T7™

ISE FIX Order Routing (IORS) Manual

For use with FIX Protocol Version 4.2

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Abstract

This document provides information on business descriptions, programming interfaces and protocols for connecting client applications to the ISE T7TM system.

Please note that some functionality described herein may not be available.

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1. About This Document

This document is a programmer's reference guide intended to aid in the development of order entry applications to the ISE's trading system. It covers the general business behavior of the ISE market and the technology standards and techniques employed to access that system. The most recent version of this document is available at https://members.ise.com.

1.1   Background

The International Securities Exchange (ISE) operates an equity options exchange and offers options trading on over 2,000 underlying equity, ETF, index, and FX products. As the first all-electronic options exchange in the U.S., ISE transformed the options industry by creating efficient markets through innovative market structure and technology. ISE continues to expand its marketplace through the ongoing development of enhanced trading functionality and new product introductions.

ISE is a member of the Options Price Reporting Authority (OPRA) and is an owner of the Options Clearing Corporation (OCC). ISE sends its quotes and trades to OPRA, and the OCC clears the trades. Options contracts traded on the ISE are fungible with contracts traded on other U.S. options exchanges.

The ISE combines electronic trading with auction market principles. Primary features of the ISE market include:

- Market participants trade anonymously
- Customer orders have priority over non-customer orders
- Non-customers receive pro-rata priority in the order book

1.2   ISE T7

ISE T7 is a high-throughput, low-latency trading platform. ISE offers four interfaces to the T7 trading system:

1. Direct Trading Interface (DTI): This is the binary trading interface to the core trading system. Members and third party software vendors may develop trading applications that communicate directly to the exchange system.
2. FIX Interface (IORS): This is an industry standard trading interface for sending orders and receiving execution reports in standard FIX ver. 4.2 format.
3. PrecISE Trade®: ISE's proprietary trader workstation that displays the ISE market prices and provides the full suite of trading functions available from the ISE Exchange.
4. Market Data Interface (MDI): High volume market data are distributed using Multicast (UDP), over high volume data lines or via cross connects at data centers.

NOTE: ISE market data does not include OPRA redistribution.

This document describes the FIX interface (IORS).

1.3 Intended Audience

This document should be used by:

- ISE and ISE Gemini Electronic Access Members (EAMs)
- Clearing Firms
- Service Bureaus
- Members using ISE's FIX drop copy services

1.4 Related Documents

The Financial Information Exchange (FIX) protocol is an open message standard that supports the real-time electronic exchange of securities transactions.

This document should be read in conjunction with:

Table 1: Related Documents

Document	Description	Location
Financial Information Exchange Protocol	Describes the industry standard for broker – institution electronic communication.	www.fixprotocol.org/specifications/
ISE Rules	Refer to Chapter 7 for Electronic Access Member trading practices.	www.ise.com/rules
FIX Protocol Internet site	Provides a central repository for FIX documents.	www.fixprotocol.org
ISE Internet site	Provides exchange information for members.	www.ise.com
ISE Member Website	Provides documentation and tools for the ISE T7 Trading System.	https://members.ise.com Registration required.

1.5 Acronyms

Acronyms used in this document (descriptions and additional acronyms can be found in **Appendix A: Glossary**, on page 71):

Table 2: Acronyms

Acronym	Description
ABBO	Away BBO
ALO	Add Liquidity Only Order
AMR	Away Market Routing
AON	All Or None order
BBO	Best Bid and Offer
BU	Business Unit
CAO	Complex Auction Order
CCC	Customer-To-Customer Cross
CMTA	Clearing Member Transfer Agreement
DMM	Directed Market Maker

Acronym	Description
DNF	Do Not Flash
DNR	Do Not Route
DO	Directed Order
EAM	Electronic Access Member
FARMM	Far away Market Maker
FIX	Financial Information Exchange
FOK	Fill Or Kill
GTC	Good 'Til Cancel
GTD	Good 'Til Date
IBBO	ISE BBO
IOC	Immediate Or Cancel
IORS	ISE FIX Order Routing System
ISE	International Securities Exchange
ISO	Intermarket Sweep Order
MDI	Market Data Interface
ME	Matching Engine
MEQ	Minimum Execution Quantity
MM	Market Maker
NBBO	National BBO
NTT	No Trade Through
OCC	Options Clearing Corporation
OPG	At the Opening
OPRA	Options Price Reporting Authority
PIM	Price Improvement Mechanism
QCC	Qualified Contingent Cross
SBBO	Synthetic Best Bid and Offer
TMS	Technology Member Services

2. Introduction To IORS

ISE FIX Order Routing System (IORS) is an ISE application that routes and translates messages between members' FIX order entry systems and the binary messaging interface to the ISE T7 trading system. IORS is designed to provide order entry, order management, and trade reporting functions for EAMs. IORS does not support quoting and does not provide any market data.

IORS is written for FIX Protocol version 4.2; however numerous extensions have been made to the protocol, including "borrowing forward" from later FIX versions (4.3, 4.4, etc.), in order to provide ISE-specific order functionality not explicitly available in version 4.2. Exceptions to the 4.2 protocol will be noted.

IORS does not support encrypted data.

2.1 Messages

Messages defined in FIX version 4.2 that are not described in this document are not supported.

