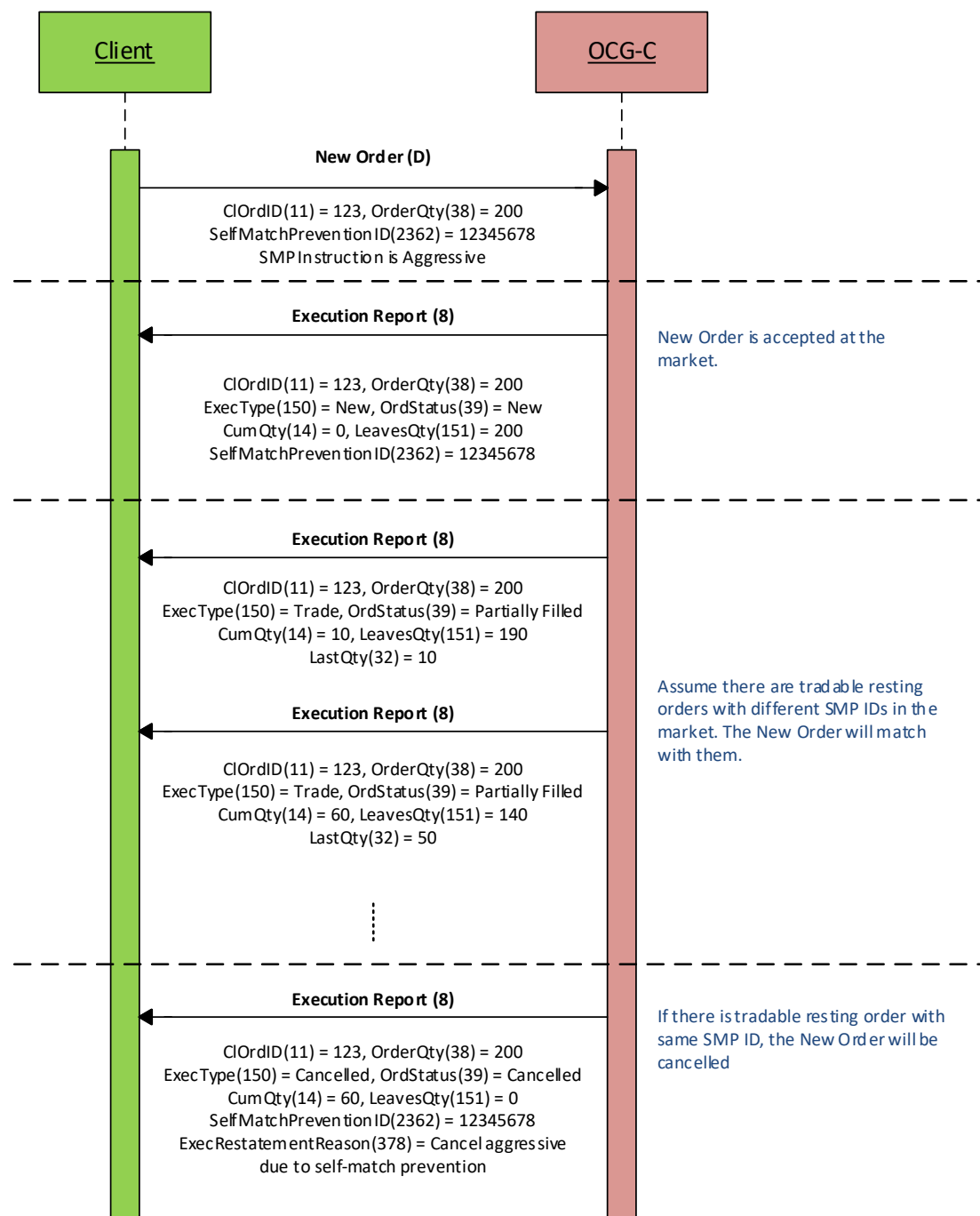
For a Limit order, the Order Price must be specified whereas for a Market order Price must not be present; any order submission that does not adhere to this will be rejected.

### 6.5.4.1 Message Flow – New Order

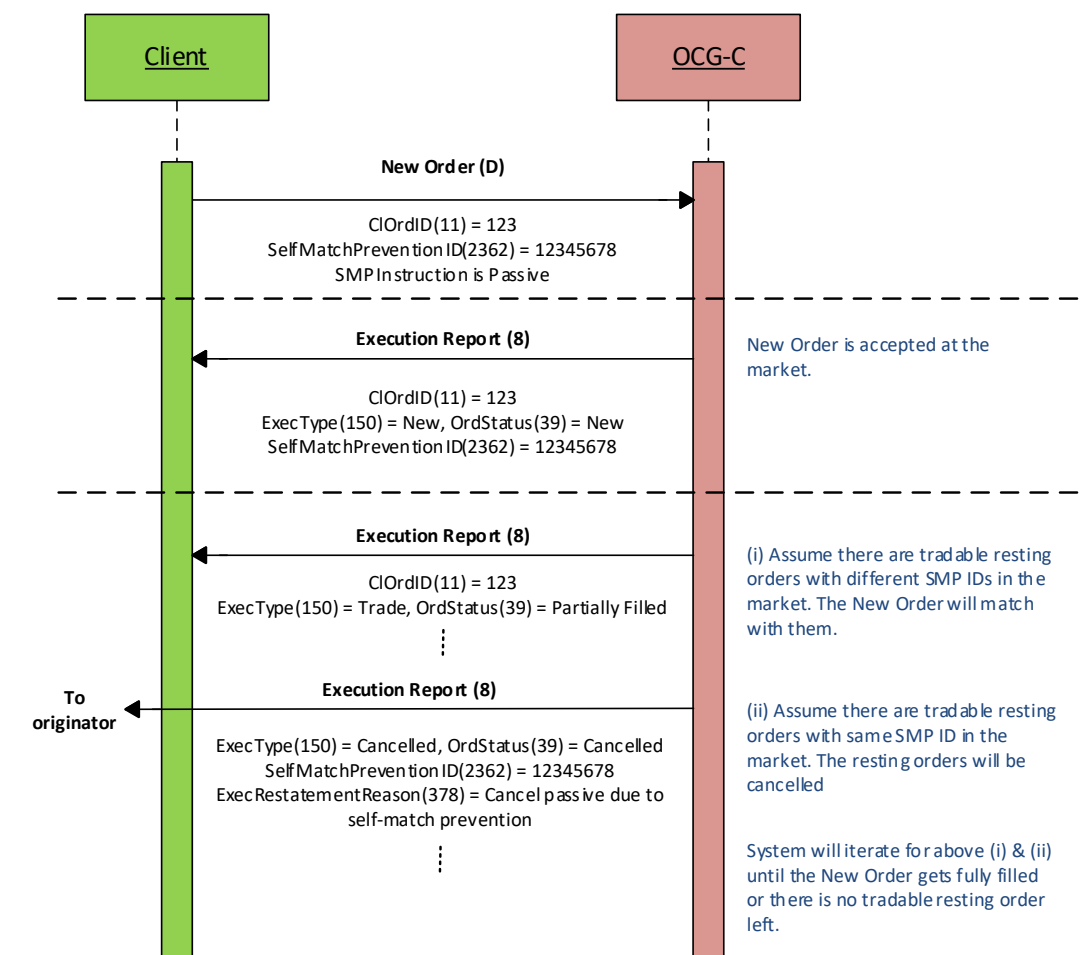




### 6.5.4.2 Message Flow - New Order - Aggressive SMP



### 6.5.4.3 Message Flow – New Order – Passive SMP



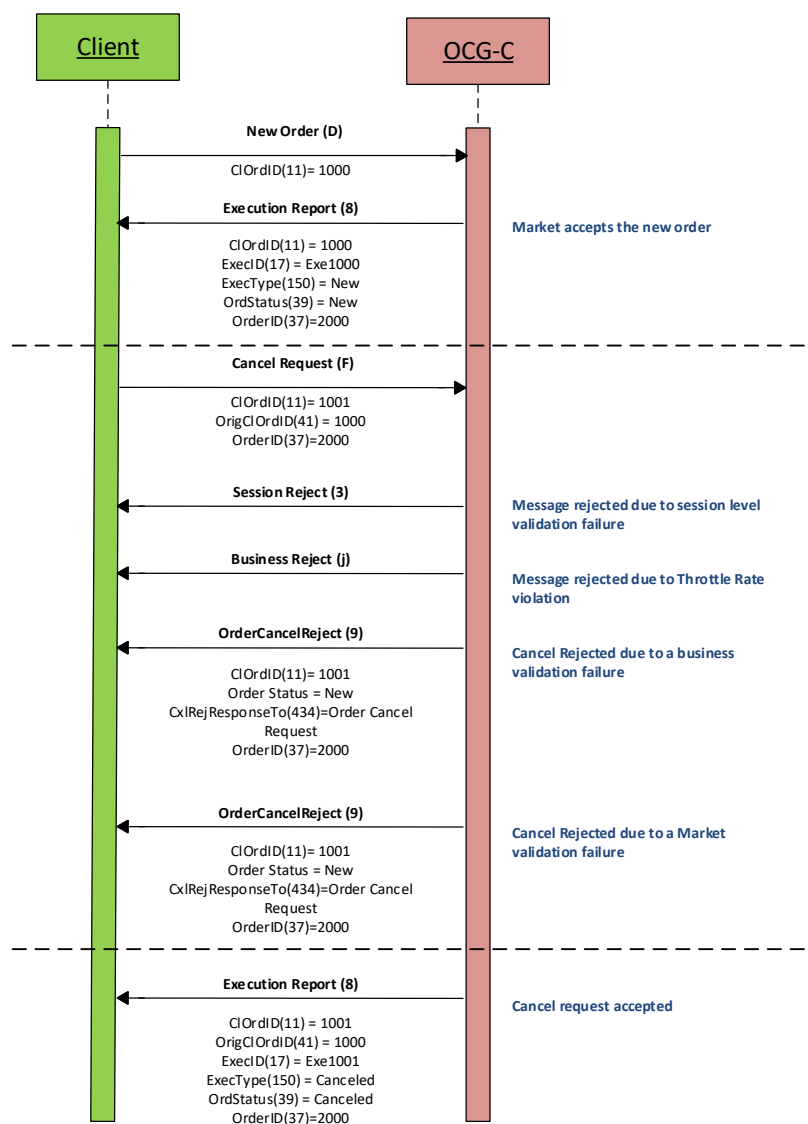
### 6.5.5 Cancellations

The remainder of a live order may be cancelled via the Cancel Request (35=F) message. The OCG-C will respond with an Execution Report (35=8) to confirm or Cancel Reject (35=9) message for a rejection.

The client should identify the order being cancelled by its OrigClOrdID (41). The client can specify the OrderID (37) in the Cancel Request message but it is not a mandatory requirement. If the OrderID (37) is specified in the Cancel Request message, the system will validate the specified OrderID with the actual OrderID assigned to the particular order by the system (order is identified by the OrigClOrdID). The Cancel Request will be rejected if the specified OrderID is invalid based on this validation.

The client may not cancel an order that is fully filled/cancelled/expired. If the client sends a cancel request for an order for which an amendment or a cancellation is already being processed the incoming cancel request will be rejected.

### 6.5.5.1 Message Flow – Cancel Request



### 6.5.6 Mass Cancellation

A client may mass cancel live orders via the Mass Cancel Request (35=q) message. The OCG-C will respond with an Order Mass Cancel Report (35=r) to confirm or reject the mass cancellation request.

If the Mass Cancel Request is accepted, the OCG-C will respond with an Order Mass Cancel Report where the MassCancelResponse (531) field will reflect the action taken by the OCG-C as a result of the Mass Cancel Request. The OCG-C will generate an Execution Report (35=8) for each order that is cancelled due to the Mass Cancel Request.

If the Mass Cancel Request is rejected, the OCG-C will respond with an Order Mass Cancel Report with MassCancelResponse (531) = 0 (Cancel Request Rejected). The MassCancelRejectReason (532) will indicate the reason why the Mass Cancel Request was rejected.

The client may use the Mass Cancel Request to mass cancel all orders, mass cancel orders for a particular instrument or a market segment by specifying the applicable mass cancel type in

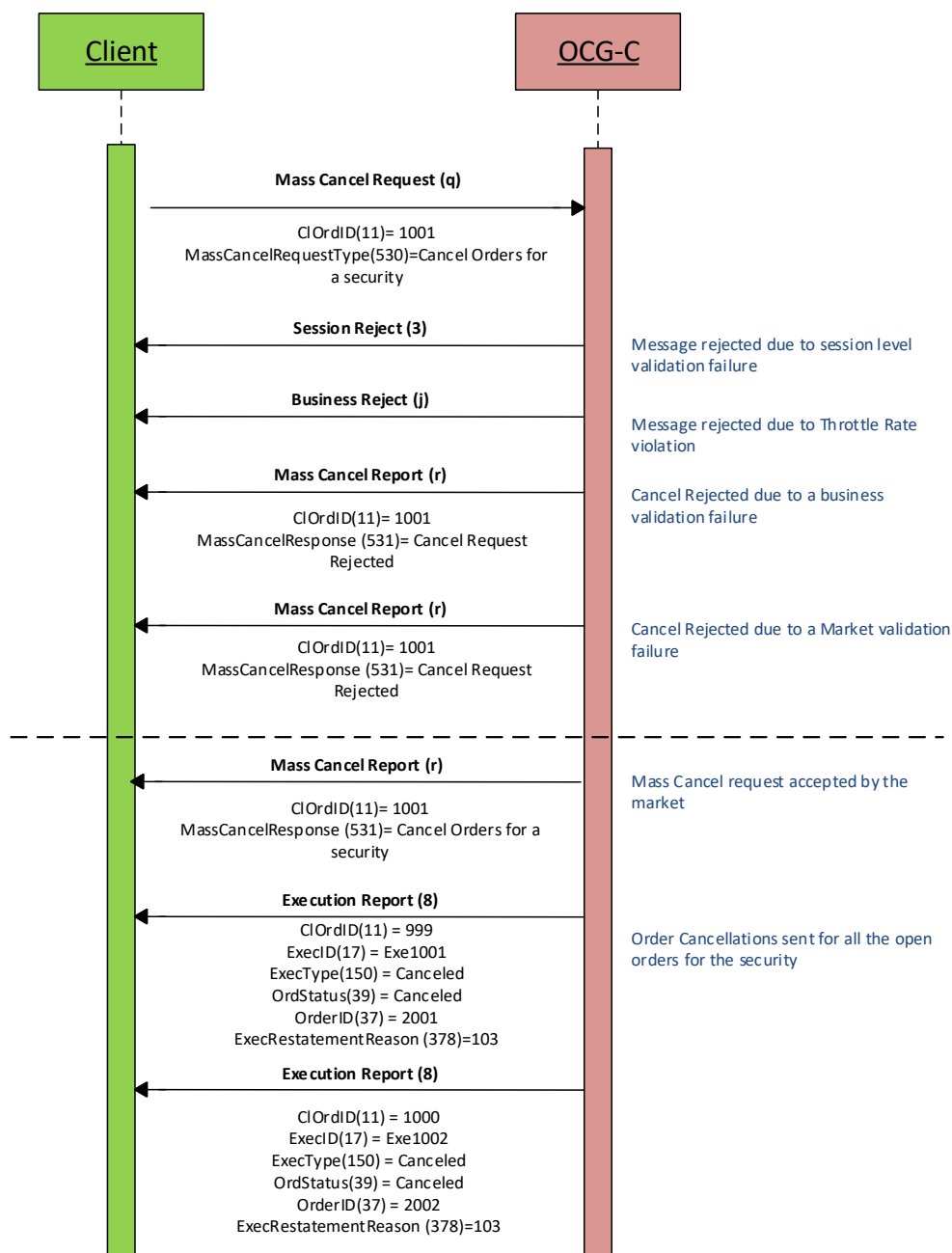
the MassCancelRequestType (530) field. All orders to be mass cancelled here must belong to the given BrokerID (448) associated with this client.

Though a Mass Cancellation request is accepted by the OCG-C, an individual order cancellation depends on the prevailing trading state of the instrument(s) when the mass cancellation request is received by the trading system. This is also applicable to OBO Mass Cancellation request.

The FIX tags relevant to each of the supported mass cancel types are outlined below:

Description	FIX Tag and Value
Cancel all orders	MassCancelRequestType (530) = 7
Cancel all orders for a security ID	MassCancelRequestType (530) = 1 SecurityID (48) SecurityIDSource (22) =8 SecurityExchange (207) = XHKG
Cancel all orders for a market segment	MassCancelRequestType (530) = 9 MarketSegmentID (1300)

### 6.5.6.1 Message Flow – Mass Cancel Request



### 6.5.7 On Behalf Of (OBO) Cancellations

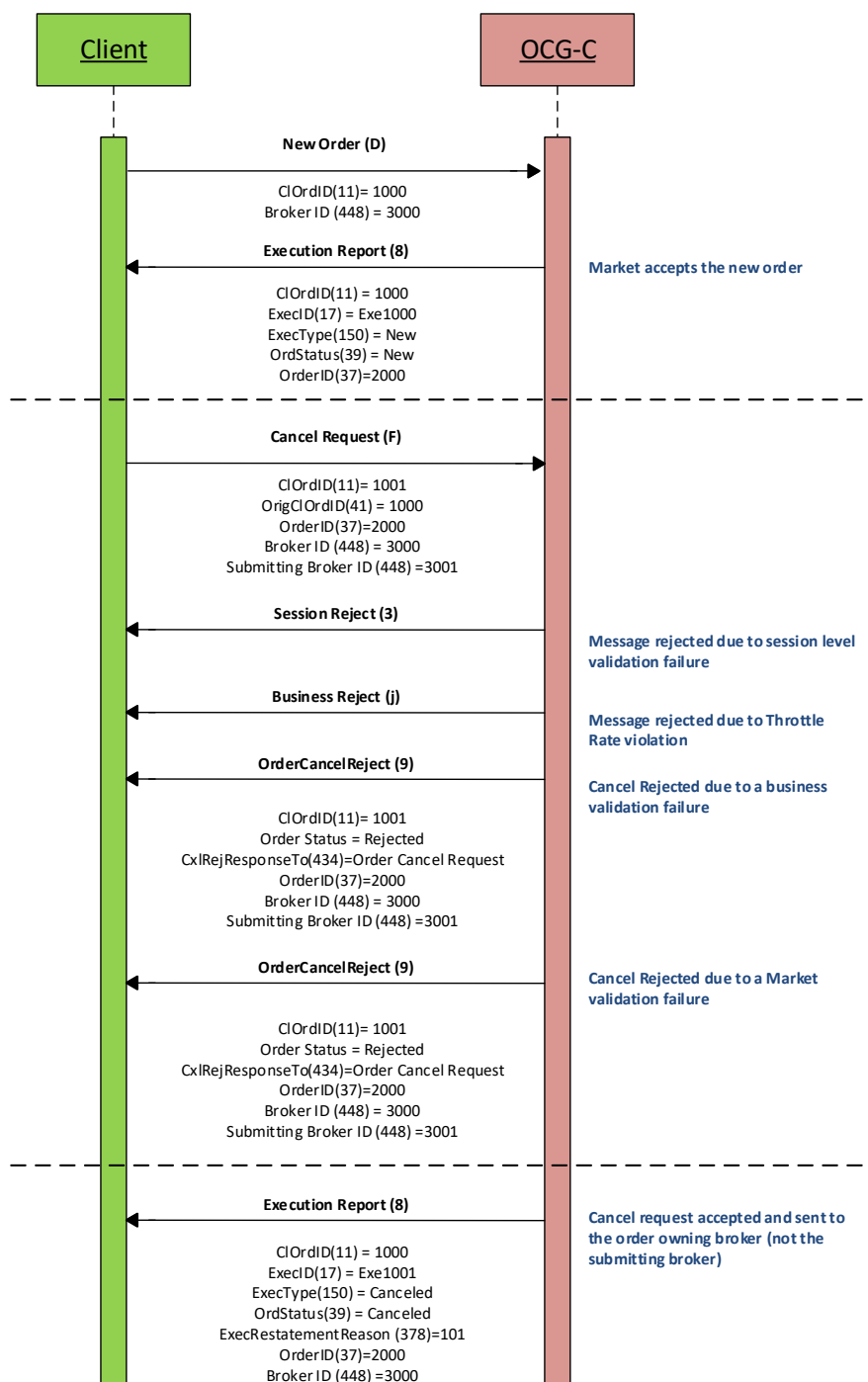
OBO Cancel functionality allows a Broker ID to cancel order(s) belonging to another Broker ID within the same member firm (Exchange Participant) but these two Broker IDs must belong to two different sessions, where either of these sessions is through OCG-C and the other may or may not be through OCG-C.

#### 6.5.7.1 OBO Cancel Order

The client can perform an OBO Cancel for a single order by specifying the OrderID (37) as well as the Broker ID (PartyID = 448, PartyRole = 1) that originally sent the order along with the Broker ID (PartyID = 448, PartyRole = 36) that is submitting this cancel request through Order Cancel Request (35=F) message.

In case the request is rejected the OCG-C will respond with a Cancel Reject (35=9) to the submitter of the Cancel request. In the case of successful order cancellation, the Execution Report (35=8) will be sent to the owner of the order as opposed to the submitter of the Cancel Request and no message will be sent to the submitter of the OBO cancel order request.

### 6.5.7.2 Message Flow – OBO Cancel Request

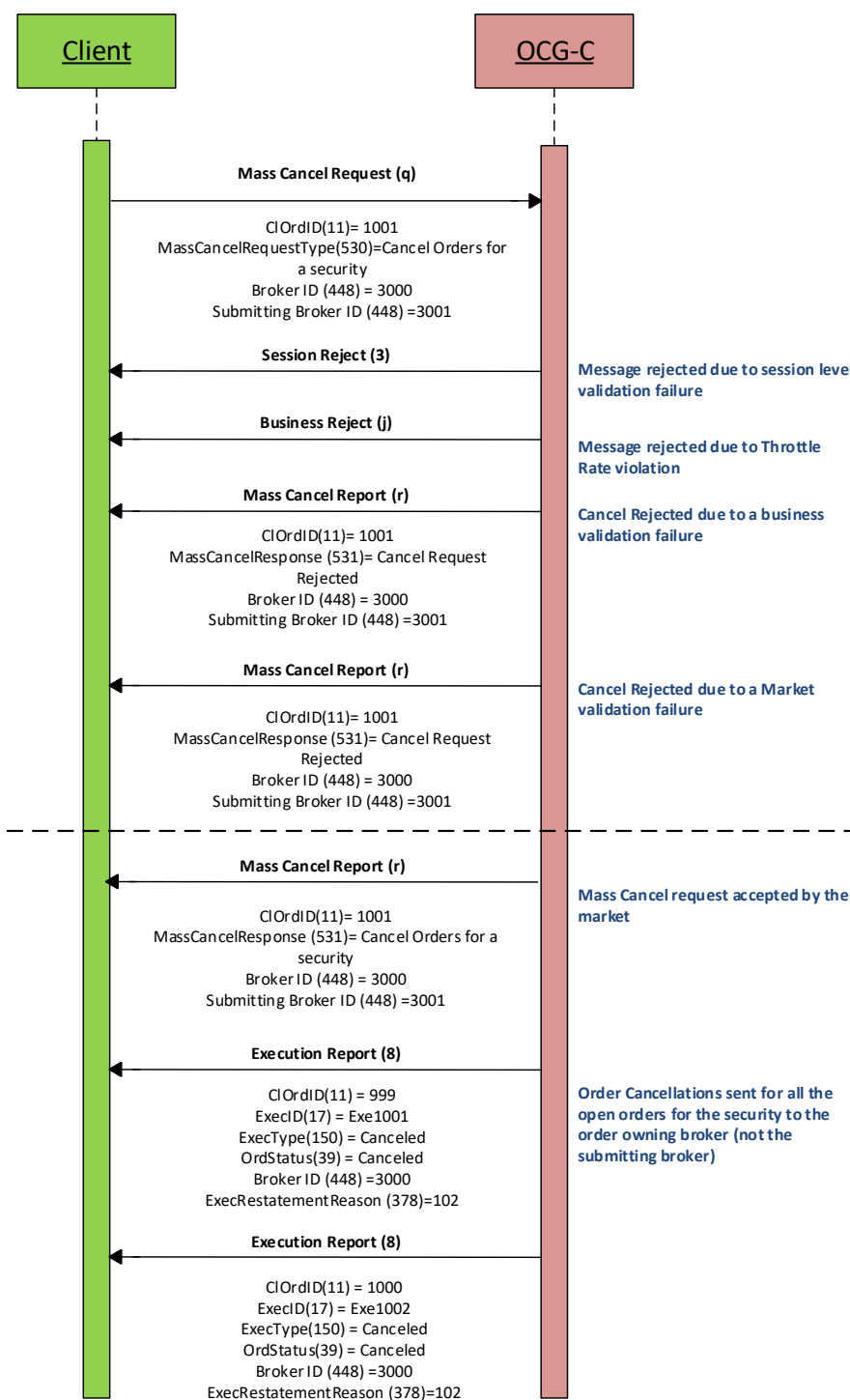


### 6.5.7.3 OBO Mass Order Cancellation

The client can perform an OBO Mass Cancel for a selected set of orders based on the MassCancelRequestType (530) field in the OrderMassCancelRequest (35=q) message. In case the request is rejected, the OCG-C will be respond with an OrderMassCancelReport (35=r) message. If the request is accepted then the OCG-C will respond with an

OrderMassCancelReport (35=r) message. These responses will be sent to the submitter of the Mass Cancel Request. In the case of successful order cancellations, Execution Report (35=8) will be generated for each order that is cancelled and but this will be sent to the owner of the individual order. It should be noted that OBO Mass Cancel is developed to safeguard EPs' interests in case of emergency. For this reason this function should be used only in emergency situations such as malfunctioning of the original OCG-C session, but not on a day-to-day basis to cancel orders on behalf of other working OCG-C sessions.

### 6.5.7.4 Message Flow – OBO Mass Cancel Request



### 6.5.8 Amending an Order

Order attributes of a single sided order can be amended using the Order Cancel/Replace Request message. The following attributes of a live order may be amended:

- Order Quantity
- Price
- Side (the only amendment allowed is to change from Sell to Sell Short and vice versa)
- Order Capacity
- Short Sell Indication (using OrderRestrictions / PositionEffect)
- Disclosure Instruction
- Text
- Broker Location ID

The OCG-C will respond with an Execution Report (35=8) to confirm or Cancel Reject (35=9) to reject the Cancel/Replace Request sent by the client.

The client should identify the order being amended by its OrigClOrdID (41). The client may or may not specify the OrderID (37) in the Cancel/Replace Request message. If the OrderID is specified in the Cancel/Replace Request message, it must be the OrderID assigned to this particular order as identified using the OrigClOrdID. The Cancel/Replace Request will be rejected if the specified OrderID is invalid based on this validation.