IORS supports the following FIX messages:

Table 3: Supported Session Messages

MsgType	Name	Comments
0	Heartbeat	See *FIX Protocol ver. 4.2 with Errata 20010501*
1	Test Request	
2	Resend Request	
3	Reject	
4	Sequence Reset	
5	Logout	
A	Logon	

NOTE: ISE implements the FIX session level and session messages as per the protocol. These messages are not described in this document. For a description of these messages, and of the session level processing, please refer to *FIX Protocol ver. 4.2 with Errata 20010501*.

Table 4: Supported Application Messages

MsgType	Name	Comments
D	New Order Single	
F	Order Cancel Request	
9	Order Cancel Reject	
G	Order Cancel Replace Request	
H	Order Status Request	
s	New Order Cross	NON-STANDARD (FIX ver. 4.3)
AB	New Order Multileg	NON-STANDARD (FIX ver. 4.3)
AC	Multileg Order Cancel Replace	NON-STANDARD (FIX ver. 4.3)

MsgType	Name	Comments
As	New Order Cross — Multileg	NON-STANDARD (ISE)
8	Execution Report	
J	Allocation	
P	Allocation Instruction Ack	
UDA	Member Kill Switch	NON-STANDARD (ISE)
UDB	Member Kill Switch Ack	NON-STANDARD (ISE)
B	News	
j	Business Message Reject	

2.2 Options Symbology

IORS uses explicit OSI symbology to identify options, using the following required fields:

Table 5: ISE Options Symbology

Tag	Field name	Req	Comments
55	Symbol	Y	OSI Option symbol. (XYZ, XYZ1, etc.)
200	MaturityMonthYear	Y	YYYYMM format
201	PutOrCall	Y	0=Put 1=Call
202	StrikePrice	Y	
205	MaturityDay	Y	$1 \leq n \leq 31$

NOTE: Following OSI methodology, ISE will use the numeral seven (7) appended to the option symbol to identify mini options. For example, the symbol for a mini option for ABC is ABC7.

ISE does not use *SymbolSfx* (65). Instead, suffixes are concatenated without punctuation to the symbol. For example, BRK.B is sent as:

> *Symbol* (55) = "BRKB"

Not as:

> *Symbol* (55) = "BRK"
> *SymbolSfx* (65) = "B"

2.3 Establishing a FIX Session

Members are required to initiate the FIX session; IORS will not initiate the session.

IORS considers all communication with the member over the course of the trading day as a single FIX session, maintaining sequence numbers across any physical disconnections/reconnections. The member's first logon attempt in the morning must start with *MsgSeqNum* (34) = 1.

The member's connection is identified using a unique CompID pair. If either *SenderCompID* (49) or *TargetCompID* (56) are not as configured on the Logon message, IORS will silently close the socket.

All session-level processing is implemented as per the protocol, including full support for message recovery and sequence number reset. Session messages and processing are not described in this document; please see *FIX Protocol ver. 4.2 with Errata 20010501* for specifics.

2.4   Risk Protection & Management

IORS provides a number of mechanisms to help members manage risk.

2.4.1   Mass Cancel On Disconnect

A member's FIX session can be configured to automatically delete *all* open orders if the session is disconnected.

By default, open orders at the exchange remain active if the member's FIX session is disconnected. IORS does not support a mass cancel transaction; however, if configured, Mass Cancel on Disconnect can help protect members in the event of an unexpected disconnect.

2.4.2   Order Persistence

Order persistence relates to how orders are handled in the event of a software failure in the core trading system. Persistence is *not* determined by *TimeInForce* (59). By default, orders at the exchange are not persisted — for example, in the event of a Matching Engine (ME) failure in the core trading system, all orders in the affected system partition (order book) are automatically *deleted*.

Members may indicate, on an order-by-order basis, that an order should be persisted — for example, in the event of an ME software failure in the core trading system, persisted orders in the affected system partition (order book) are *reinstated* when the system is recovered.

Alternatively, a member's FIX session can be configured to persist orders by default, and the member may indicate on an order-by-order basis that an order should *not* be persisted.

Persistence, or non-persistence, is indicated using *ExecInst* (18):

Table 6: Order Persistence

Tag	Field name	Req	Comments
18	ExecInst	N	'H'=Reinstate on System Failure (Persist) 'Q'=Cancel on System Failure (Do not persist)

2.4.3   Customer Limits

A member's FIX session can be configured with per order and/or daily aggregate value limits, rejecting orders that exceed configured limits.

By default, IORS provides no limit checking except that the price and quantity values are within system limits.

Four configurable limit types are available:

- Notional dollar value per order (quantity x price x number of underlying shares)
- Aggregate notional dollar value
- Quantity per order
- Aggregate quantity

IORS will check all incoming new orders and order modifications, and reject the order if it exceeds any of the configured limits. Aggregate amounts are calculated based on *active* orders, including previous days' open GTCs/GTDs. Canceled orders reduce aggregate amounts.

NOTE: Market orders are *rejected* if either notional dollar value limit (per order or aggregate) is set.

2.4.4   "Stale" Order Check

A member's FIX session can be configured to perform "stale" order checking on inbound new orders and order modifications.

If configured, IORS will compare the inbound order time with IORS' system time. If the absolute value of the time delta between the order and IORS is greater than the configured value, the order is rejected as "stale."

NOTE: "Order time" includes transit time *within* IORS. It is possible during extremely high loads that the order is "fresh" on entry to IORS, but becomes "stale" within IORS.

No checking is done on cancel requests.

By default, IORS does not perform stale order checking. (A typical configuration is 10 seconds.)

2.4.5   Member Kill Switch

Market participants may assign specific users special privileges to block another user's or business unit's (BU) ability to enter new orders or alter existing orders. The message will also cause all open orders for the specified BU/user to be deleted. Once blocked, any new orders will be rejected; however cancel requests are accepted.

A blocked BU/user will remain blocked until explicitly reset by ISE Market Operations.

Only authorized and designated users may send the kill switch request. Unauthorized requests are rejected. Only one BU or user may be specified per request.

- To block (all users of) a BU, one instance of the repeating *PartyDetails* group is specified, with *PartyDetailRole* (1693) set to 59 (executing unit), and *PartyDetailID* (1691) set to the BU to be blocked ("ABC01E").

- To block a single user, two instances of the repeating *PartyDetails* group are specified. One instance identifies the BU, as described above, and the second instance identifies the specific user, with *PartyDetailRole* (1693) set to 55 (session ID), and *PartyDetailID* (1691) set to the user to be blocked ("1").

The Kill Switch message is described in **Section 5.16, Member Kill Switch**, on page 65.

2.5 Connecting to IORS

Before connecting to IORS, participants are required to:

- Access IORS in the member test system
- Complete the ISE conformance test in member test
- Complete the ISE connectivity test to the Production System

Market participants must use the member test system in order to perform ISE conformance testing. Although the member test and production systems are functionally similar, there are differences between the two systems. These differences include (but are not limited to):

- The network connection to the member test system has different performance characteristics
- The member test system has less CPU and memory capacity
- The daily market schedule for the member test system has extended hours
- Not all production products and instruments are available in member test

2.5.1 Accessing IORS

To access the production IORS system, the market participant must:

- Submit a written request for access to the ISE member test system.
- Install a Virtual Private Network (VPN) or private line and purchase a router to connect to the member test system.
- Complete the ISE conformance test in the ISE member test environment.
- Complete the ISE connectivity test when connecting to the production system.

2.5.2 Completing ISE Conformance Test

ISE conducts conformance testing to document the major functions of your application, and to test how the application interacts with the trading system. This includes:

- Whether your application is being used for retrieving information (drop copy) or order routing
- The messages that your application uses

Contact ISE Technology Member Services (TMS) to review the application and complete the conformance test.

If the application satisfies the ISE requirements, you will receive a letter from the ISE authorizing you to connect your application to the production system.

NOTE: Only ISE-approved applications can connect to the ISE. Approval is subject to the limitations and conditions specified in the access agreement.

2.5.3   Completing the ISE Connectivity Test to the Production System

The ISE connectivity test must be performed before your software application is installed in production at each site. Completion of this test is done after trading hours and at the market participant's site and performed on each installation of the market participant's application.

After receiving written ISE approval to connect to the production system, participants must:

- Contact ISE Market Operations to advise them that they will be using their application in the ISE production system from the specified site
- Contact ISE TMS to schedule the connectivity test

Participants must demonstrate that their application can successfully:

- Log on to the production system
- Maintain the FIX session

The ISE monitors the performance of the market participant's application over several days. Market participants must provide a technical contact in the event that the application affects the production system.

If the application adversely affects the production system:

- ISE will notify the participant's contact to disconnect the software application from the system
- The application must be disconnected immediately upon request by ISE
- ISE may request more tests on the application when considering approval

NOTE: The ISE reserves the right to refuse access to the production system if the application adversely affects the production system.

2.6   Drop Copy Services

In addition to order routing, ISE IORS offers drop copy services. Drop copy services are independent of order routing.

A drop copy session sends execution reports to interested parties (such as clearing members or sponsors) when:

- A trade occurs
- Order status changes
- A trade is modified or canceled

Drop copy services are offered in three versions:

- Trade-Drop Copy — trade reports, only

- Order-Drop Copy — order status and trade reports
- PrecISE AMR-Drop Copy — trade reports, only, for Away Market Routing (AMR) orders generated from the PrecISE trading terminal

3. Connectivity

ISE provides connectivity to both the production trading system and the test environment. For detailed information about connectivity, please see the *Member Connectivity Guide*, available on the members' website (https://members.ise.com).

3.1 Accessing Production IORS

Access to the production environment is available through ISE's primary data center at Equinix NY4 and the backup data center at TelX. The following table details production connectivity.

Table 7: IP Addresses & Ports — Production

Env.	IP Address	Port
Primary (Equinix NY4)	207.231.197.38	Member-specific
Backup (TelX)	207.231.197.165	Member-specific

3.2 Accessing Member Test

The following table details test connectivity.

Table 8: IP Address & Ports — Member Test

Env.	IP Address	Port
Member Test	207.231.198.19	Member-specific

3.3 System Availability

Access to, and technical support for, the production and test environments is available on regular business days, only. Access to the test environment may be available on holidays and weekends, but is not guaranteed, and technical support is not available.