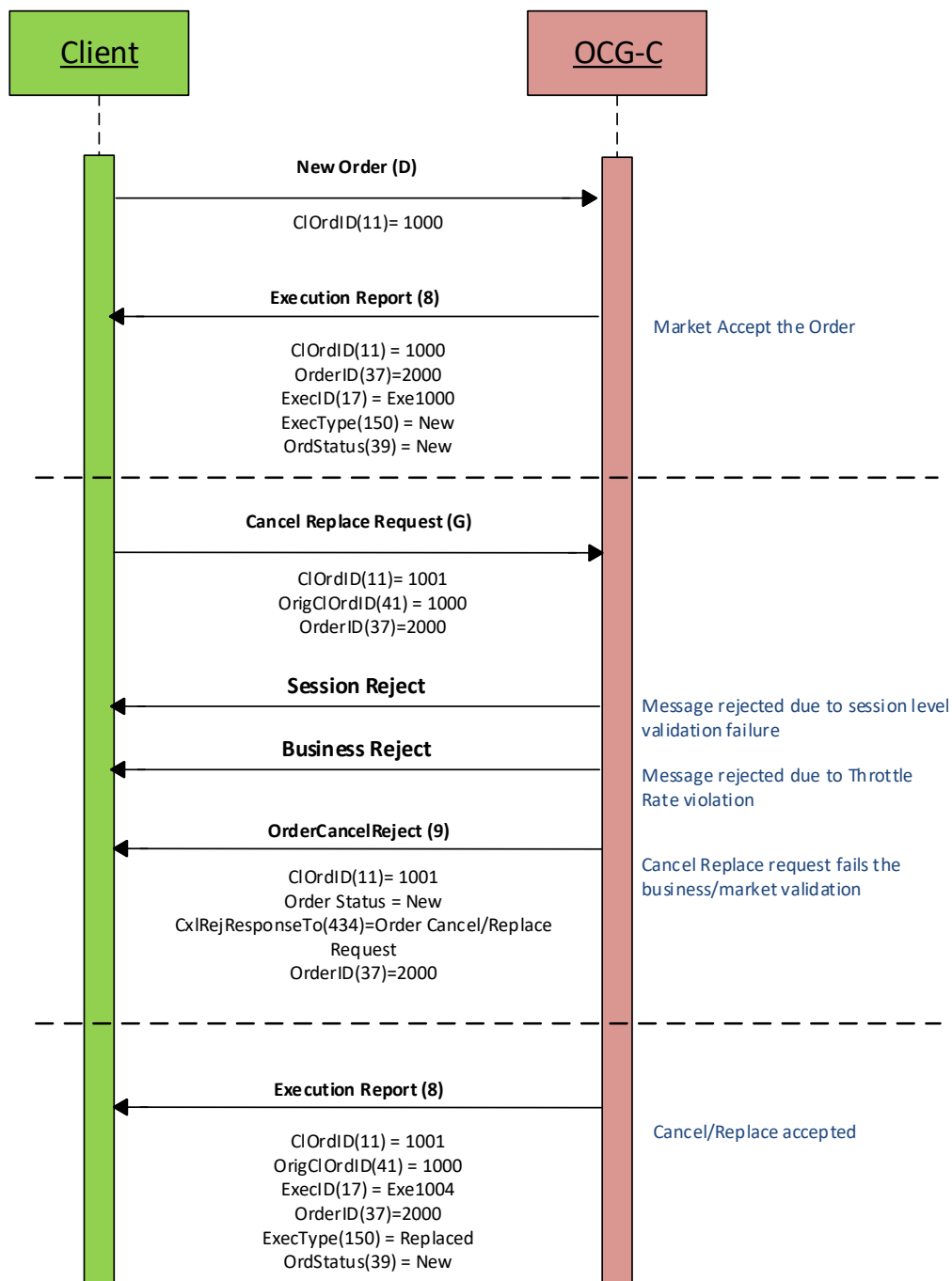
The client may not amend an order that is fully filled or cancelled or expired.

If the client sends a Cancel/Replace Request for an order for which a Cancel/Replace or a Cancel request is already being processed the incoming Cancel/Replace request is rejected.

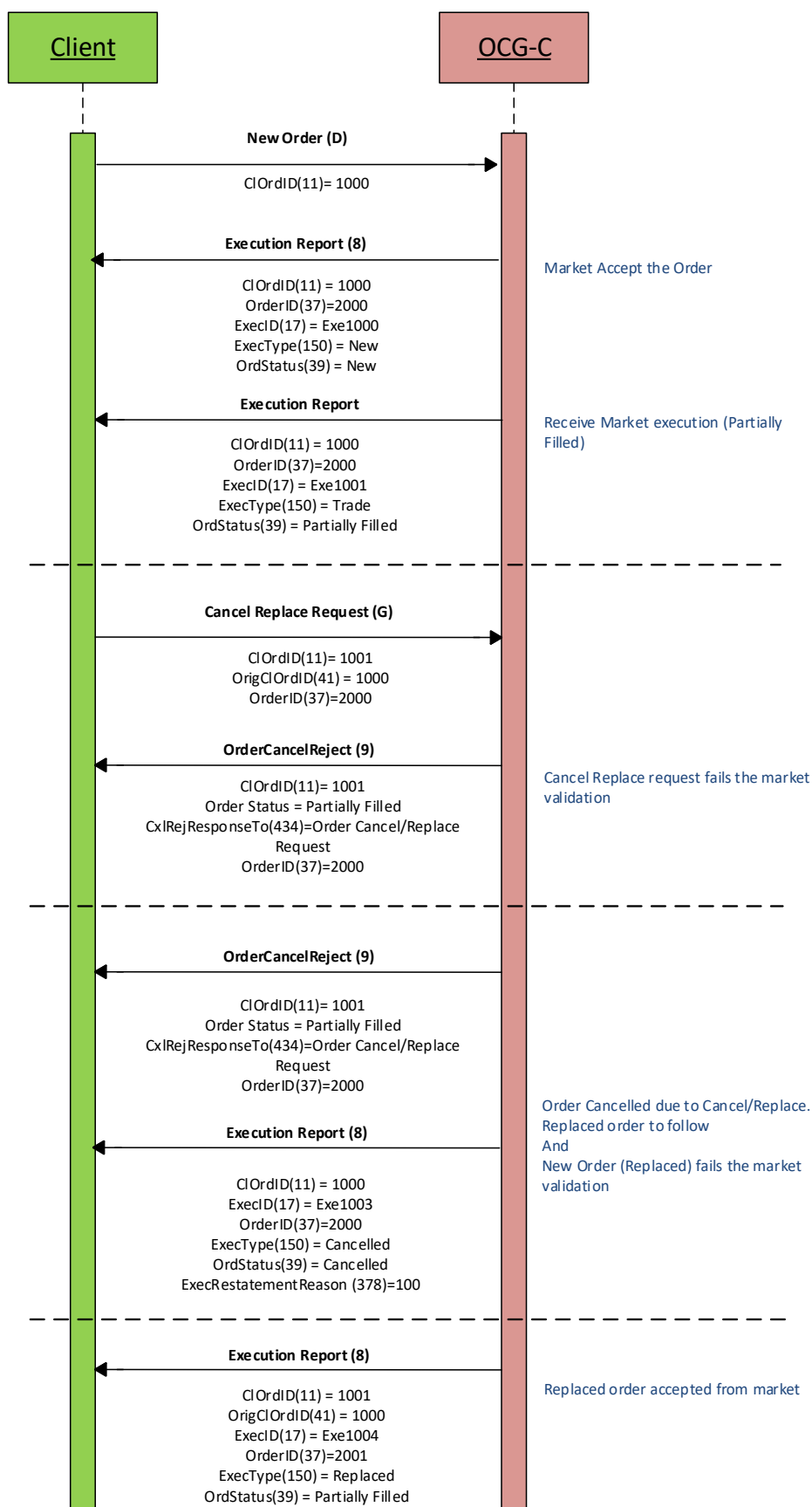
The OCG-C will facilitate order chaining up to the maximum limit of 99,999,999 and will reject subsequent requests to amend if the OrderQty (38) of the amend request exceeds this value.



### 6.5.8.1 Message Flow - Amend Request - No Price Change + No Quantity Increase

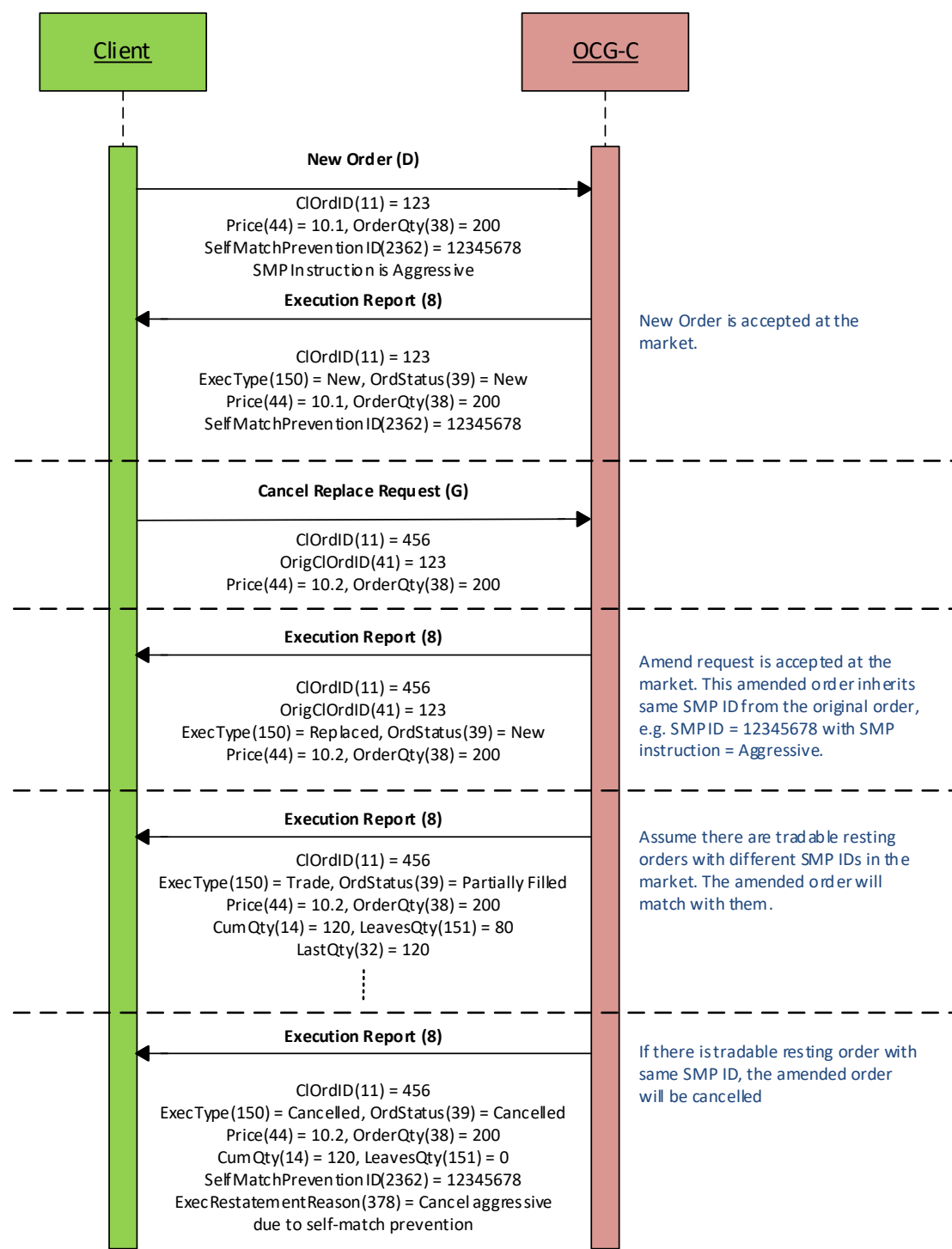


### 6.5.8.2 Message Flow – Amend Request – Change Price / Increase Quantity

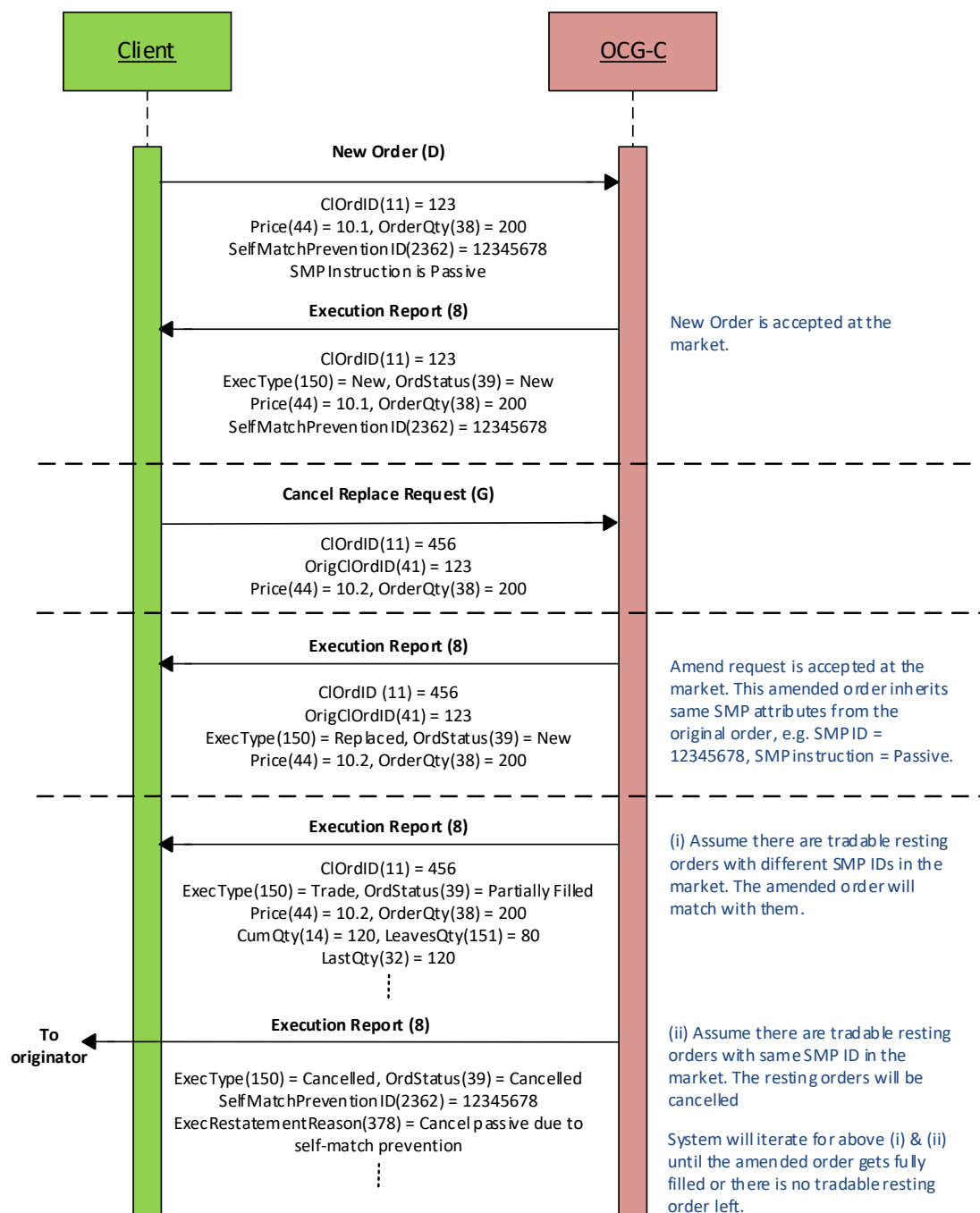


6.5.8.3

6.5.8.3 Message Flow – Amend Request – Aggressive SMP



### 6.5.8.4 Message Flow – Amend Request – Passive SMP



### 6.5.9 Cancel Auto-matched Trades

A trade already concluded for an order could be cancelled by the HKEX Market Operations. A trade cancel will be communicated to the client(s) via an Execution Report (35=8). The Execution Report will include the ExecRefID (19) in order to identify the particular trade which is being cancelled.

If a trade is cancelled in this manner, system will not reinstate the LeavesQty (151) of that order by the busted (cancelled) quantity. In this specific scenario OrderQty (38) will NOT be equal to the summation of the LeavesQty (151) + CumQty (14) – cumulative executed quantity.

### 6.5.10 Execution Reports

The Execution Report (35=8) message is used to communicate many different events to the client. The events are differentiated by the value in the ExecType (150) field as outlined below:

ExecType (150)	Description	OrdStatus (39)
0 = New	<b>Order Accepted</b> Indicates that a new order has been accepted.	<ul style="list-style-type: none"> <li>▪ 0 = New</li> </ul>
8 = Rejected	<b>Order Rejected</b> Indicates that an order has been rejected. The reason for the rejection is specified in the field OrdRejReason (103).	<ul style="list-style-type: none"> <li>▪ 8 = Rejected</li> </ul>
C = Expired	<b>Order Expired</b> Indicates that an order has been expired. OrigClOrdID field will not be provided Report.	<ul style="list-style-type: none"> <li>▪ C = Expired</li> </ul>
F = Trade	<b>Order Executed (Trade)</b> Indicates that an order has been partially or fully filled. The execution details (e.g., price and quantity) are specified.	<ul style="list-style-type: none"> <li>▪ 1 = Partially Filled</li> <li>▪ 2 = Filled</li> </ul>
4 = Cancelled	<b>Order Cancelled</b> Indicates that an Order Cancel Request has been accepted and successfully processed.  This message can also be sent unsolicited in which case the Execution Report may include the ExecRestatementReason field to indicate the reason for cancellation; OrigClOrdID field will not be provided.	<ul style="list-style-type: none"> <li>▪ 4 = Cancelled</li> </ul>
5 = Replaced	<b>Order Replaced</b> Indicates that an Order Cancel/Replace Request has been accepted and successfully processed.	<ul style="list-style-type: none"> <li>▪ 0 = New</li> <li>▪ 1 = Partially Filled</li> <li>▪ 2 = Filled</li> </ul>
H = Trade Cancel	<b>Trade Cancel</b> Indicates that an execution has been cancelled by Market Operations. The message will include an ExecRefID to identify the execution being cancelled and the updated execution details (e.g., price and quantity).	<ul style="list-style-type: none"> <li>▪ 0 = New</li> <li>▪ 1 = Partially Filled</li> <li>▪ 2 = Filled</li> <li>▪ 4 = Cancelled</li> <li>▪ C = Expired</li> </ul>

### 6.5.11 Order Status

The previous section broadly covers the OrdStatus (39) values for different types of executions. For a rejection of Order Cancel Request (35=F) or Order Cancel/Replace Request (35=G) request, the following possible states are returned in the Order Cancel Reject (35=9) message:

- 0 = New
- 1 = Partially Filled
- 2 = Filled
- 4 = Cancelled
- 6 = Pending Cancel
- 8 = Rejected

- A = Pending New
- C = Expired
- E = Pending Replace

## 6.6 Quote Handling

Quotes are input or modified as a two-sided (i.e. bid and offer) order pair. If one side of a quote fails the basic validations (e.g., price is not on tick, quantity is not on lot size, etc.), then both sides will be rejected. However, if a quote is accepted it is treated as two separate and independent limit orders where each of these two orders may be accepted or rejected (due to business validation failures).

Quotes may be submitted individually via the Quote (35=S) message.

The client should not specify the QuoteResponseLevel (301) in the Quote message. By default system will consider the QuoteResponseLevel as 1 = Acknowledge only negative or erroneous quotes.

### 6.6.1 Acknowledgement

The OCG-C will respond with Execution Report(s) (35=8) to confirm the Quote message. If the Quote message is rejected the OCG-C will respond with a Quote Status Report (35=A1) message.

The OCG-C will explicitly reject each Quote message via the Quote Status Report (35=A1) message with QuoteStatusfield (297) set to 5 = Rejected; the QuoteRejectReason (300) will indicate the reason why the Quote is rejected.

### 6.6.2 Execution

The Execution Report (35=8) message is used to notify the client if a Quote is executed. The ClOrdID (11) of the Execution Report will contain either the BidID (390) or the OfferID (1867) of the last Quote message based on the executed side of the Quote (bid or offer).

### 6.6.3 Updating a Quote

The client may update a live quote entry by sending another quote, via the Quote message, for the same instrument. When submitting an update, the client may:

- (i) Update both sides of a quote
- (ii) Update one side of a quote and leave the other side unchanged

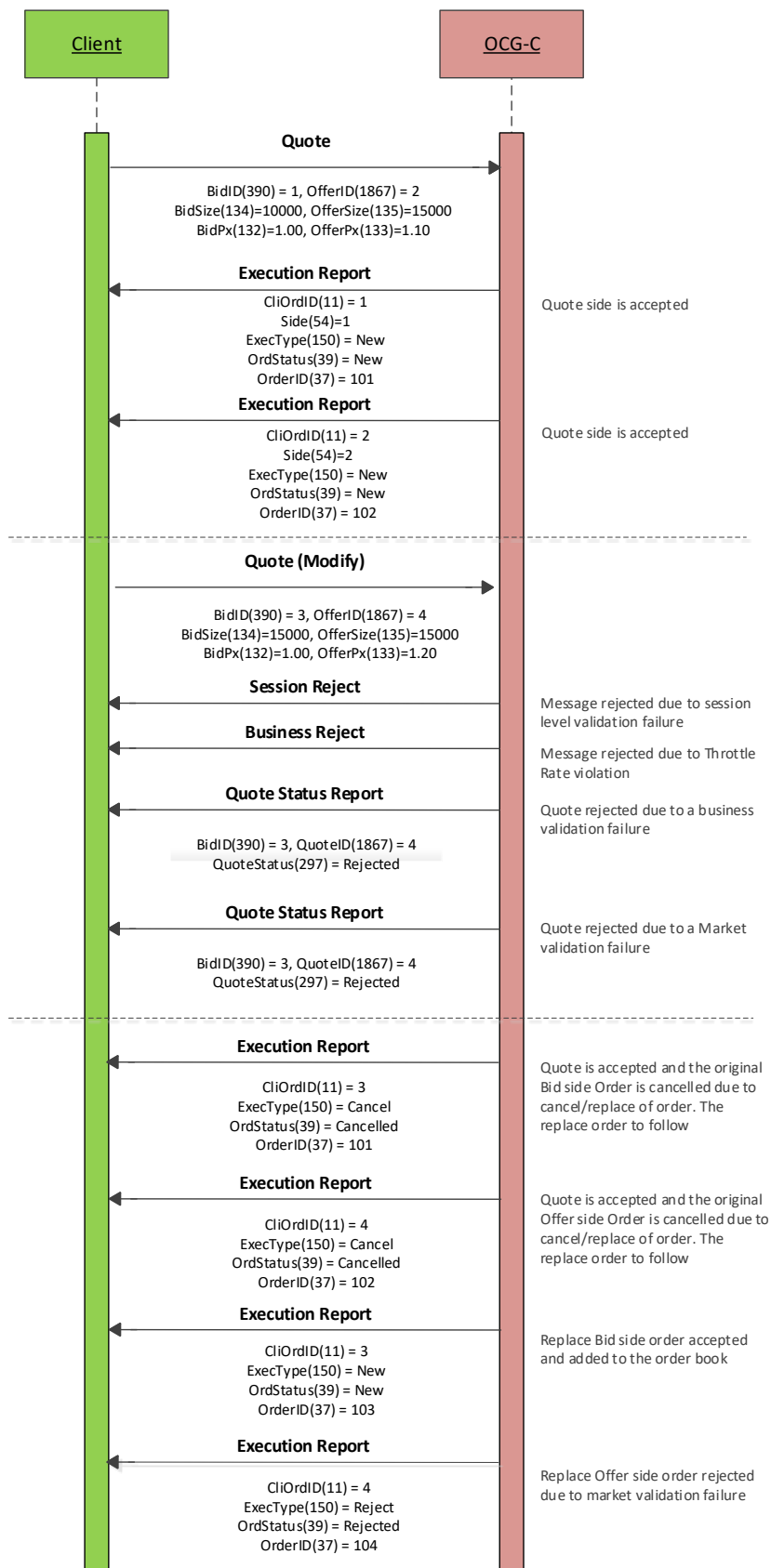
The client may update a side of a quote by providing a new price and/or quantity.

### 6.6.4 Message Flow

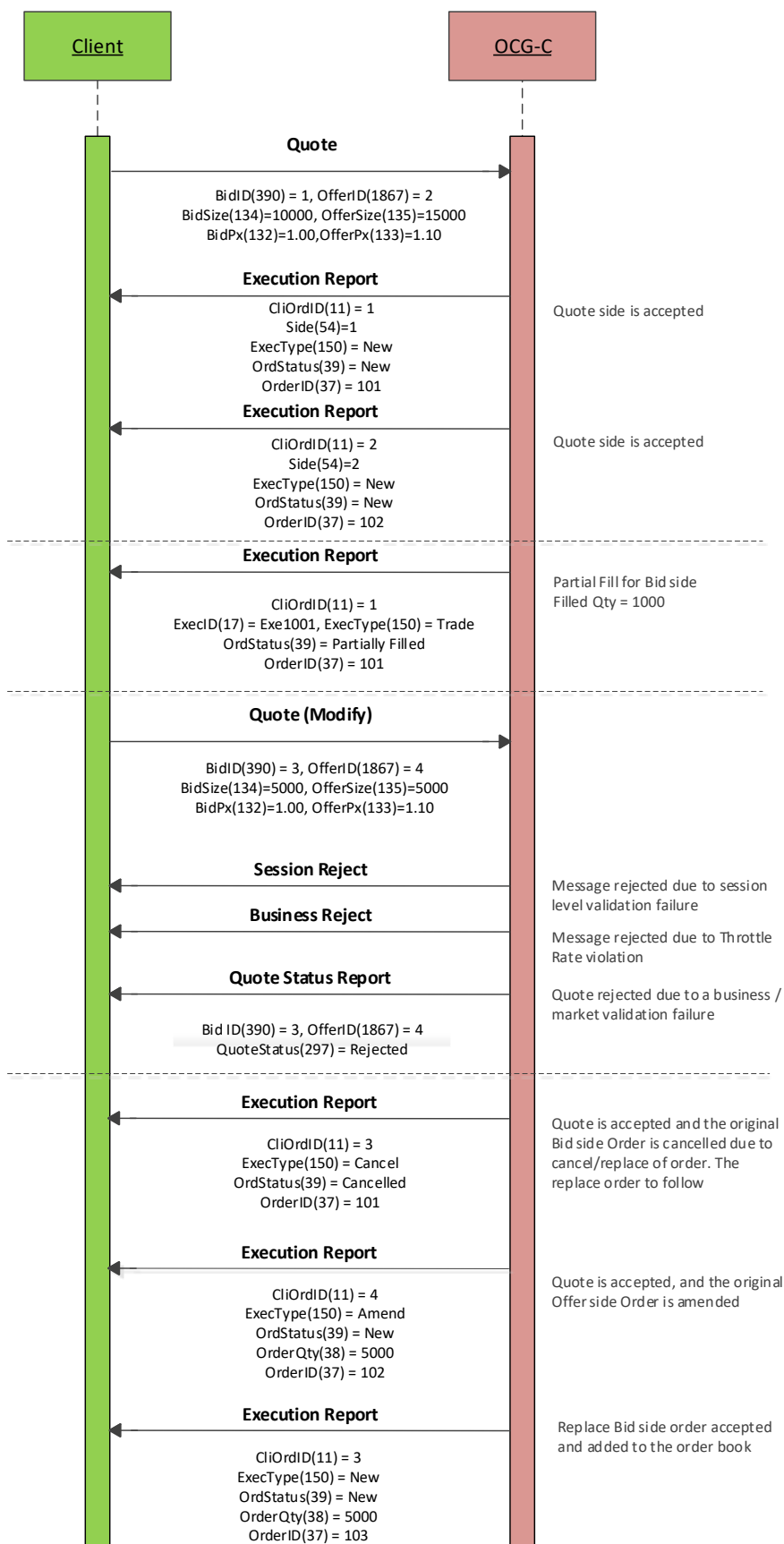
Client submits a new two sided quote via the Quote message:



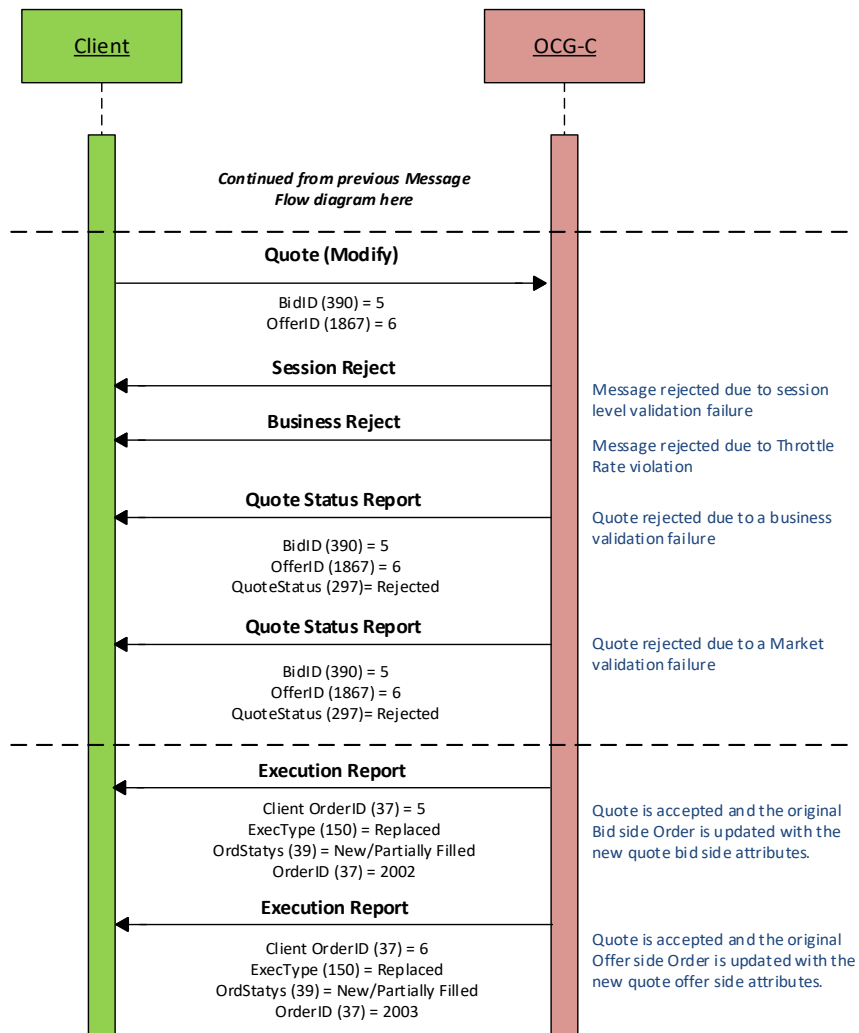
The client submits a quote to modify an existing quote in the market which results in order cancel/replace at the market:



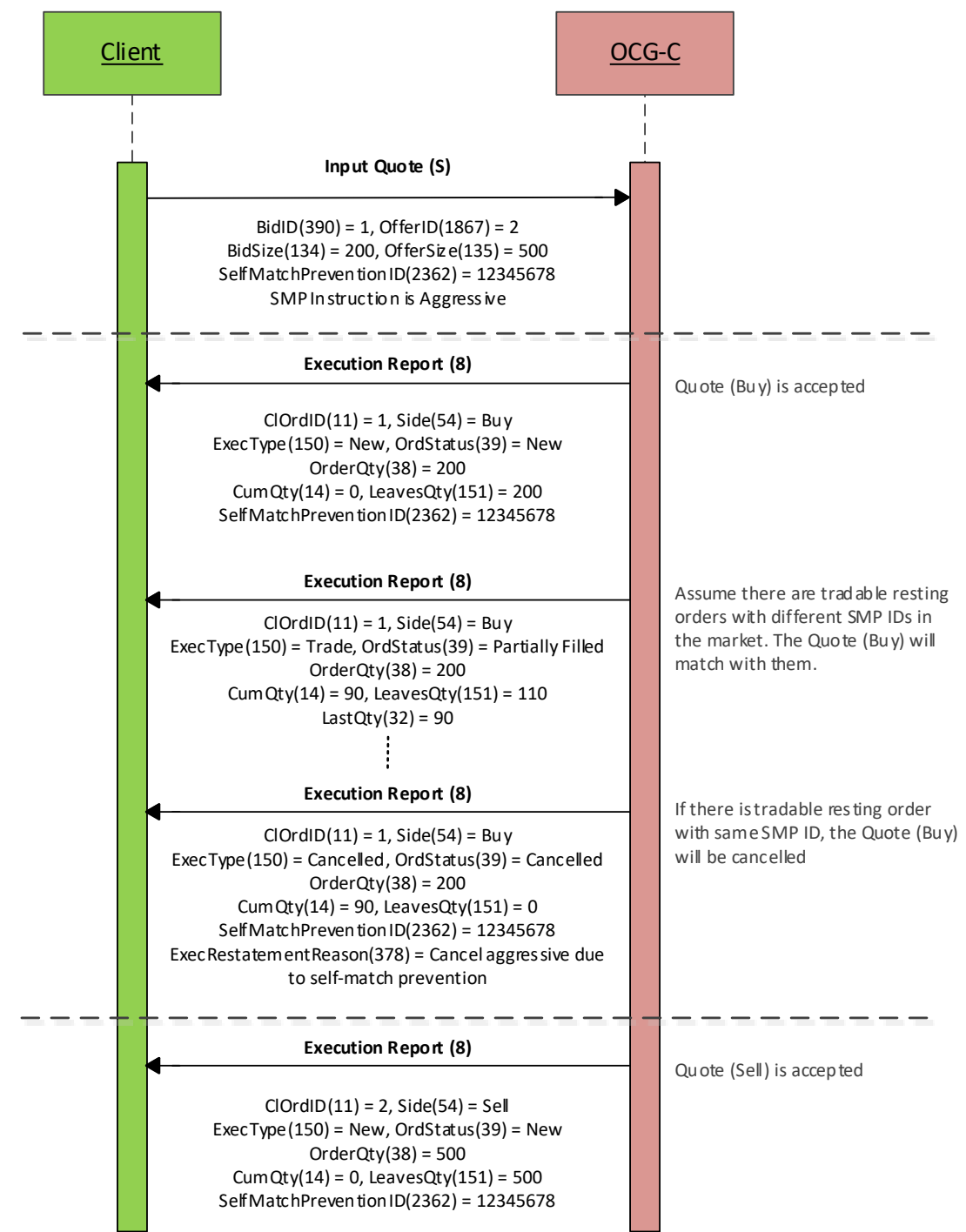




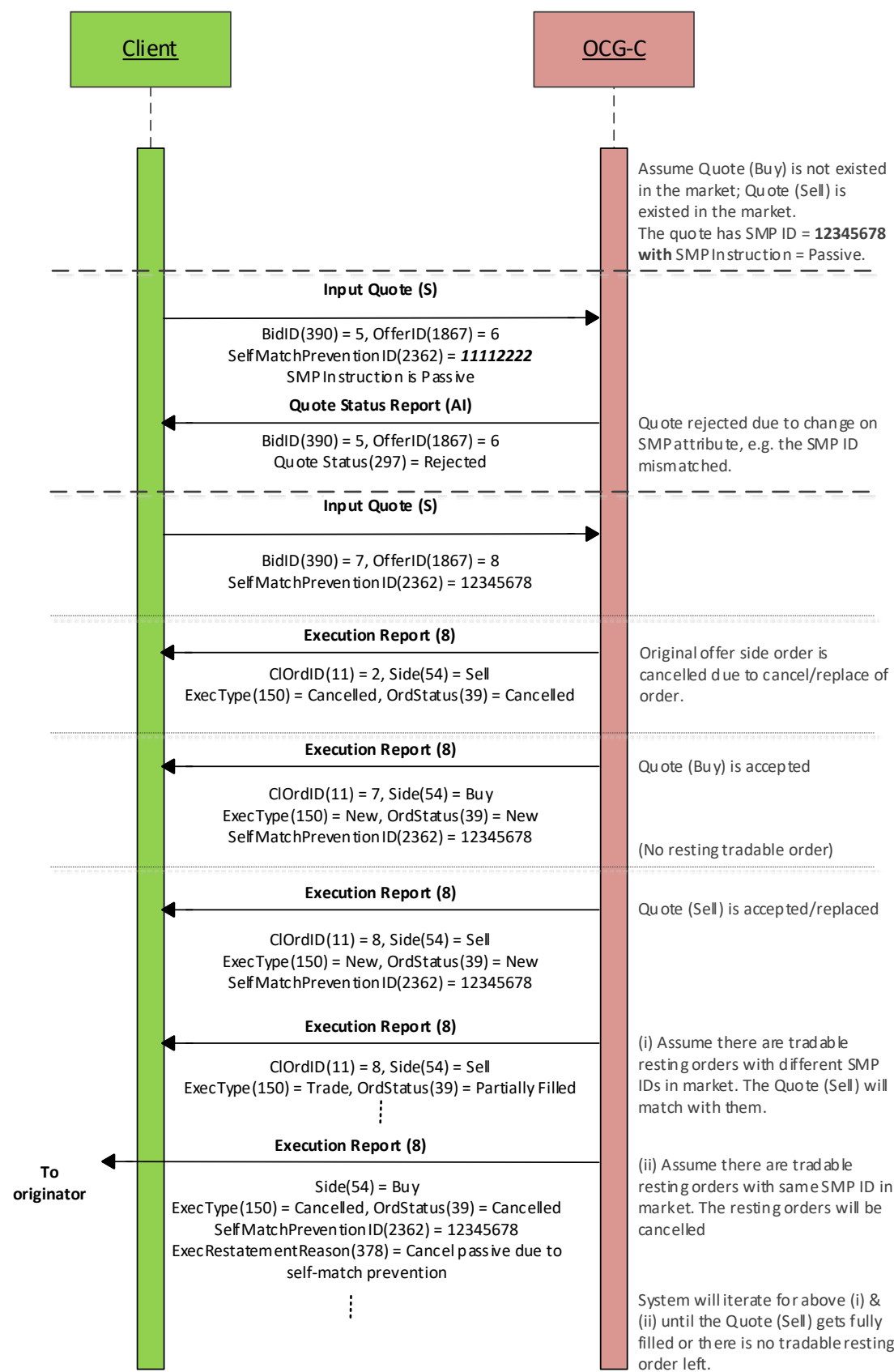
The client submits a quote to modify an existing quote in the market which results in order updates at the market:



Client submits a new two sided quote with SMP:

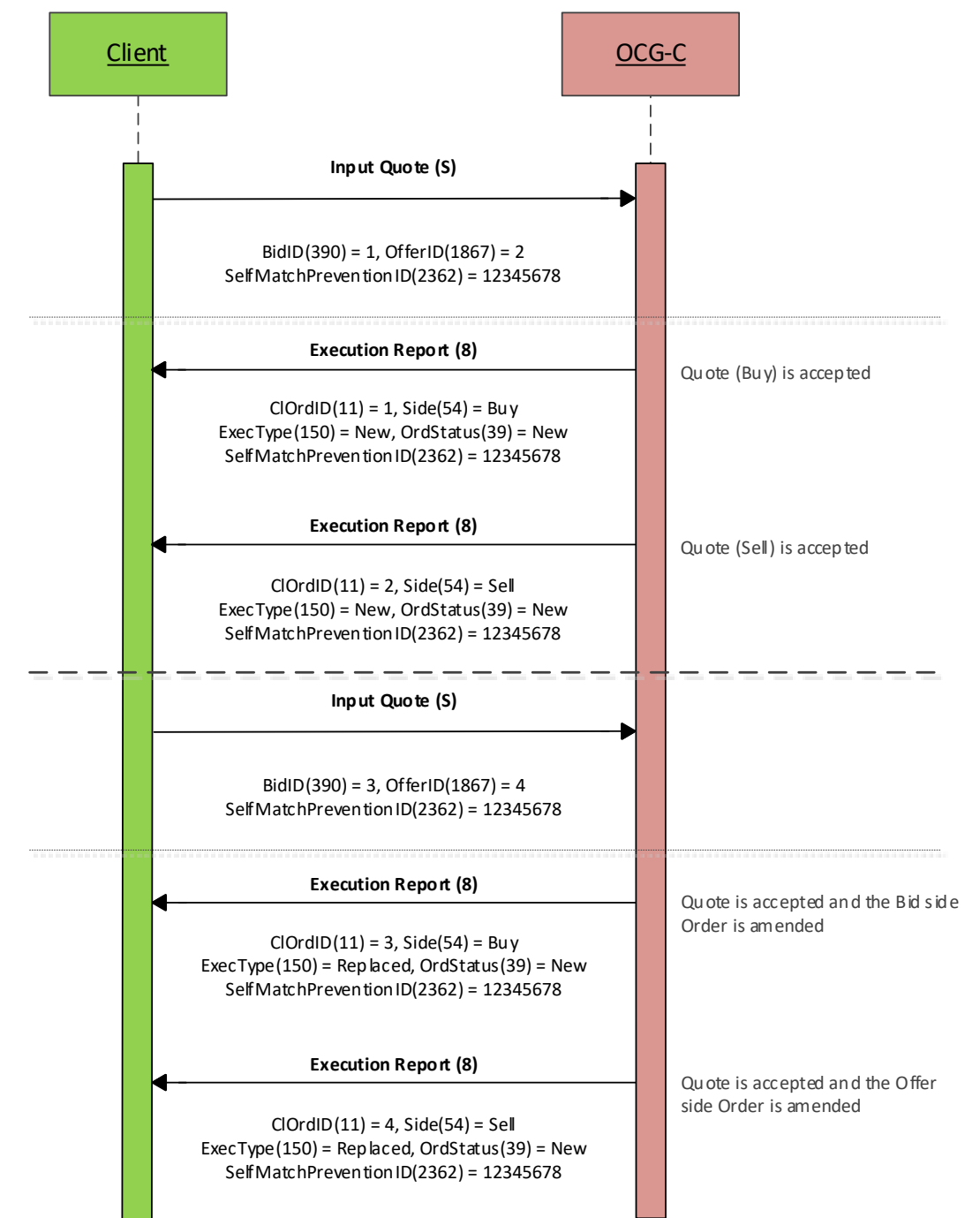


Client modifies existing quote (e.g. change on price or increase on quantity) with SMP:





Client updates existing quote (e.g. no change on price and no change/decrease on quantity and the existing quote does not get executed) with SMP:

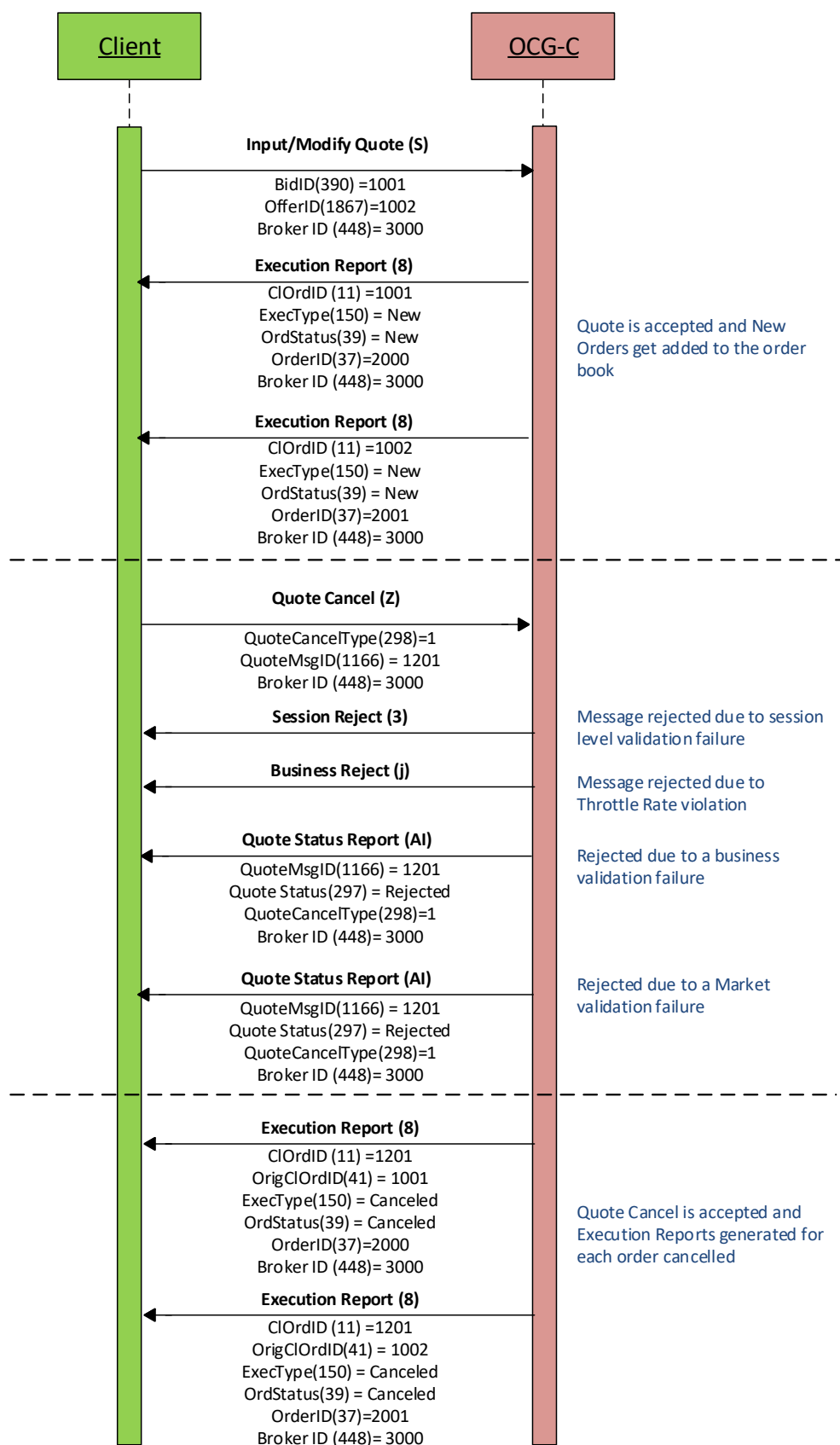


### 6.6.5 Cancelling a Quote

The client may use the Quote Cancel (35=Z) message to cancel a single quote entry. The message should include a QuoteCancelType (298) of Cancel for Instruments (1). The OCG-C will respond with Execution Report(s) (35=8) for successful cancellation.

If the Quote Cancel message is rejected the OCG-C will respond with a Quote Status Report (35=AI) message. The QuoteStatus (297) field will be set to 5 = Rejected and QuoteRejectReason (300) field will indicate the reason for rejection when a Quote Status Report is generated.

### 6.6.5.1 Message Flow





## 6.7 Trade Report Handling

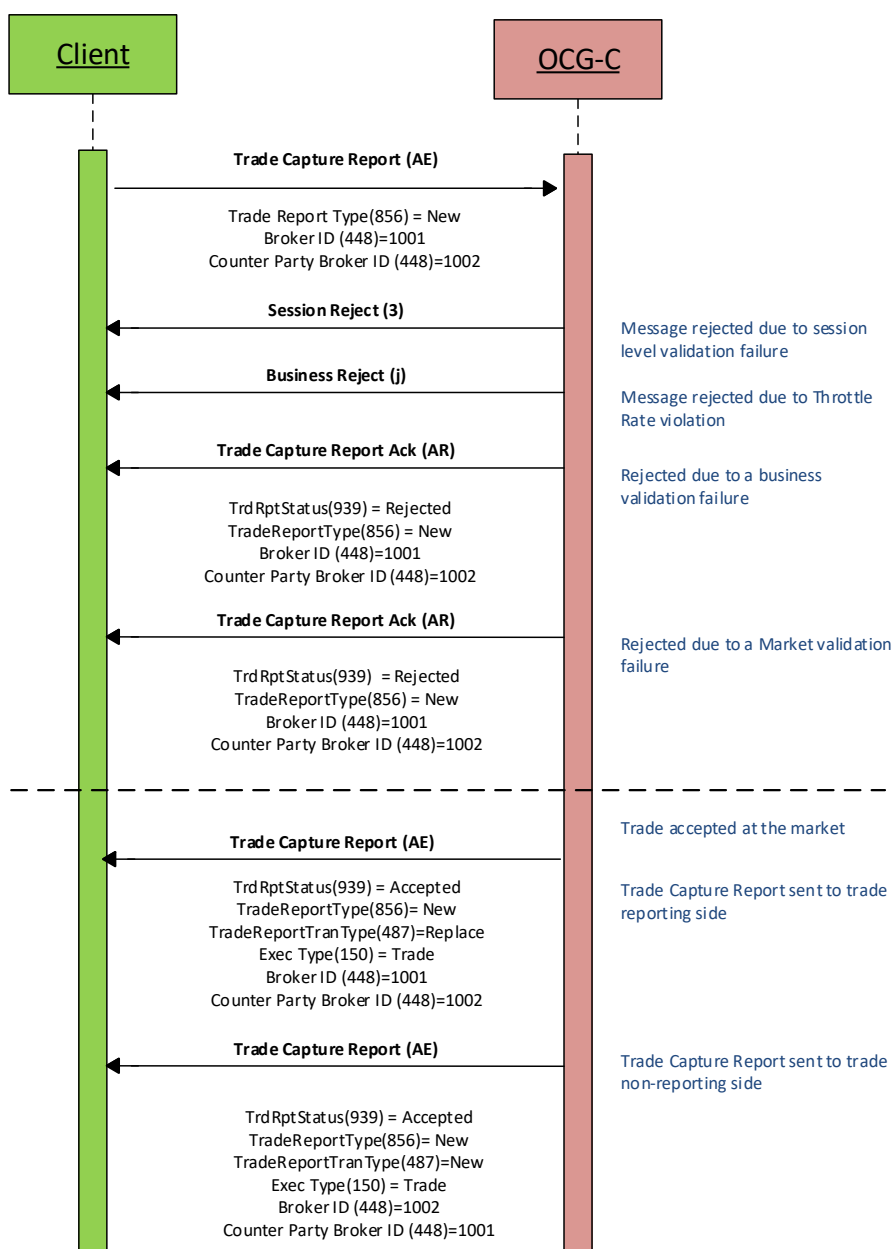
The client may use the Trade Capture Report (35=AE) message to report an off exchange trade or to cancel an alleged off exchange trade. In order to report an off exchange trade, the TradeReportType (856) field must be set to 0 = Submit and in the case of cancelling a trade, this field must be set to 6 = Trade Report Cancel.

### 6.7.1 Trade Acknowledgement

Once a Trade is accepted, two Trade Capture Reports (35=AE) will be sent (if the trade has two sides) independently to the two Broker IDs (buyer and seller broker IDs) involved in the trade with ExecType (150) set to F = Trade. The TradeReportTransType (487) field of the Trade Capture Report will be set as 2 = Replace for the reporting side and as 0 = New for the counterparty side of the trade.

The OCG-C will explicitly reject Trade message via the Trade Capture Report Ack (35=AR) message to the submitter of the Trade Capture Report message. The TrdRptStatus (939) field will indicate whether the trade is 1 = Rejected, or not. If a trade is rejected, the reason will be specified in the TradeReportRejectReason (751) field.

### 6.7.1.1 Message Flow



### 6.7.2 Trade Cancel

Purchasing side of an off-exchange trade may cancel the reported trade by submitting a Trade Capture Report (35=AE) message with TradeReportType (856) field set to 6 = Trade Report Cancel.

### 6.7.3 Trade Cancel Acknowledgement

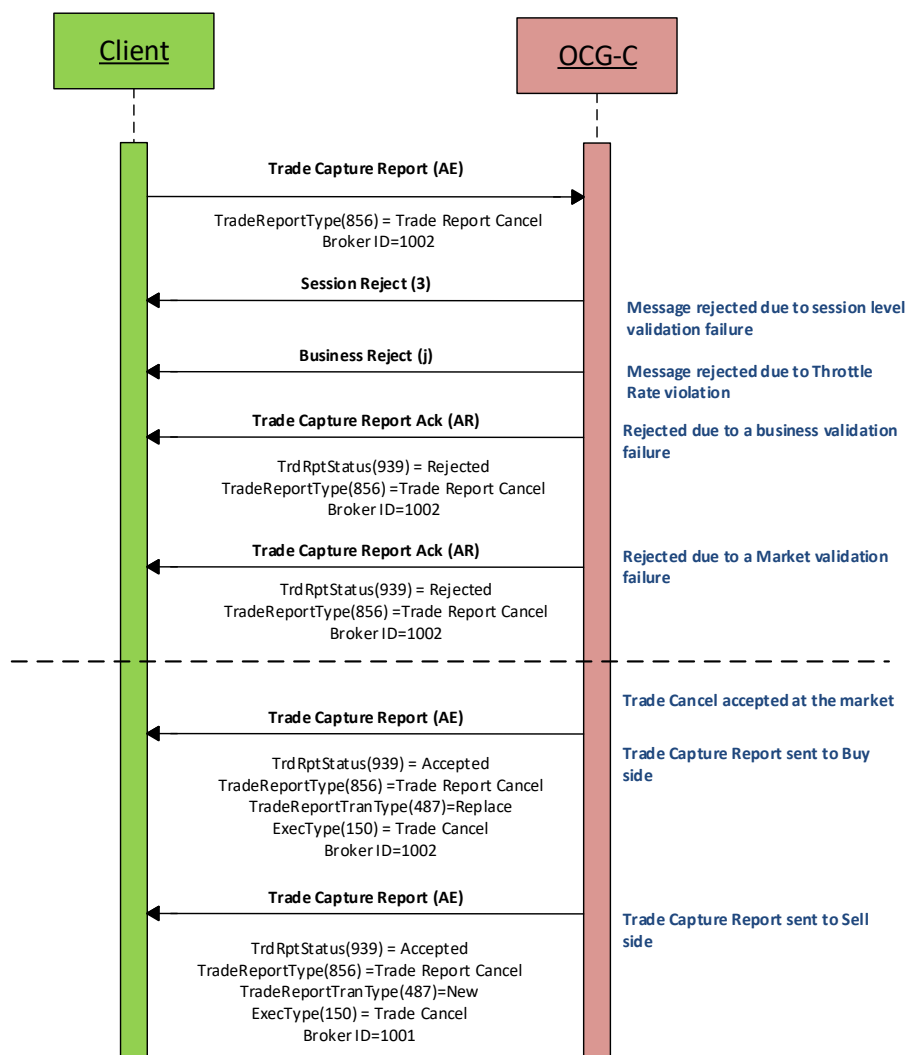
Once a Trade Cancel is accepted, two Trade Capture Reports will be sent (if the trade has two sides) independently to the two Broker IDs (buyer and seller broker IDs) involved in the trade with ExecType (150) set to H = Trade Cancel. The TradeReportTransType (487) field of the Trade Capture Report will be set as 2 = Replace for the side that submits this cancel request and as 0 = New for the counterparty side of the trade.

The OCG-C will explicitly reject a Trade Cancel message via the Trade Capture Report Ack (35=AR) message to the submitter of the cancel request. The TrdRptStatus (939) field will

indicate whether the trade is 1 = Rejected, or not. If a trade cancel request is rejected, the reason will be specified in the TradeReportRejectReason (751) field.