Normal availability for the production and test environments is shown in the following tables:

Table 9: System Availability — Production

Time (ET)	Mkt Session	FIX status	Activity
6:00 a.m.	Pre-open	Available	Pre-open orders may be sent, canceled, or modified: ▪ An order type of **Market** or **Limit** ▪ A time-in-force of **Day**, **OPG**, **GTC,** or **GTD** ▪ A client category of **Customer**, **Firm,** or **CUST BD** The following are not allowed: ▪ Crossing orders ▪ **IOC** or **FOK** ▪ Client category **Far Away Market Maker (FARMM)**

Time (ET)	Mkt Session	FIX status	Activity
9:30 a.m.	Open	Available	The market is open.
4:15 p.m.	Post-open	Available	The market is closed. Open orders may be canceled. New orders and modifications are not allowed. Post-trade allocations are allowed. ISE Market Operations can adjust trades during post-open.
5.30 p.m.	Closed	Unavailable	The server is unavailable.

Table 10: System Availability — Member Test

Time (ET)	FIX status	Comment
4:00 a.m.	Available	Server available for logon
4:15 a.m.	Available	Test market opens with selected instruments statically quoted.
9:30 a.m.	Available	Nat'l markets open. Test system quotes selected instruments based on NBBO.
4:15 p.m.	Available	Nat'l markets close. Test system remains open, statically quoting selected instruments.
11:00 p.m.	Unavailable	System is down for End-of-Day processing

4. ISE Market Description

This section describes how the markets appear through IORS and how various messages and fields are used to identify different order types and perform different functions.

This section does not describe complete FIX messages. The complete FIX messages are described in **Section 5, IORS FIX Message Specifications**, beginning on page 42. Tables in this section show only those fields relevant to the specified functionality

4.1 Exchange Codes

The following tables list various industry market identifiers for the ISE and ISE Gemini exchanges:

Table 11: Industry Exchange Codes

Identifier	Value	
	ISE	ISE Gemini
OPRA Code	I (upper-case i)	H
ISO 10383 Market Identification Code (MIC)	XISX	GMNI
Thomson Reuters Exchange Code	Y	S
Thomson Exchange Mnemonic	ISO	ISZ
Thomson TDN Code	Y	S
Thomson Reuters BDN Code	USI	USII
Thomson Reuters Eikon RIC Extension	.Y	.I2
Thomson Exchange Qualifier	-8	-S
Bloomberg exchange code	UL	UI
COATS	I (upper-case i)	H
Bluesheet Requestor Code	I (upper-case i)	I (upper-case i)
Bluesheet Exchange Code	I (upper-case i)	1

4.2 Regular Orders

Regular, or standard, orders are characterized by an instruction to buy or sell some quantity of a single option series at a given price, with a time in force directive describing the length of time the order is to remain active. The terms Market and Limit describe the price. IOC, Day, GTC, etc., refer to the Time in Force.

4.2.1 Order Entry

Regular orders are entered using the *New Order Single* message, described in **Section 5.4, New Order Single**, on page 44.

Legacy support for some special order types (as described in **Section 4.6, Special Order Types**, on page 26) using the *New Order Single* still exists, but is deprecated.

4.2.2   Cancel

Active orders are canceled using the ***Order Cancel Request*** message (**Section 5.5, Order Cancel Request**, page 46).

The cancel request message must include *OrigClOrdID* (41), the option series of the original order, and the current open quantity (as known), all of which identify the order to be canceled. The cancel request cannot be used to reduce quantity.

4.2.3   Modification

Active orders are modified using the ***Order Cancel Replace Request*** message (**Section 5.6, Order Cancel Replace Request**, page 47). Unchanging attributes to be carried over from the original order must be specified on the modification request, otherwise those attributes may be changed inadvertently to default values. For example, if the original order had a time in force of GTC, and that field is absent on the modification, the modified order will have a new time in force of Day, the default value for time in force.

Allowed modifications to an order include:

- reducing or increasing order quantity
- changing a limit order to a market order
- changing the limit price
- changing time in force
- changing clearing information (CMTA, Give-up, sub-account)
- changing position effect (open/close)

Modifications cannot include:

- changing side — Buy to Sell, or *vice versa*
- changing series
- changing client category
- reducing quantity to zero (canceling the order)
- re-opening a filled order by increasing quantity
- changing order persistence (see **Section 2.4.2, Order Persistence,** on page 12)

Order modifications can result in a loss of priority in the order book. The following table identifies actions that cause a loss of priority, and actions that maintain priority:

Table 12: Time Priority — Order Modifications

Modification Action	Priority on the Order Book
Limit to Market	Lost
Price or Stop Price modification	Lost

Modification Action	Priority on the Order Book
Quantity increase	Lost
Time in force	Maintained
Quantity decrease	Maintained

4.2.4   Execution Reports

Execution Reports (**Section 5.13, Execution Report**, page 59) are sent for all solicited and unsolicited events to inform members about the current state of their orders.

Solicited events include transactions to add, modify, or cancel orders. Unsolicited events include trades and cancels initiated by the exchange.

4.3   Multi-leg (Complex) Orders

A multi-leg (complex) order is an atomic transaction that allows for the simultaneous trading of multiple options in the same underlying symbol. Complex orders are also called strategies or combos.

Complex orders are characterized by multiple "legs," each of which identifies a specific series to buy or sell; a quantity, which indicates how often the strategy should execute; a leg ratio, which determines how often that leg executes in relation to the other legs; and a net price, which represents the total value of one execution of the strategy.

ISE supports both options-only orders of up-to four legs, and stock-combination orders of one stock leg and one to four options legs.

The following restrictions apply to multi-leg orders:

- All options legs must be for the same underlying product
- There must be at least two legs
- A maximum of four options legs and one stock leg is allowed
- Leg ratios must be expressed in the lowest possible terms. If the lowest terms are not entered, the order is rejected. For example, a ratio of 3:2 is accepted but 6:4 is rejected.
- The ratio between largest and smallest option leg cannot exceed 3:1. For example, a ratio of 17:6 is allowed, but a ratio of 16:5 is rejected.
- The deliverable (contract size) for each option leg must be equal. For example, an order with one leg delivering 100 shares and another leg delivering 150 shares is rejected.

An order with an otherwise marketable net price, including a market order, is not executable if any individual leg would execute at a price ≤ $0. Neither can it execute if one of its legs would trade ahead of a resting customer order in the regular order book.

4.3.1   ISE Synthetic Best Bid and Offer (SBBO)

The SBBO represents the high-low net-price range within which a multi-leg order is generally considered "marketable." The SBBO may range from positive to negative, depending on the instruction and value of the individual legs.

For options-only multi-leg orders, the SBBO is calculated as follows:

- Synthetic bid = (ISE best bid price of each buy leg series times its ratio) – (ISE best offer price of each sell leg series times its ratio)
- Synthetic offer = (ISE best offer price of each buy leg times its ratio) – (ISE best bid price of each sell leg times its ratio)

For stock combinations, if the stock is being bought, the SBBO is calculated as:

- Synthetic bid = Synthetic bid of options legs + national best bid of stock leg * Ratio on stock leg / size of option contract
- Synthetic offer = Synthetic offer of options legs + national best offer of stock leg * Ratio on stock leg / size of option contract

If the stock is being sold, the SBBO is calculated as:

- Synthetic bid = Synthetic bid of options legs – national best offer of stock leg * Ratio on stock leg / size of option contract
- Synthetic offer = Synthetic offer of options legs – national best bid of stock leg * Ratio on stock leg / size of option contract

4.3.2   Net Limit Price

The limit price of a multi-leg order is referred to as the "net price." The net price may be positive, negative, or zero, depending on the leg instructions and value of the individual series:

> Debit (positive) — submitter will pay money for the strategy
>
> Credit (negative) — submitter will receive money for the strategy
>
> Even (zero) — no money paid or received

The net limit price of a regular multi-leg order is calculated as:

> Net Price = (price of each buy leg times its ratio) - (price of each sell leg times its ratio)

When factoring in a stock leg, the stock ratio is adjusted by dividing the stock ratio by the size of the options contract:

> Net Price = (option legs net price) ± (stock leg ratio * stock price / contract size)

(Add buy stock leg and subtract sell stock leg)

4.3.3 Order Entry

Complex orders are entered using the **New Order Multileg** message (**Section 5.10, New Order Multileg**, page 52). Order handling and attributes for multi-leg orders are similar to regular orders with some exceptions:

- The net price of an order can be positive, negative, or zero (0)
- Regular multi-leg orders can be priced in pennies regardless of the minimum price variation (tick) of the component legs
- Stock-combo orders can be priced in increments of 100ths of a penny ($0.0001)
- The net price of an order cannot exceed the SBBO by more than $1.00 or 1%
- The net price of a order to Buy all the legs cannot be less than the aggregated minimum price of each leg
- Directed orders are not supported
- Stop orders are not supported
- Complex orders can trade with opposite complex quotes and orders, or with orders and quotes on individual legs in the regular order book ("legging-in")

4.3.4 Cancel

Active orders are canceled using the **Order Cancel Request** message (**Section 5.5, Order Cancel Request**, page 46).

The cancel request message must include *OrigClOrdID* (41), the legs as defined on the original order, and the current open quantity (as known), all of which identify the order to be canceled. The cancel request cannot be used to reduce quantity.

4.3.5 Modification

Active orders are modified using the **Multileg Order Cancel Replace** message (**Section 5.11, Multileg Order Cancel Replace**, page 55). Unchanging attributes to be carried over from the original order must be specified on the modification request, otherwise those attributes may be changed inadvertently to default values. For example, if the original order had a time in force of GTC, and that field is absent on the modification, the modified order will have a new time in force of Day.

Allowed modifications to an order include:

- reducing or increasing order quantity
- changing a limit order to a market order
- changing the net limit price
- changing time in force
- changing clearing information (CMTA, Give-up, sub-account)
- changing leg position effect (open/close)

Modifications cannot include:

- changing leg sides — Buy to Sell, or *vice versa*

- changing leg series (or stock leg)
- changing leg ratios
- changing client category
- reducing quantity to zero (canceling the order)
- re-opening a filled order by increasing quantity

Order modifications can result in a loss of priority in the order book. Please see **Table 12: Time Priority — Order Modifications**, on page 20, to identify those actions which cause a loss of priority, and which actions maintain priority.