### 6.7.3.1 Message Flow

Trade Capture Report submitted by the purchasing side of the reported trade to cancel/reject the trade:



### 6.7.4 BCAN Field Submission by Purchasing Side

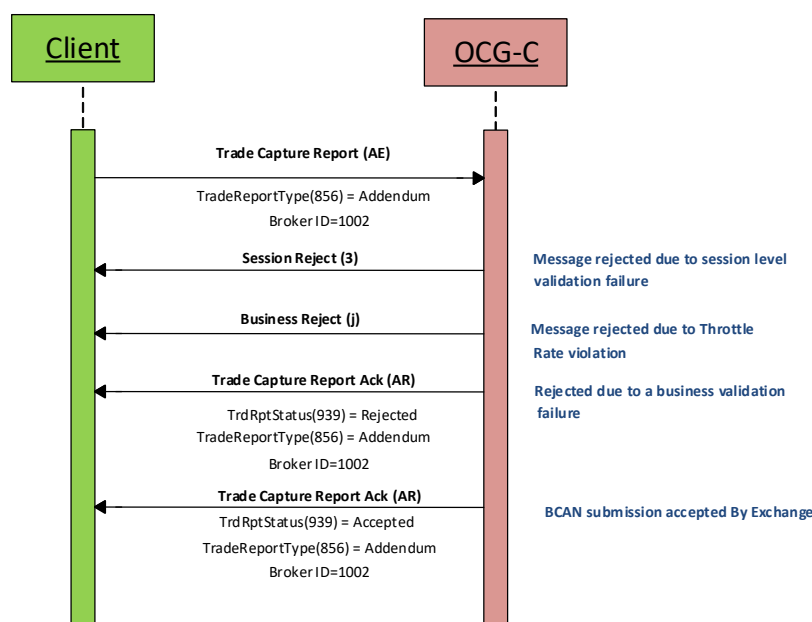
If the alleged trade is correct, purchasing side of the alleged off exchange trade needs to submit the BCAN Field of purchase side to Exchange via Trade Capture Report (35=AE) message where the TradeReportType (856) must be set to 4 = Addendum. BCAN Field submission is mandatory for alleged trade quantity greater than or equal to one board lot and is optional for alleged trade quantity less than one board lot.

### 6.7.5 BCAN Field Submission Acknowledgement

After submitting the BCAN Field to Exchange, purchasing side will receive Trade Capture Report Ack (35=AR) from OCG-C with TrdRptStatus (939) field setting to 0 = Accepted if the BCAN Field submission is accepted, otherwise the TrdRptStatus (939) field is set to 1 = Rejected with reason specified in the TradeReportRejectReason (751) field.

### 6.7.5.1 Message Flow

Trade Capture Report submitted by the purchasing side of the reported trade to provide the BCAN Field of purchase side to Exchange:



## 6.8 Odd Lot/Special Lot Order Handling

The OCG-C supports Odd lot/Special Lot order related functions in semi-automatic trading. The functions here include:

- submission of new order,
- cancellation of existing order and
- reporting a trade against a specific resting order

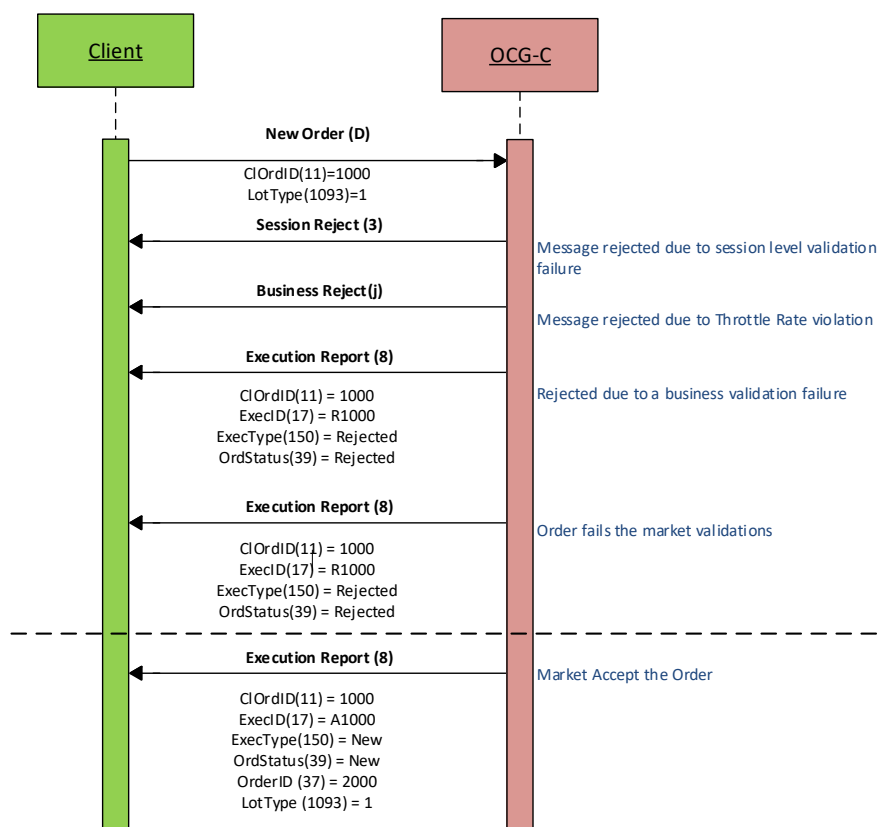
The OCG-C uses the following matrix for the acknowledgements, confirmations and executions:

Business Scenario	Odd lot/Special Lot Order Submitting Broker	Trade Submitting Broker
Odd lot/Special lot New Order – Confirmation/Rejection	Execution Report (35=8)	N/A
Odd lot/Special lot Cancel – Confirmation	Execution Report (35=8)	N/A
Odd lot/Special lot Cancel – Rejection	Cancel Reject (35=9)	N/A
Odd lot/Special lot Trade – Accepted	Execution Report (35=8)	Trade Capture Report (35=AE)
Odd lot/Special lot Trade – Rejected	N/A	Trade Capture Report Ack (35=AR)
Odd lot/Special lot Trade – Cancelled	Execution Report (35=8)	Trade Capture Report (35=AE)

## 6.8.1 Order Submission

Similar to a board lot order submission, single sided odd lot/special lot orders can be submitted to the OCG-C using the New Order (35=D). The OCG-C identifies this being an odd lot/special lot order using LotType (1093) = 1 – Odd Lot.

### 6.8.1.1 Message Flow – New Odd lot/Special lot Order



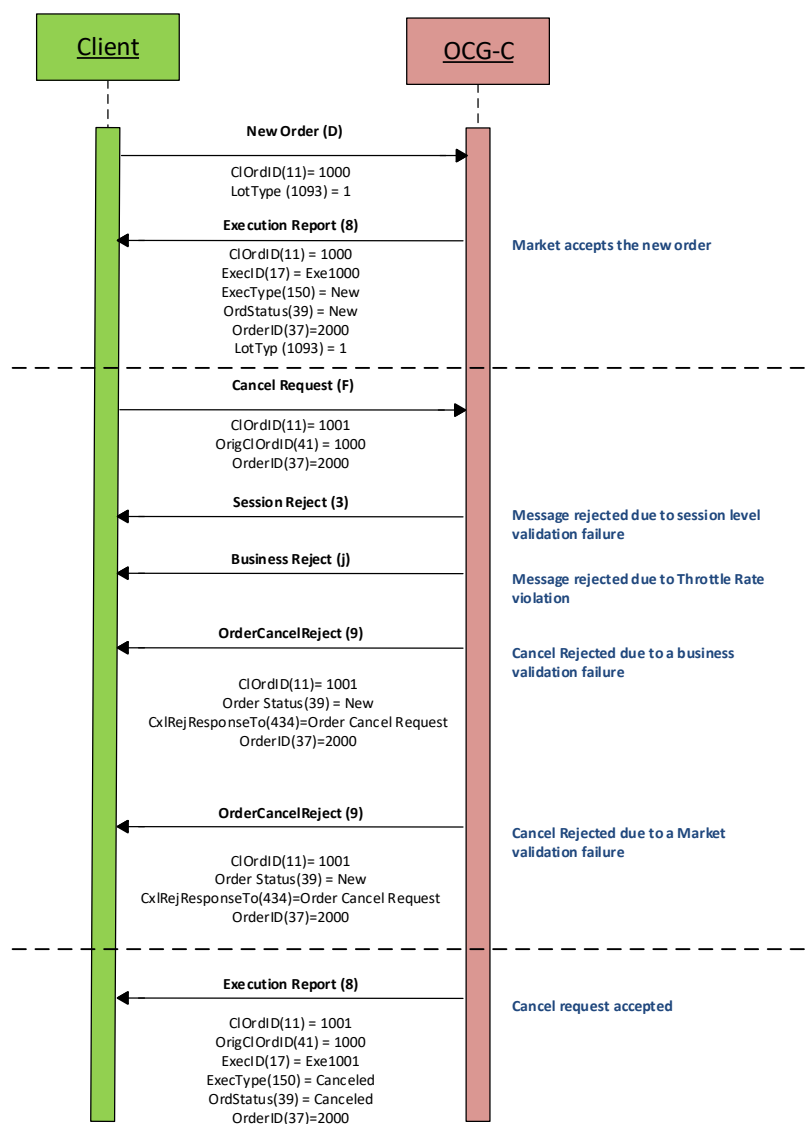
## 6.8.2 Order Cancellation

As for an odd lot/special lot order, a resting odd lot/special lot order may be cancelled via the Cancel Request (35=F) message. The OCG-C will respond with an Execution Report (35=8) to confirm or Cancel Reject (35=9) message for a rejection.

The client should identify the order being cancelled by its OrigClOrdID (41). The client can specify the OrderID (37) in the Cancel Request message but it is not a mandatory requirement. If the OrderID (37) is specified in the Cancel Request message, the system will validate the specified OrderID with the actual OrderID assigned to the particular order by the system (order is identified by the OrigClOrdID). The Cancel Request will be rejected if the specified OrderID is invalid based on this validation.

The client may not cancel an odd lot/special lot order that is fully filled/cancelled/expired. If the client sends a cancel request for an order for which a cancellation is already being processed the incoming cancel request will be rejected.

### 6.8.2.1 Message Flow – Cancel Request



### 6.8.3 Order Amendment

An odd lot/special lot order may not be amended. Any amendment request for an odd lot/special lot order will be rejected by the OCG-C.

### 6.8.4 Trade Request

A semi-automatic odd lot/special lot trade request, pointing to a resting order (i.e., existing open order) may be submitted using Trade Capture Report (35=AE) message.

Since Trade Capture Report (35=AE) message can also be used to report an off-exchange trade, the OCG-C will identify the incoming Trade Capture Report (35=AE) being a semi-automatic odd lot/special lot trade if:

- TrdType (828) = 102 – Odd Lot Trade, and
- Existence of OrderID (37) in the details of the Side (54) opposite to submitting side.

If the above criteria is not met then the OCG-C will treat the incoming Trade Capture Report (35=AE) as an off-exchange trade to be reported as described in [Section 6.7](#).

If the trade is accepted by the market then:

- Trade Capture Report submitter will receive a Trade Capture Report (35=AE) confirming the acceptance, and
- The resting order owner will receive a trade through Execution Report (35=8) to confirm the trade.

Note that this resting order should be considered as fully filled.

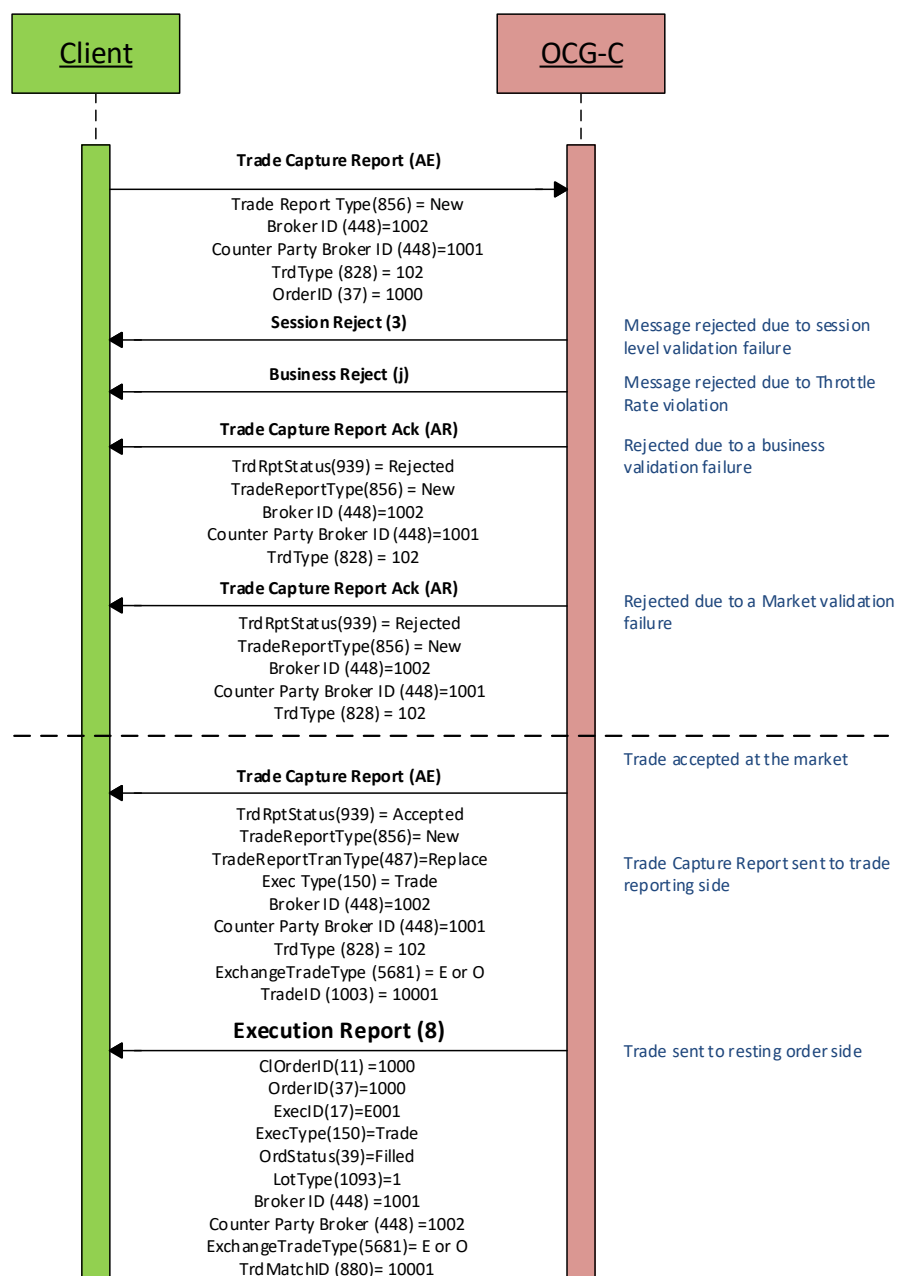
Whether the confirmed trade is odd lot or special lot may be determined by ExchangeTradeType (5681) as follows:

- E = Special Lot
- O = Odd Lot

If the trade is not accepted then the Trade Capture Report submitter will receive a Trade Capture Report Ack (35=AR) carrying the reason for rejection.

Once the trade is accepted, it can be cancelled subsequently only by the exchange.

### 6.8.4.1 Message Flow – Trade Request



## 6.9 Message Rejection

### 6.9.1 Session Level Reject

If an incoming message violates any message level validations such as data type mismatches or message structure mismatches, the messages are expected to be rejected back to the sender using a Reject (35=3) message (applicable to both the client and the OCG-C).

### 6.9.2 Business Message Reject

Business Message Reject (35=j) will be used in rejecting any business message due to application level validation failures such as MPS rate violations, conditionally required field violations, etc.



## 6.10 Cancel On Disconnect

At the request of the member firm, all live orders (board lot and odd lot/special lot) and quotes submitted under a Comp ID can be configured to be automatically cancelled whenever the OCG-C identifies an abrupt disconnection of the client session in the following scenarios:

- OCG-C detects a network-level disconnection from the client without a Logout message prior to this disconnection,
- OCG-C detects that the client session is inactive with no heartbeats being received for the specified interval of time as described in [Section 4.3](#).

The OCG-C supports a delayed cancellation of orders once the OCG-C triggers the Cancel on Disconnect scenario. In this case, the actual cancellation is initiated upon the abrupt disconnection plus the delay duration as specified for the client session; if within this delay duration the client is able to re-establish the session, then cancellation will be not triggered. Also, the Cancel on Disconnect will not be triggered due to an internal HKEX OCG-C system outage or failure.

This feature does not guarantee that all live orders will be successfully cancelled as executions that occur very near to the time of disconnect may not be reported to the client. It also depends on the market/instrument trading state when the cancellation is received by HKEX securities trading system.

If the OCG-C activates the Cancel on Disconnect feature for the client, on a subsequent successful login this client will receive the execution report messages for the cancelled orders, if any.

This optional feature is provided as an alternative to the cancellation submission on behalf of the EP's manual process at present.

The configuration of the Cancel on Disconnect feature cannot be altered during a FIX session intra-day.

## 6.11 Message Rate Throttling

HKEX has implemented a scheme for throttling message traffic where each Comp ID is only permitted to submit up to a specified number of business messages per second (MPS).

The client can request for message rate entitlement information pertaining to that client by sending a User Request (35=BE) message and the OCG-C will reply with a User Response (35=BF) message to convey the message rate entitlement information.

Every message that exceeds the maximum rate of a Comp ID will be rejected via a Business Message Reject; the Text field within the Business Message Reject will indicate the remaining throttle interval time.

HKEX reserves the right to drop the client session with or without sending a Logout (35=5) message to the client, if that client is found to be excessively violating the message rate.

## 6.12 Party Entitlements

The client can request for entitlement information for Broker IDs of that client via Party Entitlement Request (35=CU) Message. If the Request is accepted, Party Entitlement Report (35=CV) message will carry the entitlement information.

## **6.13 Self-matching Prevention**

Self-matching Prevention (SMP) allows market participants to safeguard their orders from being self-executed with each other.

Market participant first needs to submit requests via an EP to HKEX to obtain SMP ID and/or share the SMP ID with other EPs. The requesting EP also needs to specify the SMP instruction pertaining to the SMP ID in the request to complete the SMP ID registration. The SMP instruction can be cancel aggressive or cancel passive.

Market participants can specify the SelfMatchPreventionID (2362) during order and quote submissions. When the system detects the incoming order (same processing for quote) that will hit resting order(s) with same SMP ID, the system will base on the SMP instruction of the SMP ID to determine whether to cancel the aggressive (new incoming) order or the passive (resting) order:

- If the SMP instruction is cancel passive, all tradable resting order(s) with the same SMP ID will be cancelled.
- If the SMP instruction is cancel aggressive, the new incoming order will be cancelled immediately when it hits a tradable resting order with same SMP ID.

The SMP ID can be used within the requesting EP and/or shared with other EPs. No matter whether the orders are submitted by the same EP or different EPs, as long as the SMP IDs are the same, SMP will be triggered.

Trade matched during Pre-opening Session (POS) and Closing Auction Session (CAS) will not trigger SMP.

### **6.13.1 SMP Handling for Order**

EP can specify the SelfMatchPreventionID (2362) in the new order (board lot) message.

SMP is not applicable to odd lot/special lot orders.

SMP ID amendment for an existing order is not allowed. EP may cancel the existing order and resubmit a new order with other SMP ID.

When an order is amended, it will inherit the same SMP ID from the original order.

When a new order is accepted, an ExecutionReport (35=8) with ExecType (150) = 0 (New) will always be returned to EP. The system will then proceed to try to match with tradable resting orders (if any) along with SMP checking. Refer to Section 6.5.4.2 & 6.5.4.3 for message flow.

When an order amendment is accepted, an ExecutionReport (35=8) with ExecType (150) = 5 (Relaced) will always be returned to EP. The system will then proceed to try to match with tradable resting orders (if any) along with SMP checking. Refer to Section 6.5.8.3 & 6.5.8.4 for message flow.

SMP is triggered if the incoming order or amended order hits tradable resting order with same SMP ID. When SMP is triggered, an unsolicited ExecutionReport (35=8) with ExecType (150) = 4 (Cancelled) will be relayed to the originator. This Execution Report will contain the SMP ID as well as the ExecRestatementReason (378) to indicate that such cancellation is due to SMP.

### **6.13.2 SMP Handling for Quote**

EP can specify the SelfMatchPreventionID (2362) in the quote message.

SMP ID amendment on quote modification is not allowed. If there is existing quote (either offer side, bid side or both sides) in the order book, the SMP ID of the quote modification

message must be the same as existing one. It is noted that if there is no SMP ID specified in the existing quote, the SMP ID must not be present in the quote modification message.

When quote is accepted, an ExecutionReport (35=8) with ExecType (150) = 0 (New) or 5 (Replaced) per side will always be returned to EP. The system will then proceed to try to match with tradable resting orders (if any) along with SMP checking. Refer to Section 6.6.4 for message flow.

SMP is triggered if the incoming quote hits tradable resting order with same SMP ID. When SMP is triggered, an unsolicited ExecutionReport (35=8) with ExecType (150) = 4 (Cancelled) will be relayed to the originator. This Execution Report will contain the SMP ID as well as the ExecRestatementReason (378) to indicate that such cancellation is due to SMP.

## 7. Message Definitions

### 7.1 Supported Message Types

All supported message types initiated by the client or the OCG-C:

#	Message	Message Type	Usage
1.	Heartbeat	0	Allows the client and the OCG-C to exercise the communication line during periods of inactivity and verify that the interfaces at each end are available.
2.	Test Request	1	Allows the client or the OCG-C to request a response from the other party if inactivity is detected.
3.	Resend Request	2	Allows for the recovery of messages lost during a malfunction of the communications layers.
4.	Reject	3	Used to reject a message that does not comply with session level validations.
5.	Sequence Reset	4	Allows the client or the OCG-C to increase the expected incoming sequence number of the other party.
6.	Logon	A	Allows the client and the OCG-C to establish a FIX session.
7.	Logout	5	Allows the client and the OCG-C to terminate a FIX session.
8.	Business Message Reject	j	Indicates that an application message could not be processed
9.	Execution Report	8	Indicates one of the following: <ul style="list-style-type: none"> <li>▪ Order Accepted</li> <li>▪ Order Rejected</li> <li>▪ Order Expired</li> <li>▪ Order Cancelled</li> <li>▪ Order Replaced</li> <li>▪ Trade</li> <li>▪ Trade Cancel</li> </ul>
10.	Order Cancel Reject	9	Indicates that either a Cancel or Cancel/Replace request has been rejected
11.	New Order – Single	D	Allows the client to submit a new order.
12.	Order Cancel Request	F	Allows the client to cancel a live order in the execution venue.
13.	Order Cancel Replace Request	G	Allows the client to amend specific attributes a live order.
14.	Mass Cancel Request	q	Allows the client to mass cancel: <ul style="list-style-type: none"> <li>▪ All live orders.</li> </ul>

#	Message	Message Type	Usage
			<ul style="list-style-type: none"> <li>▪ All live orders for a particular instrument.</li> <li>▪ All live orders for a particular market segment.</li> </ul>
15.	Order Mass Cancel Report	r	Indicates one of the following <ul style="list-style-type: none"> <li>▪ Mass cancel request accepted.</li> <li>▪ Mass cancel request rejected.</li> </ul>
16.	Quote	S	Allows the client to submit a quote for a single instrument.
17.	Quote Cancel	Z	Allows the client to cancel a quote for a particular instrument.
18.	Quote Status Report	AI	Indicates one of the following: <ul style="list-style-type: none"> <li>▪ Quote rejected</li> <li>▪ Request to cancel a quote rejected</li> </ul>
19.	Trade Capture Report	AE	Indicates one of the following: <ul style="list-style-type: none"> <li>▪ Trade Submit</li> <li>▪ Trade Cancel</li> </ul>
20.	Trade Capture Report Ack	AR	Indicates one of the following: <ul style="list-style-type: none"> <li>▪ Reject Trade</li> <li>▪ Reject Trade Cancel</li> </ul>
21.	OBO Cancel Request	F	Allows the client to cancel a live order in the execution venue on behalf of another user.
22.	OBO Mass Cancel Request	q	Allows the client to carry out mass cancellations on behalf of another user at the following order levels: <ul style="list-style-type: none"> <li>▪ All live orders.</li> <li>▪ All live orders for a particular instrument.</li> <li>▪ All live orders for a particular market segment</li> </ul>
23.	User Request	BE	Allows the client to request for throttle entitlement details
24.	User Response	BF	Response to the User Request
25.	Party Entitlements Request	CU	Request entitlement information for Exchange participant
26.	Party Entitlements Report	CV	Response to Party Entitlements Request

## 7.2 In-bound Messages

In addition to the Session-level messages, the following lists the messages that are sent by the client to the OCG-C:

1. New Order – Single (35=D)
2. Order Cancel Request (35=F)
3. Order Cancel/Replace Request (35=G)

4. Order Mass Cancel Request (35=q)
5. Quote (35=S)
6. Quote Cancel (35=Z)
7. Trade Capture Report (35=AE)
8. User Request (35=BE)
9. Party Entitlements Request (35=CU)

### 7.3 Out-bound Messages

In addition to the Session-level messages, the following lists the messages that are sent by the OCG-C to the client:

1. Execution Report (35=8)
2. Order Cancel Reject (35=9)
3. Business Message Reject (35=j)
4. Order Mass Cancel Report (35=r)
5. Quote Status Report (35=AI)
6. Trade Capture Report (35=AE)
7. Trade Capture Report Ack (35=AR)
8. User Response (35=BF)
9. Party Entitlements Response (35=CV)

### 7.4 Message Header

All messages exchanged between the client and the OCG-C have the following standard message header:

FIX Tag	Field Name	Required?	Description
8	BeginString	Y	Always FIXT.1.1
9	BodyLength	Y	Number of bytes after this field up to and including the delimiter immediately preceding the CheckSum.
35	MsgType	Y	Message type.
49	SenderCompID	Y	Comp ID of the party sending the message.
56	TargetCompID	Y	Comp ID of the party the message is sent to.
34	MsgSeqNum	Y	Sequence number of the message.
43	PossDupFlag	N	Indicates whether the message was previously transmitted under the same MsgSeqNum (34). Absence of this field is interpreted as original transmission (N).
97	PossResend	N	Indicates whether the message was previously transmitted under a different MsgSeqNum (34). Absence of this field is interpreted as original transmission (N).
52	SendingTime	Y	Time the message was transmitted.
122	OrigSendingTime	N	Time the message was originally transmitted. If the original time is not available, this should be the same value as SendingTime (52).

FIX Tag	Field Name	Required?	Description
			Required if PossDupFlag (43) is Possible Duplicate (Y).
1128	ApplVerID	N	Version of FIX used in the message: <ul style="list-style-type: none"> <li>9 = FIX50SP2</li> </ul> Required if the message is generated by the OCG-C.

## 7.5 Message Trailer

All messages exchanged between the client and the OCG-C have the following standard message trailer:

FIX Tag	Field Name	Required?	Description
10	Checksum	Y	Standard check sum described by FIX protocol. Always last field in the message; i.e. serves, with the trailing <SOH>, as the end-of-message delimiter. Always defined as three characters.

## 7.6 Administrative Messages

### 7.6.1 Logon (A)

This message is initiated by the client and the OCG-C may respond with the same message.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	A = Logon
<b>Message Body</b>			
98	EncryptMethod	Y	Method of encryption. <ul style="list-style-type: none"> <li>0 = None/Other</li> </ul>
108	HeartBtInt	Y	Indicates the heartbeat interval in seconds.
789	NextExpectedMsgSeqNum	Y	Next expected MsgSeqNum value to be received.
1400	EncryptedPasswordMethod	N	Enumeration defining the encryption method used to encrypt password fields: <ul style="list-style-type: none"> <li>101 = RSA</li> </ul>
1402	EncryptedPassword	N	Encrypted password – encrypted via the method specified in EncryptedPasswordMethod (1400). Padding scheme supported is PKCS #1 or OAEP.
1404	EncryptedNewPassword	N	Encrypted new password – encrypted via the method specified in EncryptedPasswordMethod (1400). Padding scheme supported is PKCS #1 or OAEP.
1409	SessionStatus	N	Status of the FIX session. Required if the message is generated by the OCG-C.
1137	DefaultAppVerID	Y	Default version of FIX messages used in this session: <ul style="list-style-type: none"> <li>9 = FIX50SP2</li> </ul>
464	TestMessageIndicator	N	Can be used to specify that this FIX session will be sending and receiving "test" vs. "production" messages Only applicable for Logon (35=A) message from the OCG-C to the client.
58	Text	N	Text field will be used to convey the number of days to password expiry when the OCG-C replies with a Logon (35=A) message upon a successful logon attempt.
<b>Message Trailer</b>			

EncryptedPassword (1402) must be present in the Logon message (35=A) initiated by the client.