4.3.6   Execution Reports

Execution Reports (**Section 5.13, Execution Report**, page 59) for multi-leg orders are sent per leg, identified by both *ClOrdID* (11) and *LegRefID* (654), as specified on the original order.

4.4   Client Category & Account Type

The *CustomerOrFirm* (204) field identifies both order capacity (client category) and clearing capacity on the order.

ISE extends the default values in *CustomerOrFirm* (204) to more clearly identify the order and clearing capacities. The following table details the allowed values:

Table 13: Client & Clearing Categories

CustomerOrFirm (204)				
Value	Order Capacity	Order Book Priority	OCC Clearance	Definition
0	Customer	Customer	Customer	Order is for a customer that is not a registered US Broker/Dealer or an affiliate of a registered US Broker/Dealer.
1	Proprietary – Firm	Non-Customer	Firm	Order is for a proprietary trading account that clears Firm at OCC.
2	Broker-Dealer – Firm	Non-Customer	Firm	Order is for a Broker-Dealer entity that clears Firm at OCC.
3	Broker-Dealer – Customer	Non-Customer	Customer	Order is for a Broker-Dealer entity that clears Customer at OCC.
4	ISE Market Maker	Non-Customer	Market Maker	Order is for an ISE Market Maker account
5	Far Market Maker	Non-Customer	Market Maker	Order is for an Away or Non-ISE Market Maker account
7	Proprietary – Customer	Non-Customer	Customer	Order is for a proprietary trading account that clears Customer at OCC.
8	Professional Customer	Non-Customer	Customer	Order is for a customer that had an average of more than 390 orders per day during the previous calendar quarter.

4.5　Order Instructions

Optional order instruction may be provided to change default behavior in the trading system.

4.5.1　Intermarket Sweep Order (ISO)

An ISO is an order that should execute, if possible, without regard to protection of other markets' prices.

- ISO applies to regular, facilitation, solicitation, and PIM orders, only.
- ISO is not allowed on MKT, stop, multi-leg orders, reserve, or MEQ orders.
- ISO is allowed with a time in force of DAY, GTC, GTD, and IOC.
- ISO is indicated by setting *ExecInst* (18) = 'f' (lower-case 'F').

Table 14: ISO Instruction

Tag	Field name	Req	Comments
18	ExecInst	Y	'f'=ISO

4.5.2　Do Not Route (DNR)

DNR indicates that a regular customer or professional customer order, which is eligible for away market price protection, should *not* lock to the linkage handler for processing. At the conclusion of the Flash auction (see **Section 4.7.1.3, Flash**, on page 35), if there is still quantity remaining, the customer order is canceled.

DNR applies to regular orders, only, and is indicated by setting *ExecInst* (18) = 'h' (lower-case 'H').

Table 15: DNR Instruction

Tag	Field name	Req	Comments
18	ExecInst	Y	'h'=DNR

4.5.3　Attributable Order

Attributable Order instructions are used to expose order data — member ID, CMTA, give-up — that are otherwise hidden to the marketplace.

- Regular orders (including Block orders) and multi-leg orders may be attributable, as well as regular and multi-leg auction orders.
- Attributable orders cannot be altered to be non-attributable, and *vice versa*.
- Attributable orders are indicate by using the multi-value string field, *ExposureFlag* (9203).

Table 16: Attributable Order Instruction

Tag	Field Name	Req	Usage
9203	ExposureFlag	Y	"C"=Customer ID "E"=Expose All "G"=Give-up "M"=CMTA "E" is mutually exclusive with any other code.

4.6 Special Order Types

A number of special order types are supported for both regular and complex orders.

4.6.1 Minimum Quantity Orders

Minimum quantity orders are orders that must execute a specified minimum quantity. Depending on the order attributes, orders that cannot execute the required minimum quantity are posted (hidden) to the order book or canceled.

ISE supports three minimum quantity order types:

- All Or None (AON)
- Fill Or Kill (FOK)
- Minimum Execution Quantity (MEQ)

4.6.1.1 All Or None (AON)

An AON order must be filled completely in one execution or it does not execute at all.

The order attempts to match with the order book upon entry. If the order is not marketable, or if it is marketable but the order book does not contain sufficient quantity to execute the entire order, the order is placed on the book.

- An order is marked AON by setting *ExecInst* (18) = 'G' (AON)
- An AON order is not displayed and does not form part of the ISE best bid and offer (IBBO)
- An AON order has no priority – it is executed on a best-efforts basis
- AON orders may be regular or multi-leg orders
- An AON may be canceled or modified; however an AON cannot be modified to be a non-AON, or *vice versa*

Table 17: AON Order

Tag	Field name	Req	Comments
18	ExecInst	Y	'G'=AON

4.6.1.2 Fill Or Kill (FOK)

An FOK order must be filled completely upon entry or the entire order is immediately canceled.

The order attempts to match with the order book upon entry. If the order is not marketable, or if it is marketable but the order book does not contain sufficient quantity to execute the entire order, the order is canceled.