## 7.6.2 Logout (5)

This message can be initiated by both client and the OCG-C.



FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	5 = Logout
<b>Message Body</b>			
1409	SessionStatus	N	Status of the FIX session. Required if the message is generated by the OCG-C.
58	Text	N	Textual reason for the logout.
<b>Message Trailer</b>			

### 7.6.3 Heartbeat (0)

This message can be initiated by both client and OCG-C.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	0= Heartbeat
<b>Message Body</b>			
112	TestReqID	N	Required if the heartbeat is a response to a TestRequest (35=1). The value in this field should echo the TestReqID (112) received in the TestRequest .
<b>Message Trailer</b>			

### 7.6.4 Test Request (1)

This message can be initiated by both the client and the OCG-C.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	1= Test Request
<b>Message Body</b>			
112	TestReqID	Y	Identifier included in Test Request message to be returned in resulting Heartbeat.
<b>Message Trailer</b>			

### 7.6.5 Resend Request (2)

This message can be initiated by both client and the OCG-C.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	2= Resend Request
<b>Message Body</b>			
7	BeginSeqNo	Y	Sequence number of the first message expected to be resent.
16	EndSeqNo	Y	Sequence number of the last message expected to be resent. This may be set to 0 to request the sender to transmit ALL messages starting from BeginSeqNo (7).
<b>Message Trailer</b>			

### 7.6.6 Reject (3)

This message is initiated by the OCG-C.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	3= Reject
<b>Message Body</b>			
45	RefSeqNum	Y	Sequence number of the message which caused the rejection
371	RefTagID	N	If a message is rejected due to an issue with a particular field its tag number will be indicated.
372	RefMsgType	N	Message type of the rejected message.
373	SessionRejectReason	N	Code specifying the reason for the reject: <ul style="list-style-type: none"> <li>▪ 0 = Invalid Tag Number</li> <li>▪ 1 = Required Tag Missing</li> <li>▪ 2 = Tag not defined for this message</li> <li>▪ 3 = Undefined tag</li> <li>▪ 4 = Tag specified without a value</li> <li>▪ 5 = Value is incorrect (out of range) for this tag</li> <li>▪ 6 = Incorrect data format for value</li> <li>▪ 9 = CompID problem</li> <li>▪ 10 = Sending Time Accuracy problem</li> <li>▪ 11 = Invalid Msg Type</li> <li>▪ 13 = Tag appears more than once</li> <li>▪ 15 = Repeating group fields out of order</li> <li>▪ 16 = Incorrect NumInGroup count for repeating group</li> <li>▪ 18 = Invalid/Unsupported Application Version</li> <li>▪ 99 = Other</li> </ul>
58	Text	N	Text specifying the reason for the rejection.
<b>Message Trailer</b>			

### 7.6.7 Sequence Reset (4)

This message can be initiated by both client and the OCG-C.

<u>FIX Tag</u>	<u>Field Name</u>	<u>Required?</u>	<u>Description</u>
<b><u>Message Header</u></b>			
35	MsgType	Y	4= Sequence Reset
<b>Message Body</b>			
36	NewSeqNo	Y	Sequence number of the next message to be transmitted.
123	GapFillFlag	N	Mode in which the message is being used. Absence of this field is interpreted as Sequence Reset (N).
<b><u>Message Trailer</u></b>			

## 7.7 Business Messages – Order Handling

### 7.7.1 New Board Lot Order – Single (D)

This message is initiated by the client to send a new board-lot order.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	D = New Order Single
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 2 or 3.
→	448	PartyID	ID of the Broker client submitting the order: Broker Number/BS User ID/BCAN Field
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that is submitting this order) - mandatory</li> <li>▪ 3 = Client ID (BCAN Field) - mandatory</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
18	ExecInst	N	Instructions for order handling: <ul style="list-style-type: none"> <li>▪ c (lower case C) = Ignore Price Validity Checks</li> <li>▪ x (lower case X) = Ignore Notional Value Checks</li> </ul> If either is missing, the respective check will be performed: Absence of this field is interpreted as None (i.e. system will perform both Price and Notional Value check).

40	OrdType	Y	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul>
58	Text	N	Free Text
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> <li>▪ 4 = Fill or Kill = FOK</li> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	Y	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if Side (54) = 1 (Buy) to indicate covering a short sell.
528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>▪ 2 = Index Arbitrage</li> <li>▪ 5 = Acting as Market Maker or Specialist in Security</li> <li>▪ 6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: Order Type (40) = 2 (Limit). If present, this should be set as 1.
<a href="#">2362</a>	<a href="#">SelfMatchPreventionID</a>	<a href="#">N</a>	<a href="#">The identifier to prevent self-matching</a>
Component Block <DisclosureInstructionGrp>			
1812	NoDisclosureInstructions	Y	Number of disclosure instructions below.
→	1813	Disclosure Type	Type of disclosure instruction to convey:

				<ul style="list-style-type: none"> <li>100 = None (No specific information to disclose)</li> </ul> <p>It is a mandatory field for future use. EP should specify Disclosure Type 100 with Disclosure Instruction (1814) = 1 for completeness.</p>
→	1814	Disclosure Instruction	Y	<p>Instruction to disclose information or to use default values of the receiver:</p> <ul style="list-style-type: none"> <li>1 = Yes</li> </ul>
End Component Block				
<a href="#">Message Trailer</a>				

## 7.7.2 New Odd Lot/Special Lot Order – Single (D)

This message is initiated by the client to send a new odd lot/special lot order to the market.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	D = New Order Single
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
Component Block <Parties>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2 or 3.
→	448	PartyID	ID of the Broker client submitting the order: Broker Number/BS User ID/BCAN Field
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that is submitting this order) - mandatory</li> <li>3 = Client ID (BCAN Field) – mandatory for special lot order with OrderQty &gt;= 1 board lot; optional for odd lot order with OrderQty &lt; 1 board lot</li> <li>75 = Location ID (BS User ID)</li> </ul>
End Component Block			
Component Block <Instrument>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> <p>Required if: SecurityID (48) is specified</p>
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> <p>Required if: SecurityIDSource (22) = 8 (Exchange Symbol).</p>

End Component Block			
18	ExecInst	N	<p>Instructions for order handling:</p> <ul style="list-style-type: none"> <li>x (lower case X) = Ignore Notional Value Checks</li> </ul> <p>Absence of this field is interpreted as None (i.e. system will perform Notional Value check).</p>
40	OrdType	Y	<p>Order type applicable to the order:</p> <ul style="list-style-type: none"> <li>2 = Limit</li> </ul>
58	Text	N	Free Text
59	TimeInForce	N	<p>Time qualifier of the order:</p> <ul style="list-style-type: none"> <li>0 = Day (Default)</li> </ul> <p>Absence of this field is interpreted as 0 = Day.</p>
54	Side	Y	<p>Side of the order</p> <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell Short</li> </ul>
38	OrderQty	Y	Total order quantity of the order
44	Price	N	<p>Price of order.</p> <p>Required if:</p> <p>OrdType (40) = 2 = Limit.</p>
60	TransactTime	Y	The time at which the particular message was generated.
77	PositionEffect	N	<p>Indicates whether the resulting position after a trade should be an opening position or closing position:</p> <ul style="list-style-type: none"> <li>C = Close</li> </ul> <p>Applicable only if Side (54) = 1 (Buy) to indicate covering a short sell.</p>
528	OrderCapacity	N	<p>Designates the capacity of the firm placing the order:</p> <ul style="list-style-type: none"> <li>A = Agency</li> <li>P = Principal</li> </ul>
Component Block <DisclosureInstructionGrp>			
1812	NoDisclosureInstructions	Y	Number of disclosure instructions below.
→	1813	Disclosure Type	<p>Type of disclosure instruction to convey:</p> <ul style="list-style-type: none"> <li>100 = None (No specific information to disclose)</li> </ul> <p>It is a mandatory field for future use. EP should specify Disclosure Type 100 with Disclosure Instruction (1814) = 1 for completeness.</p>
→	1814	Disclosure Instruction	<p>Instruction to disclose information or to use default values of the receiver:</p> <ul style="list-style-type: none"> <li>1 = Yes</li> </ul>
End Component Block			
1093	LotType	N	<p>Lot Type of the order:</p> <ul style="list-style-type: none"> <li>1 = Odd Lot</li> </ul> <p>See Notes.</p>

### Message Trailer

**Notes:**

1. This message will be treated as a request for new board lot order (as in [Section 7.7.1](#)) if:
  - LotType (1093) is present but value is 2, or
  - LotType (1093) is absent

### 7.7.3 Order Cancel Replace Request (G)

This message is initiated by the client to cancel/replace an existing board-lot order.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	G = Order Cancel Replace Request
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of this cancel/replace request.
37	OrderID	N	Order ID of the original order.
41	OrigClOrdID	Y	Client Order ID of the order being cancel-replaced.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order cancel/replace – Broker ID or BS User ID. If Broker ID then it must be the same as in the original order.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted this order)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
18	ExecInst	N	Instructions for order handling:



			<ul style="list-style-type: none"> <li>▪ c (lower case C) = Ignore Price Validity Checks</li> <li>▪ x (lower case X) = Ignore Notional Value Checks</li> </ul> <p>If either is missing, the respective check will be performed:</p> <p>Absence of this field is interpreted as None (i.e. system will perform both Price and Notional Value check).</p>
40	OrdType	Y	<p>Order type applicable to the order:</p> <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul> <p>This must remain the same as in the original order.</p>
58	Text	N	Free Text
59	TimeInForce	N	<p>Time qualifier of the order:</p> <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> <li>▪ 4 = Fill or Kill = FOK</li> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> <p>Absence of this field is interpreted as 0 = Day.</p> <p>If specified, this must remain the same as in the original order.</p>
54	Side	Y	<p>Side of the order</p> <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	Y	Total order quantity of the order
44	Price	N	<p>Price of order.</p> <p>Required if:</p> <p style="padding-left: 20px;">OrdType (40) = 2 = Limit.</p>
60	TransactTime	Y	The time at which the particular message was generated.
77	PositionEffect	N	<p>Indicates whether the resulting position after a trade should be an opening position or closing position:</p> <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> <p>Applicable only if Side (54) = 1 (Buy) to indicate covering a short sell.</p>
528	OrderCapacity	N	<p>Designates the capacity of the firm placing the order:</p> <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
529	OrderRestrictions	N	<p>Restrictions associated with this order:</p> <ul style="list-style-type: none"> <li>▪ 2 = Index Arbitrage</li> <li>▪ 5 = Acting as Market Maker or Specialist in Security</li> <li>▪ 6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> <p>The above 3 values are applicable only if Side (54) = 5 (Sell Short)</p>

1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: Order Type (40) = 2 (Limit). If present, this should be set as 1. This must be the same as in the original order.
Component Block <DisclosureInstructionGrp>			
1812	NoDisclosureInstructions	Y	Number of disclosure instructions below. If none, then the disclosure instructions from the original order will be assumed.
→	1813	Disclosure Type	Type of disclosure instruction to convey: <ul style="list-style-type: none"> <li>100 = None (No specific information to disclose)</li> </ul> It is a mandatory field for future use. Client should specify Disclosure Type 100 with Disclosure Instruction (1814) = 1 for completeness.
→	1814	Disclosure Instruction	Instruction to disclose information or to use default values of the receiver: <ul style="list-style-type: none"> <li>1 = Yes</li> </ul>
End Component Block			
<a href="#">Message Trailer</a>			

#### 7.7.4 Order Cancel Request (F)

This message is initiated by the client to cancel an existing order (board lot or odd lot/special lot).

FIX Tag	Field Name	Required?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	F = Order Cancel Request
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of this cancel request.
37	OrderID	N	Order ID of the original order.
41	OrigClOrdID	Y	Client Order ID of the order being cancelled.
Component Block <Parties>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order cancel request – Broker ID or BS User ID. If Broker ID then it must be the same as in the original order.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that submitted this order)</li> </ul>

				<ul style="list-style-type: none"> <li>75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>				
<b>Component Block &lt;Instrument&gt;</b>				
48	SecurityID	Y	Instrument identifier	
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified	
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).	
<b>End Component Block</b>				
38	OrderQty	Y	Total order quantity of the order	
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell Short</li> </ul>	
58	Text	N	Free Text	
60	TransactTime	Y	The time at which the particular message was generated.	
<a href="#">Message Trailer</a>				

### 7.7.5 Mass Cancel Request (q)

This message is initiated by the client to mass cancel board lot and odd/special lot orders.

FIX Tag	Field Name	Required?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	q = Order Mass Cancel Request
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of this mass cancel request.
530	MassCancelRequestType	Y	Specifies the scope of the mass cancel request: <ul style="list-style-type: none"> <li>1 = Cancel orders for a Security</li> <li>7 = Cancel all orders</li> <li>9 = Cancel orders for a Market Segment</li> </ul>
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order mass cancel request – Broker ID or BS User ID. Orders for the Broker ID specified here will be cancelled.

→	447	PartyIdSource	Y	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Y	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID for which orders are to be mass cancelled)</li> <li>75 = Location ID (BS User ID)</li> </ul>
End Component Block				
Component Block <Instrument>				
	48	SecurityID	N	Instrument identifier Required if: MassCancelRequestType (530) = 1
	22	SecurityIDSource	N	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
	207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block				
	54	Side	N	Side of the order <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> </ul>
	1300	MarketSegmentID	N	Identifies the Market Segment: <ul style="list-style-type: none"> <li>MAIN</li> <li>GEM</li> <li>NASD</li> <li>ETS</li> </ul> Required if: MassCancelRequestType (530) = 9 (Cancel Orders for A Market Segment)
	60	TransactTime	Y	The time at which the particular message was generated.
<a href="#">Message Trailer</a>				

## 7.7.6 On Behalf Of Cancels

The client can request to cancel order(s) owned by a Broker ID that belongs to the same firm but different session.

### 7.7.6.1 OBO Cancel Request (F)

This message is initiated by the client to cancel an existing board-lot or odd/special lot order.

FIX Tag	Field Name	Required?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	F = Order Cancel Request

<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID of the original order.
41	OrigClOrdID	N	Client Order ID of the order being cancelled.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 2 or 3: <ul style="list-style-type: none"> <li>▪ Order Owning Broker ID</li> <li>▪ Submitting Broker ID</li> <li>▪ Broker Location ID</li> </ul>
→	448	PartyID	ID of the Broker client submitting the order cancel request – Owner Broker ID, Submitting Broker ID or BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted the order)</li> <li>▪ 36 = Entering Trader (Broker ID that is submitting this OBO cancel request)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
38	OrderQty	Y	Total order quantity of the order
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
58	Text	N	Free Text
60	TransactTime	Y	The time at which the particular message was generated.
<b><a href="#">Message Trailer</a></b>			

### 7.7.6.2 OBO Mass Cancel (q)

This message is initiated by the client to mass cancel orders (board lot and odd lot/special Lot).

FIX Tag	Field Name	Required?	Description	
<b>Message Header</b>				
35	MsgType	Y	q = Order Mass Cancel Request	
<b>Message Body</b>				
11	ClOrdID	Y	Client specified identifier of this mass cancel request.	
530	MassCancelRequestType	Y	Specifies the scope of the mass cancel request: <ul style="list-style-type: none"> <li>▪ 1 = Cancel orders for a Security</li> <li>▪ 7 = Cancel all orders</li> <li>▪ 9 = Cancel orders for a Market Segment</li> </ul>	
<b>Component Block &lt;Parties&gt;</b>				
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 2 or 3: <ul style="list-style-type: none"> <li>▪ Order Owning Broker ID</li> <li>▪ Submitting Broker ID</li> <li>▪ Broker Location ID</li> </ul>	
→	448	PartyID	Y	ID of the Broker client submitting the order cancel request – Owner Broker ID, Submitting Broker ID or BS User ID.
→	447	PartyIDSource	Y	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Y	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID for which orders to be mass cancelled)</li> <li>▪ 36 = Entering Trader (Broker ID that is submitting this OBO mass cancel request)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>				
<b>Component Block &lt;Instrument&gt;</b>				
48	SecurityID	N	Instrument identifier Required if: MassCancelRequestType (530) = 1	
22	SecurityIDSource	N	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified	
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).	
<b>End Component Block</b>				
54	Side	N	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> </ul>	

1300	MarketSegmentID	N	<p>Identifies the Market Segment:</p> <ul style="list-style-type: none"> <li>▪ MAIN</li> <li>▪ GEM</li> <li>▪ NASD</li> <li>▪ ETS</li> </ul> <p>Required if: MassCancelRequestType (530) = 9 (Cancel Orders for A Market Segment)</p>
60	TransactTime	Y	The time at which the particular message was generated.

[Message Trailer](#)

## 7.7.7 Execution Report (8)

### 7.7.7.1 Order Accepted

The OCG-C will send this execution report once the new order (board lot or odd lot/special Lot) [or a new quote](#) is accepted.

FIX Tag	Field Name	Required ?	Description
<b>Message Header</b>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.
17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted the order)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> </ul>



			<ul style="list-style-type: none"> <li>▪ 4 = Fill or Kill = FOK</li> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.
528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>▪ 2 = Index Arbitrage</li> <li>▪ 5 = Acting as Market Maker or Specialist in Security</li> <li>▪ 6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: Order Type (40) = 2 (Limit). If present, this should be set as 1.
<a href="#">2362</a>	<a href="#">SelfMatchPreventionID</a>	<a href="#">N</a>	<a href="#">The identifier to prevent self-matching</a>
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>▪ 0 = New</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>▪ 0 = New</li> </ul>
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
58	Text	N	Free Text
1093	LotType	N	Lot Type of the order:

- 1 = Odd Lot
- 2 = Round Lot

### Message Trailer

Notes:

1. If LotType (1093) is present and value is 1, then this execution report carries an odd lot/special lot order,
2. If LotType (1093) is present and value is 2, then this execution report carries a board (i.e., round) lot order,
3. If LotType (1093) is absent then this execution report carries a board (i.e., round) lot order.

## 7.7.7.2 Order Rejected

The OCG-C will send this execution report once the new order (board lot or odd lot/special Lot) is rejected.

FIX Tag	Field Name	Required ?	Description
<b>Message Header</b>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.
17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted the order)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			

40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>1 = Market</li> <li>2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>0 = Day (Default)</li> <li>3 = Immediate or Cancel = IOC</li> <li>4 = Fill or Kill = FOK</li> <li>9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.
528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>A = Agency</li> <li>P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>2 = Index Arbitrage</li> <li>5 = Acting as Market Maker or Specialist in Security</li> <li>6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: OrdType (40) = 2 (Limit). If present, this should be set as 1.
<a href="#">2362</a>	<a href="#">SelfMatchPreventionID</a>	<a href="#">N</a>	<a href="#">The identifier to prevent self-matching</a>
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>8 = Rejected</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report:

			<ul style="list-style-type: none"> <li>▪ 8 = Reject</li> </ul>
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
103	OrdRejReason	N	Reject code indicating the reason for the order reject: <ul style="list-style-type: none"> <li>▪ 3 = Order exceeds Limit</li> <li>▪ 6 = Duplicate order (e.g., dupe ClOrdID)</li> <li>▪ 13 = Incorrect quantity</li> <li>▪ 16 = Price exceeds current price band</li> <li>▪ 19 = Reference price is not available</li> <li>▪ 20 = Notional value exceeds threshold</li> <li>▪ 99 = Other</li> <li>▪ 101 = Price exceeds current price band (override not allowed)</li> <li>▪ 102 = Price exceeds current price band</li> </ul>
1328	RejectText	N	Textual description of the rejection that is being communicated through this execution report
58	Text	N	Free Text
<a href="#">Message Trailer</a>			

### 7.7.7.3 Order Cancelled

The OCG-C sends this execution report once the Cancel Request for an order (board lot or odd lot/special Lot) is accepted.

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order cancel request.
41	OrigClOrdID	Y	Original client specified identifier for the incoming cancel request
37	OrderID	Y	Order ID as assigned by the exchange.
17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted the order)</li> </ul>

				<ul style="list-style-type: none"> <li>75 = Location ID (BS User ID)</li> </ul>
End Component Block				
Component Block <Instrument>				
48	SecurityID	Y		Instrument identifier
22	SecurityIDSource	Y		Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N		The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block				
40	OrdType	N		Order type applicable to the order: <ul style="list-style-type: none"> <li>1 = Market</li> <li>2 = Limit</li> </ul>
59	TimeInForce	N		Time qualifier of the order: <ul style="list-style-type: none"> <li>0 = Day (Default)</li> <li>3 = Immediate or Cancel = IOC</li> <li>4 = Fill or Kill = FOK</li> <li>9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y		Side of the order <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell Short</li> </ul>
38	OrderQty	N		Total order quantity of the order
44	Price	N		Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y		The time at which the particular message was generated.
528	OrderCapacity	N		Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>A = Agency</li> <li>P = Principal</li> </ul>
529	OrderRestrictions	N		Restrictions associated with this order: <ul style="list-style-type: none"> <li>2 = Index Arbitrage</li> <li>5 = Acting as Market Maker or Specialist in Security</li> <li>6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N		Maximum number of price levels to trade through. Applicable if:

			OrdType (40) = 2 (Limit). If present, this should be set as 1.
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>▪ 4 = Cancelled</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>▪ 4 = Cancelled</li> </ul>
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
58	Text	N	Free Text
<a href="#">Message Trailer</a>			

#### 7.7.7.4 Order Cancelled – Unsolicited

The OCG-C will send this execution report for an unsolicited cancel of an order (board lot or odd lot/special Lot).

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.
17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
Component Block <Parties>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted the order)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>

End Component Block			
Component Block <Instrument>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> <li>▪ 4 = Fill or Kill = FOK</li> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.
528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>▪ 2 = Index Arbitrage</li> <li>▪ 5 = Acting as Market Maker or Specialist in Security</li> <li>▪ 6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: OrdType (40) = 2 (Limit).

			If present, this should be set as 1.
<a href="#">2362</a>	<a href="#">SelfMatchPreventionID</a>	<a href="#">N</a>	<a href="#">The identifier to prevent self-matching</a>
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: <ul style="list-style-type: none"> <li>Side (54) = 1 (Buy) to indicate covering a short sell.</li> </ul>
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>▪ 4 = Cancelled</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>▪ 4 = Cancelled</li> </ul>
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
58	Text	N	Free Text
378	ExecRestatementReason	N	Code to identify the reason for an Execution Report message with Exec Type= 4 (Cancel): <ul style="list-style-type: none"> <li>▪ 6 = Cancel on Trading Halt/VCM</li> <li>▪ 8 = Market Operation</li> <li>▪ <a href="#">17 = Cancel aggressive due to self-match prevention</a></li> <li>▪ <a href="#">18 = Cancel passive due to self-match prevention</a></li> <li>▪ 100 = Unsolicited Cancel for original order (for cancel/replace operation which fails market validation)</li> <li>▪ 103 = Mass cancelled by Broker</li> <li>▪ 104 = Cancel On Disconnect</li> <li>▪ 105 = Cancel due to Broker suspension</li> <li>▪ 106 = Cancel due to Exchange Participant suspension</li> <li>▪ 107 = System Cancel</li> </ul>
<a href="#">Message Trailer</a>			

### 7.7.7.5 Order Expired

The OCG-C will send this execution report when an order (board lot or odd lot/special Lot) expires.

<u>FIX Tag</u>	<u>Field Name</u>	<u>Required ?</u>	<u>Description</u>
<a href="#">Message Header</a>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.



17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
Component Block <Parties>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted the order)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
End Component Block			
Component Block <Instrument>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> <li>▪ 4 = Fill or Kill = FOK</li> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.

528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>▪ 2 = Index Arbitrage</li> <li>▪ 5 = Acting as Market Maker or Specialist in Security</li> <li>▪ 6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> <p>The above 3 values are applicable only if Side (54) = 5 (Sell Short)</p>
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: <p style="text-align: center;">OrdType (40) = 2 (Limit).</p> If present, this should be set as 1.
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: <p style="text-align: center;">Side (54) = 1 (Buy) to indicate covering a short sell.</p>
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>▪ C = Expired</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>▪ C = Expired</li> </ul>
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
1328	RejectText	N	Textual description of the reason for expiration
58	Text	N	Free Text
<a href="#">Message Trailer</a>			

### 7.7.7.6 OBO Cancel

The OCG-C will send this execution report for an OBO cancellation of an order (board lot or odd lot/special Lot).

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.

17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
Component Block <Parties>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted the order)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
End Component Block			
Component Block <Instrument>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> <li>▪ 4 = Fill or Kill = FOK</li> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.

528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>A = Agency</li> <li>P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>2 = Index Arbitrage</li> <li>5 = Acting as Market Maker or Specialist in Security</li> <li>6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: OrdType (40) = 2 (Limit). If present, this should be set as 1.
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>4 = Cancelled</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>4 = Cancelled</li> </ul>
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
58	Text	N	Free Text
378	ExecRestatementReason	N	Code to identify the reason for an Execution Report message with Exec Type= 4 (Cancel): <ul style="list-style-type: none"> <li>101 = OBO Single Order Cancel</li> <li>102 = OBO Mass Order Cancel</li> </ul>

[Message Trailer](#)

### 7.7.7.7 Order Replaced

The OCG-C sends this execution [report to client](#):

- [when a Cancel/Replace request for an order \(board lot\) is accepted.](#)
- [when a Quote is modified.](#)

FIX Tag	Field Name	Required ?	Description
---------	------------	------------	-------------

[Message Header](#)

35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order cancel request.
41	OrigClOrdID	Y	Original client specified identifier for the incoming cancel request
37	OrderID	Y	Order ID as assigned by the exchange.
17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted the order)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> <li>▪ 4 = Fill or Kill = FOK</li> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> </ul>

			<ul style="list-style-type: none"> <li>5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.
528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>A = Agency</li> <li>P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>2 = Index Arbitrage</li> <li>5 = Acting as Market Maker or Specialist in Security</li> <li>6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: OrdType (40) = 2 (Limit). If present, this should be set as 1.
<a href="#">2362</a>	<a href="#">SelfMatchPreventionID</a>	<a href="#">N</a>	<a href="#">The identifier to prevent self-matching</a> <a href="#">Present only for quote modification.</a>
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>0 = New</li> <li>1 = Partially Filled</li> <li>2 = Filled</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>5 = Replaced</li> </ul>
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
58	Text	N	Free Text
<a href="#">Message Trailer</a>			

### 7.7.7.8 Trade (Board lot Order Executed)

The OCG-C sends this execution report for an auto-matched trade.