- An order is marked FOK by setting *TimeInForce* (59) = 4 (FOK).
- FOK may be used for regular or multi-leg orders

Table 18: FOK Order

Tag	Field name	Req	Comments
59	TimeInForce	Y	4=FOK

4.6.1.3   Minimum Execution Quantity (MEQ)

An MEQ order must execute *at least* the minimum quantity indicated.

The order attempts to match with the order book upon entry. If the order is not marketable, or if it is marketable but the order book does not contain sufficient quantity to execute the required minimum quantity, then, depending on other order attributes, the order is placed on the book, or canceled:

- If *TimeInForce* (59) = 3 (IOC), any quantity left unexecuted is canceled.
- If *TimeInForce* (59) = 0 (Day), 1 (GTC), or 6 (GTD), any quantity left unexecuted is posted to the order book.

An MEQ order posted to the book is not displayed and does not form part of the IBBO.

If *TimeInForce* (59) ≠ 3 (IOC), successive executions must also be for the required minimum quantity.

Additional information:

- An MEQ is indicated by setting *MinQty* (110) > 0
- MEQs may be regular orders, only
- MEQs may be market or limit, but market orders *must* have *TimeInForce* (59) = 3 (IOC)
- MEQs may be stop limit orders, but cannot be stop market orders
- MEQs may be Preferenced, but cannot be Directed.
- Resting orders may be canceled and modified; however, a regular order cannot be changed to an MEQ, and an MEQ cannot be changed to a regular order.

Table 19: Minimum Execution Quantity Order

Tag	Field name	Req	Comments
110	MinQty	Y	0 < *n* < OrderQty

4.6.2   Stop Orders

Stop orders are hidden orders with a trigger price that are placed in the order book. If the IBBO or last sale of the instrument should reach the trigger price, the order is activated and processed.

There are two types of stop orders:

- A standard stop order becomes a market order when activated.
- A stop limit order becomes a limit order when activated.

An order is marked as either a stop order, or a stop limit order using the *OrdType* (40) field. The *StopPx* (99) field must be provided.

Stop orders apply to regular orders, only.

Table 20: Stop Order

Tag	Field name	Req	Comments
40	OrdType	Y	3=Stop 4=Stop Limit
44	Price	N	Activated limit price. Required if OrdType = 4
99	StopPx	Y	Trigger price.

4.6.3   Preferenced Orders

An EAM may specify a Market Maker (MM) to get a preferred allocation on an order.

If a preferenced order trades with the book at entry, and the preferred MM is present at the IBBO, the MM receives an enhanced share. If the preferred MM is not quoting at the IBBO, preferencing has no effect, even if the order trades with that MM at farther price levels.

Specifying a preferred MM does not change priority rules or away market protection for the order being entered.

The preferred MM is identified by its three-letter acronym, appended with "PR."

Additional information:

- Auction and crossing orders cannot be preferenced
- Preferenced orders cannot be directed (see **Section 4.6.4, Directed Orders (DO)**, on page 29)
- Preferenced orders may be regular or multi-leg orders

The preferred MM is specified using the *ExecutingParticipantID* (7901) field:

Table 21: Preferenced Order

Tag	Field name	Req	Comments
7901	ExecutingParticipantID	Y	"ZYXPR" where "ZYX" represents the 3-letter MM acronym

NOTE: A firm's FIX interface can be configured to preference all orders by default. If so configured, orders can be dynamically preferenced to a different preferred MM using *ExecutingParticipantID* (7901); however, there is no mechanism to *prevent* orders from being preferenced.

4.6.4 Directed Orders (DO)

An EAM can specify a Directed Market Maker (DMM) on a customer order and the order is routed to the specified MM for handling. By specifying a DMM on an order, the EAM is transferring the opportunity to facilitate the order to the DMM.

The DMM is identified by its three-letter acronym, appended with "DO."

Additional information:

- An MM must be configured to receive directed orders. If the specified MM does not accept directed orders, the order is processed as a regular order.
- Series status must be regular or fast. A DO entered in any other series state is processed as a regular order.
- The DMM can either initiate a PIM auction or release the order to the ISE order book for processing.
- DOs may be modified or canceled *if* the DMM has not acted on the order.
- Any quantity released to the order book may be modified or canceled.
- Once the DMM initiates the PIM auction, the order cannot be modified or canceled.
- Directed orders may be regular orders, only.

The DMM is specified using the *ExecutingParticipantID* (7901) field:

Table 22: Directed Order

Tag	Field name	Req	Comments
7901	ExecutingParticipantID	Y	"ZYXDO" where "ZYX" represents the 3-char MM acronym

A DO follows this processing cycle:

- An EAM enters a DO
- Upon receipt of the directed order, the DMM can:
  - Initiate a PIM
  - Release the order back to the market
  - Do nothing – after three seconds, the order is automatically released.

If the DO is released (actively or passively):

- A copy of the DMM's quote is taken at the time the order was routed to the DMM.
- The system executes the order against the IBBO if it equals the National Best Bid and Offer (NBBO), but not against the DMM's quote.
- The system initiates a directed order auction, requesting additional liquidity for this order.
- Once the auction expires, the order is executed against the book and responses, up to the away market. The DMM's quote is executed last at each price level. If the DMM's quote should fade then the copy of the original quote is used.
- The balance is either placed in the order book or locked to the linkage handler.