FIX Tag	Field Name	Required ?	Description
<b>Message Header</b>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.
17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
880	TrdMatchID	N	Identifier assigned to a trade by the matching system
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2 or 3.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/Counterparty Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that is receiving this trade)</li> <li>▪ 17 = Contra Firm (Counterparty Broker ID for this trade). This is provided only if applicable.</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> <li>▪ 4 = Fill or Kill = FOK</li> </ul>

			<ul style="list-style-type: none"> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.
528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>▪ 2 = Index Arbitrage</li> <li>▪ 5 = Acting as Market Maker or Specialist in Security</li> <li>▪ 6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: OrdType (40) = 2 (Limit). If present, this should be set as 1.
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>▪ 1 = Partially Filled</li> <li>▪ 2 = Filled</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>▪ F = Trade</li> </ul>
31	LastPx	Y	Execution Price
32	LastQty	Y	Execution Size
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity



574	MatchType	N	The point in the matching process at which the trade was matched: <ul style="list-style-type: none"> <li>▪ 4 = Auto match</li> <li>▪ 5 = Cross Auction</li> </ul>
1115	OrderCategory	N	Defines the type of interest behind a trade <ul style="list-style-type: none"> <li>▪ A = Internal Cross Order</li> </ul> Absence of this field means the trade is not concluded within the same firm
58	Text	N	Free Text
1093	LotType	N	Lot Type of the order: <ul style="list-style-type: none"> <li>▪ 2 = Round Lot</li> </ul>
1057	AggressorIndicator	N	Used to identify whether the order initiator is an aggressor or not in the auto-matched trade during continuous trading session: <ul style="list-style-type: none"> <li>▪ Y = Order initiator is aggressor</li> <li>▪ N = Order initiator is passive</li> </ul>
<a href="#">Message Trailer</a>			

### 7.7.7.9 Trade (Auto-matched ) Cancelled

The OCG-C sends this execution report when an auto-matched trade is cancelled by the exchange.

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.
17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
19	ExecRefID	Y	Execution Reference identifier used with Trade Cancel; refers to the Exec ID of the original trade.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that is receiving this cancel)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>

End Component Block			
Component Block <Instrument>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 1 = Market</li> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> <li>▪ 3 = Immediate or Cancel = IOC</li> <li>▪ 4 = Fill or Kill = FOK</li> <li>▪ 9 = At Crossing. Applicable for orders in Auction session.</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.
528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>▪ 2 = Index Arbitrage</li> <li>▪ 5 = Acting as Market Maker or Specialist in Security</li> <li>▪ 6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> The above 3 values are applicable only if Side (54) = 5 (Sell Short)
1090	MaxPriceLevels	N	Maximum number of price levels to trade through. Applicable if: OrdType (40) = 2 (Limit).

			If present, this should be set as 1.
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>▪ 0 = New</li> <li>▪ 1 = Partially Filled</li> <li>▪ 2 = Filled</li> <li>▪ 4 = Cancelled</li> <li>▪ C = Expired</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>▪ H = Trade Cancel</li> </ul>
31	LastPx	N	Execution Price Will be set to 0
32	LastQty	N	Execution Size Will be set to 0
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
1115	OrderCategory	N	Defines the type of interest behind a trade <ul style="list-style-type: none"> <li>▪ A = Internal Cross Order</li> </ul> Absence of this field means the trade is not concluded within the same firm
58	Text	N	Free Text
378	ExecRestatementReason	N	Code to identify the reason for an Execution Report message with Exec Type= H (Trade Cancel): <ul style="list-style-type: none"> <li>▪ 8 = Market (exchange) option</li> </ul>
<a href="#">Message Trailer</a>			

### 7.7.7.10 Trade (Odd lot/Special lot Order Executed)

The OCG-C sends this execution report for an Odd lot/Special lot order when it is filled.

<u>FIX Tag</u>	<u>Field Name</u>	<u>Required ?</u>	<u>Description</u>
<a href="#">Message Header</a>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.

17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
880	TrdMatchID	N	Identifier assigned to a trade by the matching system
Component Block <Parties>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2 or 3.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/Counterparty Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that is receiving this trade)</li> <li>▪ 17 = Contra Firm (Counterparty Broker ID for this trade). This is provided only if applicable.</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
End Component Block			
Component Block <Instrument>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.

528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>▪ 2 = Filled</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>▪ F = Trade</li> </ul>
31	LastPx	Y	Execution Price
32	LastQty	Y	Execution Size
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
1115	OrderCategory	N	Defines the type of interest behind a trade <ul style="list-style-type: none"> <li>▪ A = Internal Cross Order</li> </ul> Absence of this field means the trade is not concluded within the same firm
58	Text	N	Free Text
1093	LotType	N	Lot Type of the order: <ul style="list-style-type: none"> <li>▪ 1 = Odd Lot</li> </ul>
5681	ExchangeTradeType	N	Exchange assigned Trade Type: <ul style="list-style-type: none"> <li>▪ E = Special Lot – Semi-Automatic</li> <li>▪ O = Odd Lot – Semi-Automatic</li> </ul>
<a href="#">Message Trailer</a>			

### 7.7.7.11 Trade (Semi-auto-matched) Cancelled

The OCG-C sends this execution report when a semi-auto-matched trade is cancelled by the exchange.

Note that this trade cancellation message is sent to the Side (54) that refers to an Odd lot/Special lot order.

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	8 = Execution Report
<b>Message Body</b>			
11	ClOrdID	Y	Client specified identifier of the order.

37	OrderID	Y	Order ID as assigned by the exchange.
17	ExecID	Y	Unique Execution ID assigned for each Execution Report generated.
19	ExecRefID	Y	Execution Reference identifier used with Trade Cancel; refers to the Exec ID of the original trade.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that is receiving this cancel)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
40	OrdType	N	Order type applicable to the order: <ul style="list-style-type: none"> <li>▪ 2 = Limit</li> </ul>
59	TimeInForce	N	Time qualifier of the order: <ul style="list-style-type: none"> <li>▪ 0 = Day (Default)</li> </ul> Absence of this field is interpreted as 0 = Day.
54	Side	Y	Side of the order <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
38	OrderQty	N	Total order quantity of the order
44	Price	N	Price of order. Required if: OrdType (40) = 2 = Limit.
60	TransactTime	Y	The time at which the particular message was generated.

528	OrderCapacity	N	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: Side (54) = 1 (Buy) to indicate covering a short sell.
39	OrdStatus	Y	Order Status after applying the transaction that is being communicated: <ul style="list-style-type: none"> <li>▪ 0 = New</li> <li>▪ 1 = Partially Filled</li> <li>▪ 2 = Filled</li> <li>▪ 4 = Cancelled</li> <li>▪ C = Expired</li> </ul>
150	ExecType	Y	Execution Type that indicates the reason for the generation of the Execution Report: <ul style="list-style-type: none"> <li>▪ H = Trade Cancel</li> </ul>
31	LastPx	N	Execution Price Will be set to 0
32	LastQty	N	Execution Size Will be set to 0
14	CumQty	Y	Cumulative execution size
151	LeavesQty	Y	Open order quantity
1115	OrderCategory	N	Defines the type of interest behind a trade <ul style="list-style-type: none"> <li>▪ A = Internal Cross Order</li> </ul> Absence of this field means the trade is not concluded within the same firm
58	Text	N	Free Text
378	ExecRestatementReason	N	Code to identify the reason for an Execution Report message with Exec Type= H (Trade Cancel): <ul style="list-style-type: none"> <li>▪ 8 = Market (exchange) option</li> </ul>

[Message Trailer](#)

### 7.7.8 Cancel Reject (9)

The OCG-C sends this message when a Cancel Order (35=F) or Cancel/Replace Order (35=G) request is rejected.

<u>FIX Tag</u>	<u>Field Name</u>	<u>Required ?</u>	<u>Description</u>
<a href="#">Message Header</a>			
35	MsgType	Y	9 = Cancel Reject
<b>Message Body</b>			

11	ClOrdID	Y	Client identifier as specified in the Cancel or Cancel/Replace request.
41	OrigClOrdID	N	Original Client specified identifier of the order.
37	OrderID	Y	Order ID as assigned by the exchange.
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2 or 3.
→	448	PartyID	ID of the Broker client submitting the order: Broker ID/BS User ID.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that is receiving this cancel)</li> <li>▪ 36 = Entering Trader (Broker ID that is submitting the OBO Cancel Request). Applicable only if this Cancel Reject is due to an OBO Cancel Request.</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
60	TransactTime	Y	The time at which the particular message was generated
39	OrdStatus	Y	Order status as at the time of this rejection: <ul style="list-style-type: none"> <li>▪ 0 = New</li> <li>▪ 1 = Partially Filled</li> <li>▪ 2 = Filled</li> <li>▪ 4 = Cancelled</li> <li>▪ 8 = Rejected</li> <li>▪ C = Expired</li> <li>▪ 6 = Pending Cancel</li> <li>▪ A = Pending New</li> <li>▪ E = Pending Replace</li> </ul> OrdStatus will be set to 8 = Rejected if: <ul style="list-style-type: none"> <li>• Cancel Reject is due to an Order Cancel Request but it's an unknown order</li> <li>• Cancel Reject is due to an Order Cancel/Replace Request but it's an unknown order</li> <li>• Cancel Reject is due to a validation failure for an OBO Cancel Request</li> </ul>
434	CxlRejResponseTo	Y	Indicates whether the message is being generated as an amend reject or a cancel reject: <ul style="list-style-type: none"> <li>▪ 1 = Order Cancel Request</li> <li>▪ 2 = Order Cancel/Replace Request</li> </ul>
102	CxlRejReason	N	Reject code indicating the reason for the order reject: <ul style="list-style-type: none"> <li>▪ 0 = Too late to cancel</li> <li>▪ 1 = Unknown order</li> <li>▪ 3 = Order already in Pending Cancel or Pending Replace status</li> <li>▪ 6 = Duplicate ClOrdID (11) received</li> </ul>



			<ul style="list-style-type: none"> <li>▪ 8 = Price exceeds current price band</li> <li>▪ 99 = Other (default)</li> <li>▪ 100 = Reference price is not available</li> <li>▪ 101 = Price exceeds current price band (override not allowed)</li> <li>▪ 102 = Price exceeds current price band</li> <li>▪ 103 = Notional value exceeds threshold</li> </ul>
58	Text	N	Free Text
1328	RejectText	N	Textual description of the rejection that is being communicated through this execution report
<a href="#">Message Trailer</a>			

### 7.7.9 Order Mass Cancel Report (r)

The OCG-C sends this message in response to an Order Mass Cancel Request message.

FIX Tag	Field Name	Required?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	r = Order Mass Cancel Report
<b>Message Body</b>			
11	ClOrdID	N	Client specified identifier of the mass cancel request.
1369	MassActionReportID	Y	Unique identifier assigned for the Order Mass Cancel Report by the system
530	MassCancelRequestType	Y	Specifies the scope of the mass cancel request as in the incoming request: <ul style="list-style-type: none"> <li>▪ 1 = Cancel orders for a Security</li> <li>▪ 7 = Cancel all orders</li> <li>▪ 9 = Cancel orders for a Market Segment</li> </ul>
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2 or 3.
→	448	PartyID	ID of the Broker client submitting the order mass cancel request – Broker ID or BS User ID. Orders for the Broker ID specified here will be cancelled.
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID for which orders were requested to be mass cancelled)</li> <li>▪ 36 = Entering Trader (Broker ID that is submitting the OBO mass cancel request) Applicable only if this Order Mass Cancel Report is due to an OBO Mass Cancel Request)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
<b>End Component Block</b>			
<b>Component Block &lt;Instrument&gt;</b>			

48	SecurityID	N	Instrument identifier
22	SecurityIDSource	N	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
531	MassCancelResponse	Y	Indicates the action taken on the cancel request: <ul style="list-style-type: none"> <li>0 = Cancel request rejected</li> <li>1 = Cancel orders for a security</li> <li>7 = Cancel all orders</li> <li>9 = Cancel orders for a market segment</li> </ul>
532	MassCancelRejectReason	N	The code Indicating the reason why the Mass Cancel Request was rejected: <ul style="list-style-type: none"> <li>8 = Invalid or Unknown Market Segment(8)</li> <li>99 = Other</li> </ul> Required if: <i>Mass Cancel Response = Cancel Request Rejected</i>
60	TransactTime	Y	The time at which the particular message was generated.
58	Text	N	Textual description of the transaction (mass cancel request rejected) that is being communicated through the order mass cancel report. May be present only if: <i>Mass Cancel Response = Cancel Request Rejected</i>
<a href="#">Message Trailer</a>			

## 7.8 Business Messages – Quote Handling

### 7.8.1 Quote (S)

This message is initiated by the client to send a new quote or to amend an existing quote.

FIX Tag	Field Name	Required?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	S = Quote
<b>Message Body</b>			
390	BidID	Y	Client specified identifier for the Bid side of the quote.
1867	OfferID	Y	Client specified identifier for the Offer side of the quote.

537	QuoteType	N	Indicates the type of Quote. Must be: <ul style="list-style-type: none"> <li>1 = Tradable</li> </ul>
Component Block <Parties>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 2 or 3.
→	448	PartyID	ID of the Broker client submitting the order: Broker Number/BS User ID/BCAN Field
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID submitting this Quote) - mandatory</li> <li>3 = Client ID (BCAN Field) - mandatory</li> <li>75 = Location ID (BS User ID)</li> </ul>
End Component Block			
Component Block <Instrument>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	N	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
58	Text	N	Free Text
54	Side	N	Side of the order <ul style="list-style-type: none"> <li>5 = Sell Short</li> </ul>
77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>C = Close</li> </ul> Use this for indicating that the Bid side of this Quote is covering a short selling.
134	BidSize	N	Quantity of Bid side
135	OfferSize	N	Quantity of Offer side
132	BidPx	N	Bid Price
133	OfferPx	N	Offer Price
60	TransactTime	Y	The time at which the particular message was generated.
529	OrderRestrictions	N	Restrictions associated with this order: <ul style="list-style-type: none"> <li>2 = Index Arbitrage</li> </ul>

			<ul style="list-style-type: none"> <li>5 = Acting as Market Maker or Specialist in Security</li> <li>6 = Acting as Market Maker or Specialist in underlying of a derivative security</li> </ul> <p>The above 3 values are applicable only if Side (54) = 5 (Sell Short)</p>
<a href="#">2362</a>	<a href="#">SelfMatchPreventionID</a>	<a href="#">N</a>	<a href="#">The identifier to prevent self-matching</a>
<b>Component Block &lt;ValueCheckGrp&gt;</b>			
1868	NoValueChecks	N	Number of entries in this group. <i>If 0 or absence of this component group will result in system performing both Price and Notional Value checks.</i>
→	1869	ValueCheckType	Type of value to be checked: <ul style="list-style-type: none"> <li>1 = Price Check</li> <li>2 = Notional Value Check</li> </ul> Required if: NoValueChecks (1868) > 0 Absence of a particular ValueCheckType will force the system to perform that specific check.
→	1870	ValueCheckAction	Identifies if the type of value specified in the ValueCheckType is required or not: <ul style="list-style-type: none"> <li>0 = Do not check</li> <li>1 = Check</li> <li>Any other than above will assume both checks as required.</li> </ul> Required if: NoValueChecks (1868) > 0
<b>End Component Block</b>			
<a href="#">Message Trailer</a>			

## 7.8.2 Quote Cancel (Z)

This message is initiated by the client to cancel an existing Quote.

<u>FIX Tag</u>	<u>Field Name</u>	<u>Required?</u>	<u>Description</u>
<a href="#">Message Header</a>			
35	MsgType	Y	Z = Quote Cancel
<b>Message Body</b>			
1166	QuoteMsgID	Y	Client specified identifier for the Quote Cancel message.
298	QuoteCancelType	Y	Identifies type of quote cancel: <ul style="list-style-type: none"> <li>1 = Cancel for one or more securities</li> </ul>
<b>Component Block &lt;Parties&gt;</b>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker Number/BS User ID

→	447	PartyIdSource	Y	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Y	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that submitted the Quote)</li> <li>75 = Location ID (BS User ID)</li> </ul>
End Component Block				
Component Block <QuotCxlEntriesGrp>				
	295	NoQuoteEntries	N	The number of securities (instruments) whose quotes are to be cancelled. If present, must be set to 1. Required if the QuoteCancelType (298) = '1' (Cancel for one or more securities).
→ Component Block <Instrument>				
→	48	SecurityID	N	Instrument identifier Required if the QuoteCancelType (298) = '1' (Cancel for one or more securities)
→	22	SecurityIDSource	N	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
→	207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
→ End Component Block				
End Component Block				
<a href="#">Message Trailer</a>				

### 7.8.3 Quote Status Report (AI)

The OCG-C sends this message if a Quote or Quote Cancel message is rejected.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	AI = Quote Status Report
<b>Message Body</b>			
1166	QuoteMsgID	N	Client specified identifier for the Quote Cancel message. Required to be present only if the Quote Status Report is in response to a Quote Cancel message.
390	BidID	N	Client specified identifier for Bid side of the Quote. Required to be present only if the Quote Status Report is in response to a Quote message.

1867	OfferID	N	Client specified identifier for Offer side of the Quote. Required to be present only if the Quote Status Report is in response to a Quote message.
537	QuoteType	N	Indicates the type of Quote: <ul style="list-style-type: none"> <li>1 = Tradable</li> </ul>
Component Block <Parties>			
453	NoPartyIDs	Y	Number of party identifiers. The value in this field can be 1 or 2.
→	448	PartyID	ID of the Broker client submitting the order: Broker Number/BS User ID
→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that submitted the Quote/Quote Cancel message)</li> <li>75 = Location ID (BS User ID)</li> </ul>
End Component Block			
Component Block <Instrument>			
48	SecurityID	N	Instrument identifier
22	SecurityIDSource	N	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
60	TransactTime	Y	The time at which the particular message was generated.
297	QuoteStatus	N	Identifies the status of the quote acknowledgement: <ul style="list-style-type: none"> <li>5 = Rejected</li> </ul>
298	QuoteCancelType	N	Identifies type of quote cancel: <ul style="list-style-type: none"> <li>1 = Cancel for one or more securities</li> </ul>
1328	RejectText	N	Reason for rejection
300	QuoteRejectReason	N	The code indicating the reason why the quote got rejected <ul style="list-style-type: none"> <li>8 = Invalid Price</li> <li>10 = Price exceeds current price band</li> <li>14 = Notional value exceeds threshold</li> <li>16 = Reference Price is not available</li> <li>99 = Other</li> <li>101 = Price exceeds current price band (override not allowed)</li> <li>102 = Price exceeds current price band</li> </ul>

---

[Message Trailer](#)

## 7.9 Business Messages – Trade Handling

This set of messages used for reporting an off-exchange trade follows “Privately Negotiated Trade, Two-Party Report” – reference: FIX 5.0 SP2 Volume 5.

According to the business processing flow:

- For all types of off-exchange trades except “Overseas”, the selling counterparty has the responsibility to report the resultant trade. Purchasing counterparties are able to review the trades reported by sellers, and can reject any alleged trades if they are believed to be incorrect. If the alleged trade is correct, purchasing side needs to submit the BCAN Field of purchase side to Exchange via Trade Capture Report message.
- Purchases can be input for off-exchange trades of type “Overseas” (i.e., one party to the trade is not a member of HKEX). Overseas trades are not reported with a correspondent/counterparty Broker ID and they cannot therefore be rejected

The same set of messages is also used for reporting an odd lot/special lot trade in semi-automatic trading. Such a trade can be requested to be reported to the market by either buyer or seller by providing details of the resting odd lot/special lot order.

### 7.9.1 Trade Capture Report – Off Exchange Trade

#### 7.9.1.1 New (AE)

The client sends this message to report an off-exchange trade.

FIX Tag	Field Name	Required ?	Description
<b>Message Header</b>			
35	MsgType	Y	AE = Trade Capture Report
<b>Message Body</b>			
571	TradeReportID	Y	Client specified unique identifier of the trade capture report.
487	TradeReportTransType	N	Identifies the trade report message transaction type: <ul style="list-style-type: none"> <li>▪ 0 = New</li> </ul>
856	TradeReportType	Y	Type of the Trade Report: <ul style="list-style-type: none"> <li>▪ 0 = Submit</li> </ul>
828	TrdType	Y	Type of the trade being reported: <ul style="list-style-type: none"> <li>▪ 4 = Late Trade</li> <li>▪ 22 = Privately Negotiated Trade</li> <li>▪ 102 = Odd Lot Trade</li> <li>▪ 104 = Overseas Trade</li> </ul>
1123	TradeHandlingInstr	N	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>▪ 1 = Two Party Report</li> <li>▪ 6 = One Party Report (if TrdType = 104)</li> </ul>
31	LastPx	Y	Execution Price
32	LastQty	Y	Execution Size
60	TransactTime	Y	The time at which the particular message was generated.



Component Block <TrdCapRptSideGrp>					
	552	NoSides		Y	Number of sides: <ul style="list-style-type: none"> <li>▪ 1 = Overseas</li> <li>▪ 2 = Default</li> </ul> <u>Note</u> For internalized trade <ul style="list-style-type: none"> <li>▪ As BCAN Field is optional for manual trade with LastQty &lt; 1 board lot, NoSides can be 1 (if BCAN Field is not provided) or 2 (if BCAN Field for both sides are provided).</li> </ul>
→	54	Side		Y	Side of the trade <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
→ Component Block <Parties>					
→	453	NoPartyIDs		Y	Number of party identifiers: <ul style="list-style-type: none"> <li>▪ For submitting side group, this value can be 1 or 2 or 3.</li> <li>▪ For the counterparty, this value should be 1</li> </ul>
→	→	448	PartyID	Y	Broker ID/Counterparty Broker ID/BS User ID/BCAN Field.  Only the PartyIDs for the submitter should be present in the side group applicable to the submitter of the Trade Report (i.e. PartyIDs applicable to PartyRoles 1, 3 and 75).  Only the PartyID of the counterparty should be present in the side group applicable to the contra party of the trade Report (i.e. PartyID applicable to PartyRole 3, 17).
→	→	447	PartyIDSource	Y	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	→	452	PartyRole	Y	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ For the submitting side group:                             <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that is submitting this Trade Capture Report) - mandatory</li> <li>▪ 3 = Client ID (BCAN Field) of submitting side – mandatory for manual trade with LastQty &gt;= 1 board lot</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul> </li> <li>▪ For the counterparty side group:                             <ul style="list-style-type: none"> <li>▪ 3 = Client ID (BCAN Field) – mandatory and applicable for buyer side of internalized manual trade with LastQty &gt;= 1 board lot</li> <li>▪ 17 = Contra Firm (Counterparty Broker ID for this trade)</li> </ul> </li> </ul> For any TrdType, there must be one Broker ID with PartyRole = 1.

				Counterparty Broker ID (PartyRole=17) is NOT required only if: TradeHandlingInstr (1123) is 1 (Two party report) and OrderCategory (1115) is A OR TradeHandlingInstr (1123) is 6 (One party report) Location ID (PartyRole = 75) may be provided optionally for any TrdType.
→	End Component Block			
→	Component Block <ClrInstGrp>			
→	576	NoClearingInstructions	N	Number of clearing instructions. Always set to 1.
→	→	577	ClearingInstruction	N Eligibility of this trade for clearing and central counterparty processing: <ul style="list-style-type: none"> <li>▪ 0 = Process normally</li> <li>▪ 1 = Exclude from all netting</li> <li>▪ 14 = Buy-In</li> </ul>
→	End Component Block			
→	Component Block <TradeReportOrderDetail>			
→	18	ExecInst	N	Instructions for trade report handling: <ul style="list-style-type: none"> <li>▪ c (lower case C) = Ignore Price Validity Checks</li> <li>▪ x (lower case X) = Ignore Notional Value Checks</li> </ul> If either is missing, the respective check will be performed: Absence of this field is interpreted as None (i.e. system will perform both Price and Notional Value check).
→	528	OrderCapacity	N	Designates the capacity of the firm reporting this trade: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
→	End Component Block			
→	77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: <ul style="list-style-type: none"> <li>▪ Side (54) = 1 (Buy) to indicate covering a short sell.</li> </ul>
→	58	Text	N	Free Text
→	1115	OrderCategory	N	Defines the type of interest behind a trade <ul style="list-style-type: none"> <li>▪ A = Internal Cross Order</li> </ul> Absence of this field means the trade is not concluded within the same firm
End Component Block				

Component Block <Instrument>			
48	SecurityID	Y	Instrument identifier
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
<a href="#">Message Trailer</a>			

### 7.9.1.2 Cancel (AE)

The client sends this message to cancel a reported trade.

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	AE = Trade Capture Report
<b>Message Body</b>			
571	TradeReportID	Y	Client specified unique identifier of the trade capture report.
1003	TradeID	Y	Unique ID as assigned to the trade by the exchange.
487	TradeReportTransType	N	Identifies the trade report message transaction type: <ul style="list-style-type: none"> <li>0 = New</li> </ul>
856	TradeReportType	Y	Type of the Trade Report: <ul style="list-style-type: none"> <li>6 = Trade Report Cancel</li> </ul>
1123	TradeHandlingInstr	N	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>1 = Two Party Report</li> </ul>
31	LastPx	Y	Execution Price
32	LastQty	Y	Execution Size
60	TransactTime	Y	The time at which the particular message was generated.
Component Block <TrdCapRptSideGrp>			
552	NoSides	Y	Number of sides: <ul style="list-style-type: none"> <li>1</li> </ul>
→	54	Side	Side of the trade <ul style="list-style-type: none"> <li>1 = Buy</li> </ul>

→ Component Block <Parties>				
→	453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2.
→	→	448	PartyID	Broker ID requesting for this cancel/BS User ID.
→	→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that submitted this Trade Capture Report to cancel the reported trade)</li> <li>▪ 75 = Location ID (BS User ID)</li> </ul>
→ End Component Block				
End Component Block				
Component Block <Instrument>				
	48	SecurityID	Y	Instrument identifier
	22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
	207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block				
<a href="#">Message Trailer</a>				

### 7.9.1.3 New (AE) – BCAN Field Submission to Exchange by Purchasing Counterparty

The purchasing counterparty sends this message to Exchange for tagging BCAN Field of purchasing side of an off-exchange trade upon receiving the off-exchange trade reported by the seller if the alleged trade quantity is larger than or equal to one board lot.

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	AE = Trade Capture Report
<b>Message Body</b>			
571	TradeReportID	Y	Client specified unique identifier of the trade capture report.
1003	TradeID	Y	Unique ID as assigned to the trade by the exchange.

487	TradeReportTransType	N	Identifies the trade report message transaction type: <ul style="list-style-type: none"> <li>0 = New</li> </ul>	
856	TradeReportType	Y	Type of the Trade Report: <ul style="list-style-type: none"> <li>4 = Addendum</li> </ul>	
1123	TradeHandlingInstr	N	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>6 = One-party report</li> </ul>	
31	LastPx	Y	Execution Price Must be the same as in the original trade	
32	LastQty	Y	Execution Size Must be the same as in the original trade	
60	TransactTime	Y	The time at which the particular message was generated.	
<b>Component Block &lt;TrdCapRptSideGrp&gt;</b>				
552	NoSides	Y	Number of sides: <ul style="list-style-type: none"> <li>1</li> </ul>	
→	54	Side	Side of the trade <ul style="list-style-type: none"> <li>1 = Buy</li> </ul>	
→	<b>Component Block &lt;Parties&gt;</b>			
→	453	NoPartyIDs	Number of party identifiers. The value in this field should be 2.	
→	→	448	PartyID	Broker ID/ BCAN Field of the buyer side.
→	→	447	PartyIdSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that submitted this Trade Capture Report to provide the buyer side BCAN Field)</li> <li>3 = Client ID (BCAN Field) - mandatory for manual trade with LastQty &gt;= 1 board lot.</li> </ul>
→	<b>End Component Block</b>			
<b>End Component Block</b>				
<b>Component Block &lt;Instrument&gt;</b>				
48	SecurityID	Y	Instrument identifier Must be the same as in the original trade	
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified	
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if:	

			SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block			
<a href="#">Message Trailer</a>			

## 7.9.2 Trade Capture Report – Semi-automatic Odd lot/Special lot Trade

### 7.9.2.1 New (AE)

The client sends this message to report a Odd lot/Special lot trade in semi-automatic trading, pointing to a resting/existing order.

FIX Tag	Field Name	Required ?	Description
<b>Message Header</b>			
35	MsgType	Y	AE = Trade Capture Report
<b>Message Body</b>			
571	TradeReportID	N	Client specified unique identifier of the trade capture report.
487	TradeReportTransType	N	Identifies the trade report message transaction type: <ul style="list-style-type: none"> <li>▪ 0 = New</li> </ul>
856	TradeReportType	Y	Type of the Trade Report: <ul style="list-style-type: none"> <li>▪ 0 = Submit</li> </ul>
828	TrdType	Y	Type of the trade being reported: <ul style="list-style-type: none"> <li>▪ 102 = Odd Lot Trade</li> </ul>
1123	TradeHandlingInstr	N	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>▪ 1 = Two Party Report</li> </ul>
31	LastPx	Y	Execution Price
32	LastQty	Y	Execution Size
60	TransactTime	Y	The time at which the particular message was generated.
<b>Component Block &lt;TrdCapRptSideGrp&gt;</b>			
552	NoSides	Y	Number of sides: <ul style="list-style-type: none"> <li>▪ 2 = Default</li> </ul>
→	54	Side	Side of the trade <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>
→	<b>Component Block &lt;Parties&gt;</b>		
→	453	NoPartyIDs	Number of party identifiers: <ul style="list-style-type: none"> <li>▪ For submitting side group, this value can be 1 or 2 or 3.</li> </ul>

					<ul style="list-style-type: none"> <li>For the counterparty side, this value should be 1</li> </ul>
→	→	448	PartyID	Y	<p>Broker ID/Counterparty Broker ID/BS User ID/BCAN Field.</p> <p>Only the PartyIDs for the submitter should be present in the side group applicable to the submitter of the Trade Report (i.e. PartyIDs applicable to PartyRoles 1, 3 and 75).</p> <p>Only the PartyID of the counterparty should be present in the side group applicable to the contra party of the trade Report (i.e. PartyID applicable to PartyRole 17).</p>
→	→	447	PartyIdSource	Y	<p>Defines the naming convention used in specifying the PartyID (448):</p> <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	→	452	PartyRole	Y	<p>Role of the specified PartyID (448):</p> <ul style="list-style-type: none"> <li>For the submitting side group: <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that is submitting this Trade Capture Report) - mandatory</li> <li>3 = Client ID (BCAN Field) – mandatory for trade with LastQty &gt;= 1 board lot</li> <li>75 = Location ID (BS User ID)</li> </ul> </li> <li>For the counterparty side (i.e., the side for resting order) group: <ul style="list-style-type: none"> <li>17 = Contra Firm (Counterparty Broker ID for this trade) - mandatory</li> </ul> </li> </ul> <p>In general, there must be</p> <ul style="list-style-type: none"> <li>Broker ID with PartyRole = 1, and</li> <li>Broker ID with PartyRole = 17</li> </ul>
→	End Component Block				
→	Component Block <ClrInstGrp>				
→		576	NoClearingInstructions	N	<p>Number of clearing instructions. Always set to 1.</p>
→	→	577	ClearingInstruction	N	<p>Eligibility of this trade for clearing and central counterparty processing:</p> <ul style="list-style-type: none"> <li>0 = Process Normally</li> </ul>
→	End Component Block				
→	Component Block <TradeReportOrderDetail>				
→		37	OrderID	N	<p>OrderID of the counterparty Odd lot/Special lot Order.</p> <p>Applicable only if the Side refers to the resting order.</p>
→		18	Execlnst	N	<p>Instructions for trade report handling:</p> <ul style="list-style-type: none"> <li>x (lower case X) = Ignore Notional Value Checks</li> </ul> <p>Absence of this field is interpreted as None (i.e. system will perform Notional Value check).</p>

→	528	OrderCapacity	N	Designates the capacity of the firm reporting this trade: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
→ End Component Block				
→	77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: <ul style="list-style-type: none"> <li>▪ Side (54) = 1 (Buy) to indicate covering a short sell.</li> </ul>
→	58	Text	N	Free Text
End Component Block				
Component Block <Instrument>				
	48	SecurityID	Y	Instrument identifier
	22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
	207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
End Component Block				
<a href="#">Message Trailer</a>				

## 7.9.3 Trade Capture – Confirmation/Acknowledgement

### 7.9.3.1 Trade Accepted (AE) – Off Exchange Trade

The OCG-C sends this message to the submitter of the trade and also to the counterparty (if applicable).

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	AE = Trade Capture Report
<b>Message Body</b>			
571	TradeReportID	N	Unique Identification for the Trade Capture Report assigned by the reporting side of the Trade (to be returned to the reporting broker)
1003	TradeID	Y	Unique identifier as assigned to the trade by the exchange.



487	TradeReportTransType	Y	Identifies the trade report message transaction type: <ul style="list-style-type: none"> <li>0 = New (for the non-reporting side)</li> <li>2 = Replace (for the reporting side)</li> </ul>		
856	TradeReportType	Y	Type of the Trade Report: <ul style="list-style-type: none"> <li>0 = Submit</li> </ul>		
1123	TradeHandlingInstr	N	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>0 = Trade Confirm</li> </ul>		
828	TrdType	Y	Type of the trade being reported: <ul style="list-style-type: none"> <li>4 = Late Trade</li> <li>22 = Privately Negotiated Trade</li> <li>102 = Odd Lot Trade</li> <li>104 = Overseas Trade</li> </ul>		
150	ExecType	N	Execution type: <ul style="list-style-type: none"> <li>F = Trade</li> </ul>		
939	TrdRptStatus	N	Trade Report Status: <ul style="list-style-type: none"> <li>0 = Accepted</li> </ul>		
31	LastPx	Y	Execution Price		
32	LastQty	Y	Execution Size		
60	TransactTime	Y	The time at which the particular message was generated.		
Component Block <TrdCapRptSideGrp>					
552	NoSides	Y	Number of sides: <ul style="list-style-type: none"> <li>1 = Overseas</li> <li>2 = Default</li> </ul>		
→	54	Side	Y	Side of the trade <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell Short</li> </ul>	
→	Component Block <Parties>				
→	453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2 or 3.	
→	→	448	PartyID	Y	Broker ID/Counterparty Broker ID/BS User ID.
→	→	447	PartyIdSource	Y	Defines the naming convention used in specifying the PartyID (448): D = Proprietary/Custom Code
→	→	452	PartyRole	Y	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that is receiving this trade)</li> <li>17 = Contra Firm (Counterparty Broker ID for this trade)</li> <li>75 = Location ID (BS User ID).</li> </ul> For any TrdType, there will be one Broker ID with PartyRole = 1. Counterparty Broker ID (PartyRole=17) is not applicable if:

				TradeHandlingInstr (1123) is 1 (Two party report) and OrderCategory (1115) is A OR TradeHandlingInstr (1123) is 6 (One party report) Location ID (PartyRole = 75) is with relation to the Broker ID that reported this trade.
→	End Component Block			
→	Component Block <ClrInstGrp>			
→	576	NoClearingInstructions	N	Number of clearing instructions. Always set to 1.
→	→	577	ClearingInstruction	N Eligibility of this trade for clearing and central counterparty processing: <ul style="list-style-type: none"> <li>▪ 0 = Process normally</li> <li>▪ 1 = Exclude from all netting</li> <li>▪ 14 = Buy-In</li> </ul>
→	End Component Block			
→	Component Block <TradeReportOrderDetail>			
→	528	OrderCapacity	N	Designates the capacity of the firm: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>
→	End Component Block			
→	77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>▪ C = Close</li> </ul> Applicable only if: <ul style="list-style-type: none"> <li>▪ Side (54) = 1 (Buy) to indicate covering a short sell.</li> </ul>
→	58	Text	N	Free Text
→	1115	OrderCategory	N	Defines the type of interest behind a trade <ul style="list-style-type: none"> <li>▪ A = Internal Cross Order</li> </ul> Absence of this field means the trade is not concluded within the same firm
End Component Block				
Component Block <Instrument>				
	48	SecurityID	Y	Instrument identifier
	22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
	207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if:

			SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
5681	ExchangeTradeType	N	Exchange assigned Trade Type: <ul style="list-style-type: none"> <li>▪ M = Manual Trade</li> <li>▪ S = Manual – Non Standard Price Trade</li> <li>▪ Q = Special Lot Trade</li> <li>▪ P = Odd Lot Trade</li> <li>▪ R = Previous Day's Trade</li> <li>▪ V = Overseas Trade</li> </ul>
<a href="#">Message Trailer</a>			

### 7.9.3.2 Trade Accepted (AE) – Semi-automatic Odd lot/Special lot Trade

The OCG-C sends this message to the submitter of the trade to confirm the acceptance.

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	AE = Trade Capture Report
<b>Message Body</b>			
571	TradeReportID	N	Unique Identification for the Trade Capture Report assigned by the reporting side of the Trade (to be returned to the reporting broker)
1003	TradeID	Y	Unique identifier as assigned to the trade by the exchange.
487	TradeReportTransType	Y	Identifies the trade report message transaction type: <ul style="list-style-type: none"> <li>▪ 2 = Replace (for the reporting side)</li> </ul>
856	TradeReportType	Y	Type of the Trade Report: <ul style="list-style-type: none"> <li>▪ 0 = Submit</li> </ul>
1123	TradeHandlingInstr	N	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>▪ 0 = Trade Confirm</li> </ul>
828	TrdType	Y	Type of the trade being reported: <ul style="list-style-type: none"> <li>▪ 102 = Odd Lot Trade</li> </ul>
150	ExecType	N	Execution type: <ul style="list-style-type: none"> <li>▪ F = Trade</li> </ul>
939	TrdRptStatus	N	Trade Report Status: <ul style="list-style-type: none"> <li>▪ 0 = Accepted</li> </ul>
31	LastPx	Y	Execution Price
32	LastQty	Y	Execution Size
60	TransactTime	Y	The time at which the particular message was generated.
<b>Component Block &lt;TrdCapRptSideGrp&gt;</b>			
552	NoSides	Y	Number of sides:

				<ul style="list-style-type: none"> <li>2 = Default</li> </ul>	
→	54	Side	Y	Side of the trade <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell Short</li> </ul>	
→	Component Block <Parties>				
→	453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2 or 3.	
→	→	448	PartyID	Y	Broker ID/Counterparty Broker ID/BS User ID.
→	→	447	PartyIDSource	Y	Defines the naming convention used in specifying the PartyID (448): D = Proprietary/Custom Code
→	→	452	PartyRole	Y	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that is receiving this trade)</li> <li>17 = Contra Firm (Counterparty Broker ID for this trade)</li> <li>75 = Location ID (BS User ID).</li> </ul> In general, there will be <ul style="list-style-type: none"> <li>one Broker ID with PartyRole = 1, and</li> <li>one Broker ID with PartyRole = 17</li> </ul> Location ID (PartyRole = 75) is with relation to the Broker ID that reported this trade.
→	End Component Block				
→	Component Block <ClrInstGrp>				
→	576	NoClearingInstructions	N	Number of clearing instructions. Always set to 1.	
→	→	577	ClearingInstruction	N	Eligibility of this trade for clearing and central counterparty processing: <ul style="list-style-type: none"> <li>0 = Process normally</li> </ul>
→	End Component Block				
→	Component Block <TradeReportOrderDetail>				
→	528	OrderCapacity	N	Designates the capacity of the firm: <ul style="list-style-type: none"> <li>A = Agency</li> <li>P = Principal</li> </ul>	
→	End Component Block				
→	77	PositionEffect	N	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>C = Close</li> </ul> Applicable only if: <ul style="list-style-type: none"> <li>Side (54) = 1 (Buy) to indicate covering a short sell.</li> </ul>	
→	58	Text	N	Free Text	
→	1115	OrderCategory	N	Defines the type of interest behind a trade <ul style="list-style-type: none"> <li>A = Internal Cross Order</li> </ul>	

				Absence of this field means the trade is not concluded within the same firm
<b>End Component Block</b>				
<b>Component Block &lt;Instrument&gt;</b>				
48	SecurityID	Y		Instrument identifier
22	SecurityIDSource	Y		Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>▪ 8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified
207	SecurityExchange	N		The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>				
5681	ExchangeTradeType	N		Exchange assigned Trade Type: <ul style="list-style-type: none"> <li>▪ E = Special Lot – Semi-Automatic</li> <li>▪ O = Odd Lot – Semi-Automatic</li> </ul>
<a href="#">Message Trailer</a>				

### 7.9.3.3 Trade Cancelled (AE) – Off Exchange Trade

The OCG-C sends this message to both sides of the trade if it's a Two Party Report, only one side if it's a One Party Report.

<u>FIX Tag</u>	<u>Field Name</u>	<u>Required ?</u>	<u>Description</u>
<a href="#">Message Header</a>			
35	MsgType	Y	AE = Trade Capture Report
<b>Message Body</b>			
571	TradeReportID	N	Unique Identification for the Trade Capture Report assigned by the reporting side of the Trade (to be returned to the reporting broker)
1003	TradeID	Y	Unique identifier as assigned to the trade by the exchange.
487	TradeReportTransType	Y	Identifies the trade report message transaction type: <ul style="list-style-type: none"> <li>▪ 0 = New (for the party opposite to that requesting this cancel)</li> <li>▪ 2 = Replace (for the party requesting this cancel)</li> <li>▪ 5 = Cancel due to back out of trade (for both buyer and seller if ExecType = L)</li> </ul>
856	TradeReportType	Y	Type of the Trade Report: <ul style="list-style-type: none"> <li>▪ 6 = Trade Report Cancel</li> </ul>

1123	TradeHandlingInstr	N	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>0 = Trade Confirm</li> </ul>		
150	ExecType	N	Execution Type that indicates the reason for the generation of this confirmation: <ul style="list-style-type: none"> <li>H = Trade Cancel (by the counter-party)</li> <li>L = Triggered or activated by System (cancelled by the exchange)</li> </ul>		
31	LastPx	Y	Execution Price		
32	LastQty	Y	Execution Size		
60	TransactTime	Y	The time at which the particular message was generated.		
<b>Component Block &lt;TrdCapRptSideGrp&gt;</b>					
552	NoSides	Y	Number of sides: <ul style="list-style-type: none"> <li>1</li> </ul>		
→	54	Side	Y	Side of the trade <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell Short</li> </ul>	
→	<b>Component Block &lt;Parties&gt;</b>				
→	453	NoPartyIDs	Y	Number of party identifiers. The value in this field should be 1 or 2.	
→	→	448	PartyID	Y	Broker ID for this side of the trade/BS User ID.
→	→	447	PartyIDSource	Y	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>D = Proprietary/Custom Code</li> </ul>
→	→	452	PartyRole	Y	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that is receiving this message)</li> <li>75 = Location ID (BS User ID)</li> </ul>
→	<b>End Component Block</b>				
<b>End Component Block</b>					
<b>Component Block &lt;Instrument&gt;</b>					
48	SecurityID	Y	Instrument identifier		
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> Required if: SecurityID (48) is specified		
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).		
<b>End Component Block</b>					
<a href="#">Message Trailer</a>					

### 7.9.3.4 Trade Cancelled (AE) – Semi-automatic Odd lot/Special lot Trade

The OCG-C sends this message to the submitter of the original trade when the trade is cancelled by the exchange.

FIX Tag	Field Name	Required ?	Description	
<b>Message Header</b>				
35	MsgType	Y	AE = Trade Capture Report	
<b>Message Body</b>				
1003	TradeID	Y	Unique identifier as assigned to the trade by the exchange.	
487	TradeReportTransType	Y	Identifies the trade report message transaction type: <ul style="list-style-type: none"> <li>▪ 5 = Cancel due to back out of trade (if ExecType = L)</li> </ul>	
856	TradeReportType	Y	Type of the Trade Report: <ul style="list-style-type: none"> <li>▪ 6 = Trade Report Cancel</li> </ul>	
1123	TradeHandlingInstr	N	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>▪ 0 = Trade Confirm</li> </ul>	
150	ExecType	N	Execution Type that indicates the reason for the generation of this confirmation: <ul style="list-style-type: none"> <li>▪ L = Triggered or activated by System (cancelled by the exchange)</li> </ul>	
31	LastPx	Y	Execution Price	
32	LastQty	Y	Execution Size	
60	TransactTime	Y	The time at which the particular message was generated.	
<b>Component Block &lt;TrdCapRptSideGrp&gt;</b>				
552	NoSides	Y	Number of sides: <ul style="list-style-type: none"> <li>▪ 1</li> </ul>	
→	54	Side	Side of the trade <ul style="list-style-type: none"> <li>▪ 1 = Buy</li> <li>▪ 2 = Sell</li> <li>▪ 5 = Sell Short</li> </ul>	
→	<b>Component Block &lt;Parties&gt;</b>			
→	453	NoPartyIDs	Number of party identifiers. The value in this field should be 1 or 2.	
→	→	448	PartyID	Broker ID for this side of the trade/BS User ID.
→	→	447	PartyIDSource	Defines the naming convention used in specifying the PartyID (448): <ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>
→	→	452	PartyRole	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm (Broker ID that is receiving this message)</li> </ul>

				▪ 75 = Location ID (BS User ID)
→	End Component Block			
End Component Block				
Component Block <Instrument>				
48	SecurityID	Y	Instrument identifier	
22	SecurityIDSource	Y	Identifies the source of the SecurityID (48): ▪ 8 = Exchange Symbol Required if: SecurityID (48) is specified	
207	SecurityExchange	N	The market which is used to identify the security: ▪ XHKG Required if: SecurityIDSource (22) = 8 (Exchange Symbol).	
End Component Block				
<a href="#">Message Trailer</a>				

### 7.9.3.5 Trade Capture Report Ack (AR)

The OCG-C sends this message to the sender of the business message to:

- reject a trade submission received from the initiator of the 35=AE message
- reject a cancel request received from
  - the counterparty of the 35 = AE message, for an off exchange trade
  - from either side of the 35 = AE message, for an odd lot/special lot trade in semi-automatic trading
- accept or reject BCAN Field submission to Exchange by the purchasing side

FIX Tag	Field Name	Required ?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	AR = Trade Capture Report Ack
<b>Message Body</b>			
571	TradeReportID	Y	Unique Identification for the Trade Capture Report assigned by the reporting side of the Trade (to be returned to the reporting broker).
1003	TradeID	N	Unique identifier as assigned to the trade by the exchange.
487	TradeReportTransType	N	Identifies the trade report message transaction type: ▪ 0 = New
856	TradeReportType	Y	Type of the Trade Report: ▪ 0 = Submit ▪ 4 = Addendum



			<ul style="list-style-type: none"> <li>6 = Trade Report Cancel</li> </ul>	
1123	TradeHandlingInstr	N	<p>Indicates how the trade capture report should be handled by the receiver:</p> <ul style="list-style-type: none"> <li>1 = Two Party Report</li> <li>6 = One Party Report</li> </ul>	
939	TrdRptStatus	N	<p>Trade Report Status:</p> <ul style="list-style-type: none"> <li>0 = Accepted</li> <li>1 = Rejected</li> </ul>	
60	TransactTime	Y	The time at which the particular message was generated.	
Component Block <TrdCapRptSideGrp>				
552	NoSides	Y	<p>Number of sides:</p> <ul style="list-style-type: none"> <li>1 = Overseas or internalized or TradeHandlingInstr (1123) is 6 (One party report)</li> <li>2 = Default</li> </ul>	
→	54	Side	<p>Side of the trade</p> <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell Short</li> </ul>	
→	Component Block <Parties>			
→	453	NoPartyIDs	Number of party identifiers. The value in this field should be 1 or 2 or 3.	
→	→	448	PartyID	Broker ID/Counterparty Broker ID/BS User ID.
→	→	447	PartyIdSource	<p>Defines the naming convention used in specifying the PartyID (448):</p> <p>D = Proprietary/Custom Code</p>
→	→	452	PartyRole	<p>Role of the specified PartyID (448):</p> <ul style="list-style-type: none"> <li>1 = Executing Firm (Broker ID that submitted the Trade Capture Report)</li> <li>17 = Contra Firm (Counterparty Broker ID for the trade)</li> <li>75 = Location ID (BS User ID)</li> </ul> <p>For any TrdType, there will be one Broker ID with PartyRole = 1.</p> <p>Counterparty Broker ID (PartyRole=17) is not applicable if:</p> <ul style="list-style-type: none"> <li>TradeHandlingInstr (1123) is 6 (One party report)</li> <li>Location ID (PartyRole = 75) is with relation to the Broker ID that reported this trade.</li> </ul>
→	End Component Block			
End Component Block				
Component Block <Instrument>				
48	SecurityID	Y	Instrument identifier	
22	SecurityIDSource	Y	<p>Identifies the source of the SecurityID (48):</p> <ul style="list-style-type: none"> <li>8 = Exchange Symbol</li> </ul> <p>Required if:</p>	

			SecurityID (48) is specified
207	SecurityExchange	N	The market which is used to identify the security: <ul style="list-style-type: none"> <li>▪ XHKG</li> </ul> Required if: SecurityIDSource (22) = 8 (Exchange Symbol).
<b>End Component Block</b>			
751	TradeReportRejectReason	N	The code indicating the reason why the trade report is rejected: <ul style="list-style-type: none"> <li>▪ 4 = Invalid trade type</li> <li>▪ 5 = Price exceeds current price band</li> <li>▪ 6 = Reference price not available</li> <li>▪ 7 = Notional value exceeds threshold</li> <li>▪ 99 = Other</li> </ul>
1328	RejectText	N	Text explaining the reject reason
<a href="#">Message Trailer</a>			

## 7.10 Entitlements

### 7.10.1 Party Entitlement Request (CU)

The client sends this message to request for entitlement details.

FIX Tag	Field Name	Required?	Description
<a href="#">Message Header</a>			
35	MsgType	Y	CU= Party Entitlements Request
<b>Message Body</b>			
1770	EntitlementsRequestID	Y	Client assigned identifier for this request
<a href="#">Message Trailer</a>			

### 7.10.2 Party Entitlement Report (CV)

The OCG-C sends this message in response to a request for entitlement details.

The OCG-C will fragment this Party Entitlement Report per each Broker ID belonging to the client. The OCG-C will use TotNoPartyList (1512) to specify the total number of Broker IDs for which the entitlement information is provided. The last message will have the LastFragment (893) set to Y.

If any Broker ID belonging to this client is a liquidity provider, then for such a Broker ID, NoEntitlements (1773) will represent the number of symbols that the entitlements are provided for, and a single message fragment will provide the entitlement details for multiple (e.g., up to 10) symbols. For example, if an LP Broker ID is entitled to 15 symbols, two Party Entitlement Report messages will be sent with the first message carrying entitlement details for first 10 symbols, and the second message carrying information for the remaining 5 symbols.

FIX Tag	Field Name	Required ?	Description		
<b>Message Header</b>					
35	MsgType	Y	CV = Party Entitlements Report		
<b>Message Body</b>					
1771	EntitlementsReportID	Y	Identified assigned to this report message.		
1770	EntitlementsRequestID	N	Client assigned identifier to the Party Entitlements Request message. Conditionally required if the Party Entitlement Report is in response to a Party Entitlements Request		
1511	RequestResult	N	Conditionally required if the Party Entitlement Report is in response to a Party Entitlements Request: <ul style="list-style-type: none"> <li>▪ 0 = Valid Request</li> <li>▪ 1 = Invalid or unsupported request</li> <li>▪ 2 = No data found that match selection criteria</li> <li>▪ 3 = Not authorized to retrieve data</li> <li>▪ 4 = Data temporarily unavailable</li> <li>▪ 5 = Request for data not supported</li> <li>▪ 99 = Other</li> </ul>		
1512	TotNoPartyList	N	Number of Broker IDs to be returned		
893	LastFragment	N	Indicates whether this message is the last in a sequence of fragmented messages: <ul style="list-style-type: none"> <li>▪ N = No</li> <li>▪ Y = Yes</li> </ul>		
<b>Component Block &lt;PartyEntitlementGrp&gt;</b>					
1772	NoPartyEntitlements	Y	Number of party entitlement values		
→	<b>Component Block &lt;PartyDetailGrp&gt;</b>				
→	1671	NoPartyDetails	Y	Number of party identifiers. The value in this field should be 1.	
	→	1691	PartyDetailID	Y	Broker ID
→	→	1692	PartyDetailIDSource	Y	Defines the naming convention used in

					specifying the PartyID (448):	
					<ul style="list-style-type: none"> <li>▪ D = Proprietary/Custom Code</li> </ul>	
→	→	1693	PartyDetailRole	Y	Role of the specified PartyID (448): <ul style="list-style-type: none"> <li>▪ 1 = Executing Firm</li> <li>▪ 35 = Liquidity Provider</li> </ul>	
→	End Component Block					
→	Component Block <EntitlementGrp>					
→		1773	NoEntitlements	N	Number of entitlements here	
→	→	1774	EntitlementIndicator		Determines if the party is entitled: <ul style="list-style-type: none"> <li>▪ Y- Entitled</li> <li>▪ N- Not Entitled</li> </ul> Required if: NoEntitlements (1773) > 0	
→	→	1775	EntitlementType	N	Absence of this field indicates the meaning of the entitlement is implicit. <ul style="list-style-type: none"> <li>▪ 0 = Trade</li> <li>▪ 1 = Make Markets</li> </ul>	
→	→	Component Block <EntitlementAttribGrp>				
→	→	1777	NoEntitlementAttrib	N	Number of entitlement attributes	
→	→	→	1778	EntitlementAttribType	N	Name of the attribute: <ul style="list-style-type: none"> <li>▪ 4000 = Minimum Quote obligation</li> <li>▪ 4001 = Maximum Quote Spread Obligation</li> </ul> Required if: NoEntitlementAttrib (1777) > 0
→	→	→	1779	EntitlementAttribDataType	N	Data Type of the attribute: <ul style="list-style-type: none"> <li>▪ 7 = Qty</li> </ul>
→	→	→	1780	EntitlementAttribValue	N	Value of the attribute. Required if: NoEntitlementAttrib (1777) > 0
→	→	End Component Block				
→	→	1776	EntitlementID	N	Unique identifier for a specific NoElements (1773) repeating group instance.	
→	→	Component Block <InstrumentScopeGrp>				

→	→	1656	NoInstrumentScopes	N	Always 1	
→	→	→	1535	InstrumentScopeOperator	N	Operator to perform on the instrument(s) specified: ▪ 1 = Include
→	→	→	Component Block <InstrumentScope>			
→	→	→	1538	InstrumentScopeSecurityID	N	Security Identifier for which Liquidity Provider is entitled to.
→	→	→	1539	InstrumentScopeSecurityIDSource	N	Specified Security Identifier source
→	→	→	1616	InstrumentScopeSecurityExchange	N	Specified Security exchange
→	→	→	End Component Block			
→	→	End Component Block				
→	End Component Block					
End Component Block						
<a href="#">Message Trailer</a>						

## 7.11 Infrastructure

### 7.11.1 Business Message Reject (j)

This message can be initiated by the OCG-C.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	j= Business Message Reject
<b>Message Body</b>			
45	RefSeqNum	N	Sequence number of the message which caused the rejection
372	RefMsgType	Y	Message type of the rejected message.
379	BusinessRejectRefID	N	The value of the business-level "ID" field on the message being referenced.
380	BusinessRejectReason	Y	Code specifying the reason for the rejection of the message: <ul style="list-style-type: none"> <li>▪ 0 = Other</li> <li>▪ 1 = Unknown ID</li> <li>▪ 2 = Unknown Security</li> <li>▪ 3 = Unspecified Message Type</li> <li>▪ 4 = Application not available</li> <li>▪ 5 = Conditionally required field missing</li> <li>▪ 8 = Throttle limit exceeded</li> </ul>
58	Text	N	Where possible, message to explain reason for rejection  In case the BusinessRejectReason (380) = 8 (Throttle Limit Exceeded), the Text (58) field will indicate the remaining throttle interval time in milliseconds.
<b>Message Trailer</b>			

### 7.11.2 User Request (BE)

The User Request messages can be used by the client to request for throttle entitlement details for this requesting client.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	BE= User Request
<b>Message Body</b>			
923	UserRequestID	Y	Client assigned identifier for this request
924	UserRequestType	Y	Indicates the action required: <ul style="list-style-type: none"> <li>▪ 5 = Request Throttle Limit</li> </ul>
553	UserName	Y	Same as SenderCompID
<b>Message Trailer</b>			

### 7.11.3 User Response (BF)

The User Response message is used by the OCG-C as a response to a User Request to provide throttle entitlement details for the requesting client.

FIX Tag	Field Name	Required?	Description
<b>Message Header</b>			
35	MsgType	Y	BF= User Response
<b>Message Body</b>			
923	UserRequestID	Y	Client assigned identifier for the User Request
553	UserName	Y	As provided in 35=BE
Component Block <ThrottleParamsGrp>			
1610	NoThrottles	N	Throttle information to follow
→ 1611	ThrottleAction	N	Action to be taken should throttle limit be exceeded: <ul style="list-style-type: none"> <li>▪ 2 = Reject</li> </ul>
→ 1612	ThrottleType	N	Type of throttle: <ul style="list-style-type: none"> <li>▪ 0 = Inbound Rate (Absolute throttle rate)</li> </ul>
→ 1613	ThrottleNoMsgs	N	The maximum number of messages allowed by the throttle. Can be used only when ThrottleType (1612) = Inbound Rate. Indicates, along with ThrottleTimeUnit (1614), the interval of time in which ThrottleNoMsgs (1613) may be sent. Default is 1.
→ 1614	ThrottleTimeInterval	N	Indicates the interval of time in which the Throttle No Messages may be sent based on the Throttle Time Unit specified. Default Seconds Required if: ThrottleType (1612) = 0 (Inbound Rate)
→ 1615	ThrottleTimeUnit	N	Indicates the unit in which Throttle Time Interval is expressed: <ul style="list-style-type: none"> <li>▪ 0 = Seconds(default if not specified)</li> </ul> Required if: Throttle Type = 0 (Inbound Rate)
End Component Block			
<b>Message Trailer</b>			

---

## 8. Data Dictionary

### 8.1 Session Level

Tag	Field Name	Data Type	Description	Comments
7	BeginSeqNo	SeqNum	Sequence number of first message in range.	
8	BeginString	String	Identifies beginning of new message and protocol version Valid values: FIXT.1.1	
9	BodyLength	Length	Number of characters after this field up to and including the delimiter immediately preceding the CheckSum.	
10	Checksum	String	Three byte, simple checksum. Always the last field in message	
16	EndSeqNo	SeqNum	Sequence number of last message in range	
34	MsgSeqNum	SeqNum	Sequence number of the message.	
35	MsgType	String	<ul style="list-style-type: none"><li>▪ 0 = Heartbeat</li><li>▪ 1 = Test Request</li><li>▪ 2 = Resend Request</li><li>▪ 3 = Reject</li><li>▪ 4 = Sequence Reset</li><li>▪ 5 = Logout</li><li>▪ 8 = Execution Report</li><li>▪ 9 = Order Cancel Reject</li><li>▪ A = Logon</li><li>▪ D = New Order – Single</li><li>▪ F = Order Cancel Request</li><li>▪ G = Order Cancel/Replace Request</li><li>▪ q = Order Mass Cancel Request</li><li>▪ r = Order Mass Cancel Report</li><li>▪ S = Quote</li></ul>	



			<ul style="list-style-type: none"> <li>▪ Z = Quote Cancel</li> <li>▪ AE = Trade Capture Report</li> <li>▪ AI = Quote Status Report</li> <li>▪ AR = Trade Capture Report Ack</li> <li>▪ BE = User Request</li> <li>▪ BF = User Response</li> <li>▪ CU = Party Entitlement Request</li> <li>▪ CV = Party Entitlement Report</li> </ul>	
36	NewSeqNo	SeqNum	Sequence number of the next message to be transmitted.	
43	PossDupFlag	Boolean	Whether the message was previously transmitted under the same MsgSeqNum (34). Absence of this field is interpreted as Original Transmission (N).	
45	RefSeqNum	SeqNum	Sequence number of the rejected message.	
49	SenderCompID	String	Comp ID of the party sending the message.	Limited to maximum 11 characters
52	SendingTime	UTCTimestamp	Time the message was transmitted. Format: YYYYMMDD-HH:MM:SS.ssssss	
56	TargetCompID	String	Comp ID of the party the message is sent to	Limited to maximum 11 characters
97	PossResend	Boolean	Whether the message was previously transmitted under a different MsgSeqNum (34). Absence of this field is interpreted as Original Transmission (N).	
98	EncryptMethod	Int	Method of encryption	
108	HeartBtInt	Int	Indicates the heartbeat interval in seconds.	
112	TestReqID	String	Required if the heartbeat is a response to a Test Request. The value in this field should echo the TestReqID (112) received in the Test Request. Identifier for the request	

122	OrigSendingTime	UTCTimestamp	Time the message was originally transmitted. If the original time is not available, this should be the same value as SendingTime (52). Required if PossDupFlag (43) is Possible Duplicate (Y). Format: YYYYMMDD-HH:MM:SS.ssssss
123	GapFillFlag	Boolean	Mode in which the message is being used. Absence of this field is interpreted as Sequence Reset (N).
371	RefTagID	Int	If a message is rejected due to an issue with a particular field its tag number will be indicated.
372	RefMsgType	String	Message type of the rejected message.
373	SessionRejectReason	Int	Code specifying the reason for the reject: <ul style="list-style-type: none"> <li>▪ 0 = Invalid Tag Number</li> <li>▪ 1 = Required Tag Missing</li> <li>▪ 2 = Tag not defined for this message</li> <li>▪ 3 = Undefined tag</li> <li>▪ 4 = Tag specified without a value</li> <li>▪ 5 = Value is incorrect (out of range) for this tag</li> <li>▪ 6 = Incorrect data format for value</li> <li>▪ 9 = CompID problem</li> <li>▪ 10 = Sending Time Accuracy problem</li> <li>▪ 11 = Invalid Msg Type</li> <li>▪ 13 = Tag appears more than once</li> <li>▪ 15 = Repeating group fields out of order</li> <li>▪ 16 = Incorrect NumInGroup count for repeating group</li> <li>▪ 18 = Invalid/Unsupported Application Version</li> <li>▪ 99 = Other</li> </ul>
380	BusinessRejectReason	Int	Code specifying the reason for the rejection of the business message

			<ul style="list-style-type: none"> <li>▪ 0 = Other</li> <li>▪ 1= Unknown ID</li> <li>▪ 2 = Unknown Security</li> <li>▪ 3= Unspecified Message Type</li> <li>▪ 4= Application not available</li> <li>▪ 5 = Conditionally required field missing</li> <li>▪ 8 = Throttle Limit exceeded</li> </ul>	
464	TestMessageIndicator	Boolean	Used to specify that this FIX session will be sending and receiving "test" vs. "production" messages Only applicable for Logon (35=A) message from the OCG-C to the client	
554	Password	String	Password assigned to the Comp ID. Required if the message is generated by the client.	
789	NextExpectedMsgSeqNum	SeqNum	Next expected MsgSeqNum value to be received	
925	NewPassword	String	New password for the Comp ID.	
1128	ApplVerID	String	Version of FIX used in the message. Required if the message is generated by the OCG-C.	
1137	DefaultApplVerID	String	Default version of FIX messages used in this session.	
1400	EncryptedPasswordMethod	Int	Enumeration defining the encryption method used to encrypt password fields: <ul style="list-style-type: none"> <li>▪ 101 = RSA</li> </ul>	
1402	EncryptedPassword	Data	Encrypted password – encrypted via the method specified in EncryptedPasswordMethod (1400). Padding scheme supported is PKCS #1 or OAEP.	
1404	EncryptedNewPassword	Data	Encrypted new password – encrypted via the method specified in EncryptedPasswordMethod (1400). Padding scheme supported is PKCS #1 or OAEP.	
1409	SessionStatus	Int	Status of the FIX session. Required if the message is generated by the server. <ul style="list-style-type: none"> <li>▪ 0 = Session active</li> </ul>	

---

			<ul style="list-style-type: none"><li>▪ 1 = Session password changed</li><li>▪ 2 = Session password due to expire</li><li>▪ 3 = New session password does not comply with the policy</li><li>▪ 4 = Session logout complete</li><li>▪ 5 = Invalid username or password</li><li>▪ 6 = Account locked</li><li>▪ 7 = Logons are not allowed at this time</li><li>▪ 8 = Password expired</li><li>▪ 100 = Password change is required</li><li>▪ 101 = Other</li></ul>	
--	--	--	---	--

## 8.2 Business Level

Tag	Field Name	Data Type	Description	Comments
11	ClOrdID	String	Unique identifier of the order as assigned by the client	Limited to maximum 8 digits
14	CumQty	Qty	Total quantity filled	
17	ExecID	String	Unique Execution ID assigned by the system for each Execution Report generated	
18	ExecInst	MultipleCharValue	<ul style="list-style-type: none"> <li>▪ c = Ignore Price Validity Checks</li> <li>▪ x = Ignore Notional Validity Checks</li> </ul> Instructions for order handling on exchange trading floor. Absence of this field is interpreted as None	
19	ExecRefID	String	Reference identifier used with Trade and Trade Cancel execution types	
22	SecurityIDSource	String	Identifier of the source of the SecurityID (48) value.	
31	LastPx	Price	Price of this fill. Execution price	
32	LastQty	Qty	Quantity executed in this fill. Execution size	
37	OrderID	String	Unique identifier for Order as assigned by the server	Limited to maximum 20 characters
38	OrderQty	Qty	Total order quantity.	
39	OrdStatus	Char	Current status of the order: <ul style="list-style-type: none"> <li>▪ 0 = New</li> <li>▪ 1 = Partially filled</li> <li>▪ 2 = Filled</li> <li>▪ 4 = Cancelled</li> <li>▪ 6 = Pending Cancel</li> <li>▪ 8 = Rejected</li> <li>▪ A = Pending New</li> <li>▪ C = Expired</li> <li>▪ E = Pending Replace</li> </ul>	

40	OrdType	Char	Type of the order: <ul style="list-style-type: none"> <li>1 = Market</li> <li>2 = Limit</li> </ul>	
41	OrigClOrdID	String	ClOrdID (11) of the previous order (NOT the initial order of the day) as assigned by the client, used to identify the previous order in cancel and cancel/replace requests	Limited to maximum 8 digits
44	Price	Price	Limit price of the order	
48	SecurityID	String	Identifier of the instrument.	Limited to maximum 20 characters
54	Side	Char	Side of the order: <ul style="list-style-type: none"> <li>1 = Buy</li> <li>2 = Sell</li> <li>5 = Sell short</li> </ul>	
58	Text	String	Free format text string	Limited to maximum 50 characters
59	TimeInForce	Char	Specifies how long the order remains in effect: <ul style="list-style-type: none"> <li>Absent = Day</li> <li>0 = Day</li> <li>3 = IOC</li> <li>4 = FOK</li> <li>9 = At Crossing</li> </ul>	
60	TransactTime	UTCTimestamp	Time qualifier of the order Format: YYYYMMDD-HH:MM:SS.ssssss	
77	PositionEffect	Char	Indicates whether the resulting position after a trade should be an opening position or closing position: <ul style="list-style-type: none"> <li>C = Close</li> </ul>	
102	CxlRejReason	Int	Code to identify reason for cancel rejection <ul style="list-style-type: none"> <li>0 = Too late to cancel</li> <li>1 = Unknown Order</li> </ul>	

			<ul style="list-style-type: none"> <li>▪ 3 = Order already in Pending Cancel or Pending Replace status</li> <li>▪ 6 = Duplicate ClOrdID (11) received</li> <li>▪ 8 = Price exceeds current price band</li> <li>▪ 99 = Other</li> <li>▪ 100 = Reference price is not available</li> <li>▪ 101 = Price exceeds current price band (override not allowed)</li> <li>▪ 102 = Price exceeds current price band</li> <li>▪ 103 = Notional value exceeds threshold</li> </ul>	
103	OrdRejReason	Int	<p>Code to identify reason for order rejection</p> <ul style="list-style-type: none"> <li>▪ 3 = Order exceed limit</li> <li>▪ 6 = Duplicate order</li> <li>▪ 13 = Incorrect Qty</li> <li>▪ 16 = Price exceeds current price band</li> <li>▪ 19 = Reference price is not available</li> <li>▪ 20 = Notional value exceeds threshold</li> <li>▪ 99 = Other</li> <li>▪ 101 = Price exceeds current price band (override not allowed)</li> <li>▪ 102 = Price exceeds current price band</li> </ul>	
132	BidPx	Price	Bid Price	
133	OfferPx	Price	Offer price	
134	BidSize	Qty	Quantity of bid	
135	OfferSize	Qty	Quantity of offer	
150	ExecType	Char	<p>Describes the specific Execution report</p> <ul style="list-style-type: none"> <li>▪ 0 = New</li> <li>▪ 8 = Rejected</li> <li>▪ C = Expired</li> <li>▪ F = Trade</li> <li>▪ H = Trade Cancel</li> <li>▪ 4 = Cancelled</li> <li>▪ 5 = Replaced</li> </ul>	

			<ul style="list-style-type: none"> <li>▪ L = Triggered or activated by system</li> </ul>	
151	LeavesQty	Qty	Quantity open for further execution	
207	SecurityExchange	Exchange	Market used to help identify a security. Valid values	
295	NoQuoteEntries	NumInGroup	The number of securities (instruments) for which quotes are to be cancelled.	
297	QuoteStatus	Int	Identifies the status of the quote acknowledgement: <ul style="list-style-type: none"> <li>▪ 5 = Rejected</li> </ul>	
298	QuoteCancelType	Int	Identifies the type of quote cancel: <ul style="list-style-type: none"> <li>▪ 1 = Cancel for one or more securities</li> </ul>	
300	QuoteRejectReason	Int	Reason Quote was rejected <ul style="list-style-type: none"> <li>▪ 8 = Invalid Price</li> <li>▪ 10 = Price exceeds current price band</li> <li>▪ 14 = Notional value exceed threshold</li> <li>▪ 16 = Reference Price is not available</li> <li>▪ 99 = Other</li> <li>▪ 101 = Price exceeds current price band (override not allowed)</li> <li>▪ 102 = Price exceeds current price band</li> </ul>	
378	ExecRestatementReason	Int	Code to identify reason for an Execution Report message sent when communicating an unsolicited cancel: <ul style="list-style-type: none"> <li>▪ 6 = Cancel on Trading Halt/VCM</li> <li>▪ 8 = Market (Exchange) Option</li> <li>▪ <a href="#">17 = Cancel due to aggressive self-match prevention</a></li> <li>▪ <a href="#">18 = Cancel due to passive self-match prevention</a></li> <li>▪ 100 = Unsolicited Cancel</li> <li>▪ 101 = On Behalf Of Single Cancel</li> <li>▪ 102 = On Behalf Of Mass Cancel</li> <li>▪ 103 = Mass Cancelled by the Broker</li> <li>▪ 104 = Cancel on Disconnect</li> </ul>	



			<ul style="list-style-type: none"> <li>▪ 105 = Cancel due to Broker suspension</li> <li>▪ 106 = Cancel due to Exchange Participant suspension</li> <li>▪ 107 = System Cancel</li> </ul>	
379	BusinessRejectRefID	String	The value of the business-level "ID" field on the message being referenced.	
390	BidID	String	Unique identifier for Bid side of the quote	Limited to maximum 8 digits
434	CxlRejResponseTo	Char	Identifies the type of request that a Cancel Reject is in response to: <ul style="list-style-type: none"> <li>▪ 1 = Order Cancel Request</li> <li>▪ 2 = Order Cancel/Replace Request</li> </ul>	
447	PartyIDSource	Char	Identifies class or source of the PartyID (448) value.	
448	PartyID	String	Party identifier/code	
452	PartyRole	Int	Identifies the type or role of the PartyID (448) specified	
453	NoPartyIDs	NumInGroup	Number of PartyID	
487	TradeReportTransType	Int	Identifies Trade Report message transaction type: <ul style="list-style-type: none"> <li>▪ 0 = New</li> <li>▪ 2 = Replace</li> <li>▪ 5 = Cancel due to back out of trade.</li> </ul>	
528	OrderCapacity	Char	Designates the capacity of the firm placing the order: <ul style="list-style-type: none"> <li>▪ A = Agency</li> <li>▪ P = Principal</li> </ul>	
529	OrderRestrictions	MultipleChar	Restrictions associated with an order: <ul style="list-style-type: none"> <li>▪ 2 = Index Arbitrage</li> <li>▪ 5 = Acting As Market Maker Or Specialist In Security</li> <li>▪ 6 = Acting As Market Maker Or Specialist In Underlying of a derivative security</li> </ul> <p>The above 3 values are applicable only if Side = 5 (Sell Short)</p>	

530	MassCancelRequestType	Char	Specifies scope of Order Mass Cancel Request: <ul style="list-style-type: none"> <li>1 = Cancel Orders For Security</li> <li>7 = Cancel All Orders</li> <li>9 = Cancel Orders for a Market segment</li> </ul>	
531	MassCancelResponseType	Char	Indicates the action taken by the order handling system as a result of the cancel request. <ul style="list-style-type: none"> <li>0 = Cancel Request Rejected</li> <li>1 = Cancel order for a security</li> <li>7 = Cancel All Orders</li> <li>9 = Cancel all orders for a market segment</li> </ul>	
532	MassCancelRejectReason	Int	The code Indicating the reason why the Mass Cancel Request was rejected: <ul style="list-style-type: none"> <li>8 = Invalid or Unknown Market Segment(8)</li> <li>99 = Other</li> </ul> Required if: Mass Cancel Response = Mass Cancel Request Rejected	
537	QuoteType	Int	Identifies the type of quote: <ul style="list-style-type: none"> <li>1 = Tradable</li> </ul>	
552	NoSides	NumINGroup	Number of Side repeating group instances	
553	UserName	String	User id or username	Limited to maximum 49 characters
571	TradeReportID	String	Unique identifier of trade capture report	
574	MatchType	String	The point in the matching process at which this trade was matched: <ul style="list-style-type: none"> <li>4 = Auto Match</li> <li>5 = Cross Auction</li> </ul>	
576	NoClearingInstructions	NumINGroup	Number of clearing instructions	
577	ClearingInstruction	Int	Clearing Information:	

			<ul style="list-style-type: none"> <li>▪ 0 = Process normally</li> <li>▪ 1 = Exclude from all netting</li> <li>▪ 14 = Buy In</li> </ul>	
751	TradeReportRejectReason	Int	Reason Trade Capture Request was rejected <ul style="list-style-type: none"> <li>▪ 4 = Invalid trade type</li> <li>▪ 5 = Price exceeds current price band</li> <li>▪ 6 = Reference price not available</li> <li>▪ 7 = Notional value exceeds threshold</li> <li>▪ 99 = Other</li> </ul>	
828	TrdType	Int	Type of the trade being reported: <ul style="list-style-type: none"> <li>▪ 4 = Late Trade</li> <li>▪ 22 = Privately Negotiated Trade</li> <li>▪ 102 = Odd Lot Trade</li> <li>▪ 104 = Overseas Trade</li> </ul>	
856	TradeReportType	Int	Type of the Trade Report: <ul style="list-style-type: none"> <li>▪ 0 = Submit</li> <li>▪ 4 = Addendum</li> <li>▪ 6 = Trade Report Cancel</li> </ul>	
880	TrdMatchID	String	Identifier assigned to a trade by the matching system	
893	LastFragment	Boolean	Indicates whether this message is the last in a sequence of messages.	
923	UserRequestID	String	Unique identifier for a User Request	
924	UserRequestType	Int	Indicates the action required by a User Request Message	
939	TrdRptStatus	Int	Trade Report Status: <ul style="list-style-type: none"> <li>▪ 0 = Accepted</li> <li>▪ 1 = Rejected</li> </ul> Absence of this field indicates 0 = Accepted	
1003	TradeID	String	The unique ID assigned to the trade entity once it is received or matched by the server	Limited to maximum 24 characters

1057	AggressorIndicator	Boolean	Used to identify whether the order initiator is an aggressor or not in the auto-matched trade during continuous trading session: <ul style="list-style-type: none"> <li>Y = Order initiator is aggressor</li> <li>N = Order initiator is passive</li> </ul>	
1090	MaxPriceLevels	Int	Allows an order to specify a maximum number of price levels to trade through	
1093	LotType	Char	Defines the lot type assigned to the order: <ul style="list-style-type: none"> <li>1 = Odd Lot</li> <li>2 = Round Lot</li> </ul>	
1115	OrderCategory	Char	Defines the type of interest behind a trade: <ul style="list-style-type: none"> <li>A = Internal Cross Order</li> </ul>	
1123	TradeHandlingInstr	Char	Indicates how the trade capture report should be handled by the receiver: <ul style="list-style-type: none"> <li>0 = Trade Confirm</li> <li>1 = Two Party Report</li> <li>6 = One Party Report</li> </ul>	
1166	QuoteMsgID	String	Client specified identifier for the Quote Cancel message	Limited to maximum 8 digits
1300	MarketSegmentID	String	Identifies the market segment	
1328	RejectText	String	Rejection text	
1369	MassActionReportID	String	Unique identifier of Order Mass Cancel Report	
1511	RequestResult	Int	Conditionally required if the Party Entitlement Report is in response to a Party Entitlements Request: <ul style="list-style-type: none"> <li>0 = Valid Request</li> <li>1 = Invalid or unsupported request</li> <li>2 = No data found that match selection criteria</li> <li>3 = Not authorized to retrieve data</li> <li>4 = Data temporarily unavailable</li> <li>5 = Request for data not supported</li> <li>99 = Other</li> </ul>	

1512	TotNoPartyList	Int	Total broker Ids to be returned	
1535	InstrumentScopeOperator	Int	Operator to perform on the instrument(s) specified: <ul style="list-style-type: none"> <li>1 = Include</li> </ul>	
1538	InstrumentScopeSecurityID	String	Security Identifier for which LP is entitled to	
1539	InstrumentScopeSecurityIDSource	String	Specified Security Identifier source	
1610	NoThrottles	NumInGroup	Number of Throttle to follow	
1611	ThrottleAction	Int	Action to be taken once the throttle limit is exceeded: <ul style="list-style-type: none"> <li>2 = Reject</li> </ul>	
1612	ThrottleType	Int	Type of throttle : <ul style="list-style-type: none"> <li>0 = Inbound Rate</li> </ul>	
1613	ThrottleNoMsgs	Int	Maximum Number of messages allowed by the throttle	
1614	ThrottleTimeInterval	Int	Indicates, along with ThrottleTimeUnit, the interval of time in which ThrottleNoMsgs may be sent. Can be used only when ThrottleType = Inbound Rate.	
1615	ThrottleTimeUnit	Int	Indicates, along with ThrottleTimeUnit, the interval of time in which ThrottleNoMsgs may be sent: <ul style="list-style-type: none"> <li>0 = Seconds</li> </ul> Can be used only when ThrottleType = Inbound Rate.	
1616	InstrumentScopeSecurityExchange	Exchange	Specified Security exchange	
1656	NoInstrumentScopes	NumInGroup	Number of instrument scopes included	
1671	NoPartyDetails	NumInGroup	Number of party details	
1691	PartyDetailID	String	The identification of the party. Required when NoPartyDetails (1671) > 0	
1692	PartyDetailIDSource	Char	Source of the identifier of the PartyDetailID (1691) specified.	

1693	PartyDetailRole	Int	Identifies the type or role of PartyDetailID (1691) specified	
1770	EntitlementsRequestID	String	EntitlementsRequestID of the PartyEntitlementRequest message the response is to	
1771	EntitlementsReportID	String	Unique identifier for PartyEntitlementReport	
1772	NoPartyEntitlements	NumINGroup	Number of party entitlement values	
1773	NoEntitlements	NumINGroup	Number of entitlement values	
1774	EntitlementIndicator	Bool	Determines if the party is entitled: <ul style="list-style-type: none"> <li>▪ Y= Entitled</li> <li>▪ N= Not Entitled</li> </ul> Required if: NoEntitlements(1773) >0.	
1775	EntitlementType	Int	Absence of this field indicates that the entitlement is implicit: <ul style="list-style-type: none"> <li>▪ 0 = Trade</li> <li>▪ 1= Market Maker</li> </ul>	
1776	EntitlementID	String	Unique identifier for specific a specific NoElements (1773) repeating group instance	
1777	NoEntitlementAttrib	Int	Number of entitlement attributes	
1778	EntitlementAttribType	int	Name of the attribute: <ul style="list-style-type: none"> <li>▪ 4000 = Minimum Quote obligation</li> <li>▪ 4001 = Maximum Quote Spread obligation</li> </ul> Required if: NoEntitlementAttrib(1777) > 0.	
1779	EntitlementAttribDataType	Int	Data type of the entitlement attribute : <ul style="list-style-type: none"> <li>▪ 7= Qty</li> </ul>	
1780	EntitlementAttribValue	String	Value of the entitlement attribute Required if:	

			NoEntitlementAttrib(1777) > 0.	
1812	NoDisclosureInstructions	NumINGroup	No of Disclosure Instructions	
1813	DisclosureType	Int	Information subject to disclosure: <ul style="list-style-type: none"> <li>100 = None</li> </ul>	
1814	DisclosureInstruction	Int	Instruction to disclose information or to use default values of the receiver: <ul style="list-style-type: none"> <li>1 = Yes</li> </ul>	
1867	OfferID	String	Unique identifier for the Offer side of the quote assigned by the quote issuer	Limited to maximum 8 digits
1868	NoValueChecks	NumInGroup	Number of value check entries	
1869	ValueCheckType	Int	Type of value to be checked: <ul style="list-style-type: none"> <li>1 = Price Check</li> <li>2 = Notional Value Check</li> </ul> Required if: NoValueChecks (1868) > 0	
1870	ValueCheckAction	Int	Identifies if the type of value specified in the ValueCheckType is required or not: <ul style="list-style-type: none"> <li>0 = Do not check</li> <li>1 = Check</li> </ul> Required if: NoValueChecks (1868) > 0	
<a href="#">2362</a>	<a href="#">SelfMatchPreventionID</a>	<a href="#">String</a>	<a href="#">The identifier to prevent self-matching</a>	<a href="#">Limited to maximum 9 digits</a>
5681	ExchangeTradeType	Char	Exchange assigned trade type for a reported trade: <ul style="list-style-type: none"> <li>M = Manual Trade</li> <li>S = Manual Non Standard price</li> <li>Q = Special Lot</li> <li>P = Odd Lot</li> <li>R = Previous Day</li> <li>V = Overseas</li> </ul>	

- 
- |  |  |  |   |  |
|--|--|--|---|--|
|  |  |  | <ul style="list-style-type: none"><li>▪ E = Special Lot – Semi-Automatic</li><li>▪ O = Odd Lot – Semi-Automatic</li></ul> |  |
|--|--|--|---|--|



---

# Appendices

---

---

## A. Password Policy

- Length is 8 characters.
- Must comprise of a mix of alphabets (A-Z and a-z) and digits (0-9)
- Must be changed on first-time logon or first logon after reset from HKEX market operations.
- New password can't be one of the previous 5 passwords.
- Can't be changed more than once per day.
- Session will be locked after 3 consecutive invalid passwords
- Expires every 90 days.