NOTE: A firm's FIX interface can be configured to direct all orders by default. If so configured, orders can be dynamically directed to a different DMM using *ExecutingParticipantID* (7901); however, there is no mechanism to *prevent* orders from being directed.

4.6.5   Reserve Orders

Reserve orders do not show their full size in the order book.

A reserve order is comprised of a "display" quantity and a "reserve" quantity, and when the order trades, it automatically refreshes itself from its reserve quantity. Only the displayed quantity is shown on the book and has priority against other orders. The reserve quantity has no priority at the same price level, but it does have priority over orders as worse price levels.

Reserve orders are allowed for regular and multi-leg orders.

OrderQty (38) represents the total order size and *MaxFloor* (111) represents the initial displayed size. The presence of the *MaxFloor* (111) field indicates that the order is a reserve order.

The optional field, *DisplayWhen* (1083), is used to determine the method for refreshing the quantity:

- Refresh the display quantity whenever it is fully traded out (*DisplayWhen* [1083] = 2 [Exhaust]).
- Refresh it after every trade (*DisplayWhen* [1083] = 1 [Immediate]).

If *DisplayWhen* (1083) is not present, the default behavior is "exhaust."

The optional field, *DisplayRange* (8020), is used to enable "random refresh" functionality: whenever the order quantity is refreshed, the value of *DisplayRange* (8020) is added or subtracted from the *MaxFloor* (111) field to create the new refresh quantity.

If *DisplayRange* (8020) is not present, the refresh quantity will always equal *MaxFloor* (111) (for as long as *MaxFloor* (111) ≤ remaining quantity).

Table 23: Reserved Order

Tag	Field name	Req	Comments
38	OrderQty	Y	Total order quantity
111	MaxFloor	Y	0 < *n* < OrderQty — Initial display quantity
1083	DisplayWhen	N	1=Immediate 2=Exhaust (default)
8020	DisplayRange	N	0 < *n* < MaxFloor — Random refresh quantity

4.6.6   Add Liquidity Only Orders (ALO)

An ALO is an order that is guaranteed to add liquidity ("Maker") to the order book. If the order cannot be added to the book, it is canceled, or optionally, may be re-priced to allow it to rest on the book.

For example, if an incoming ALO would lock or cross either or both of the IBBO or away BBO (ABBO), a re-price ALO would be re-priced by the exchange *better,* in order to uncross the BBO(s) and rest on the book, while a cancel ALO would simply be canceled.

An order is marked ALO by setting *ExecInst* (18) = '6' (participate don't initiate). If the ALO is allowed to be re-priced, then the *ExecInst* (18) value '1' (not held) must also be set: *ExecInst* (18) = "6 1" (or "1 6"). An ALO is only re-priced once.

ALOs are allowed for regular orders, only.

Additional information:

- ALOs can only be entered when the instrument is in a continuous trading state ("Regular"). If the instrument moves out of "Regular," any resting ALOs for that instrument are canceled.
- The only allowed validity time is Day (*TimeInForce* (59) = 0).
- The only allowed order type is Limit (*OrdType* (40) = 2).
- All client categories are allowed.
- An ALO is not exposed in a Flash auction; it is either re-priced or canceled.
- ALOs may be marked ISO.
- ALOs may be preferenced but cannot be directed.
- ALOs may be canceled and modified. In addition, a non-ALO may be modified to be an ALO, and an ALO may be modified to be a non-ALO.
- Auction and cross orders cannot be marked ALO.

Table 24: ALO Order

Tag	Field name	Req	Comments
18	ExecInst	Y	'1'=Not held (ALO, re-price [with '6']) '6'=Participate don't initiate (ALO, cancel)
40	OrdType	Y	2=Limit
59	TimeInForce	N	0=Day (Default)

4.6.7 Stopped Cross Orders

A stopped cross is a guarantee by the EAM that at the time the cross order was agreed to, the requested (stopped) price was at or within the NBBO.

Stopped crosses are allowed for regular Facilitation and Solicitation auctions (see **Section 4.7, Auction Orders**, on page 32), and regular Customer-to-Customer (CCC) orders (see **Section 4.8, Cross Orders**, on page 39). Multi-leg stopped crosses are not allowed.

A stopped cross is indicated by setting *PriceProtectionScope* (1092) = 1 (Local) and populating *EffectiveTime* (168):

Table 25: Stopped Cross Order

Tag	Field name	Req	Comments
168	EffectiveTime	Y	UTC Timestamp in either of the following formats: YYYYMMDD-HH:MM:SS (whole seconds) YYYYMMDD-HH:MM:SS.sss (milliseconds)
1092	PriceProtectionScope	Y	1=Local

4.6.8 No Trade Through (NTT)

Complex orders are generally allowed to trade without regard for the away market prices of the individual legs. "No trade through" (NTT), allows a member to indicate on the complex order that it should not trade through away market leg prices.

NTT orders may be complex or stock-complex, limit or market orders, and may be for any time validity and client category. NTT orders may be modified, including changing NTT to non-NTT, and *vice versa*.

An order marked NTT that does not trade rests on the book (unless it is an IOC or FOK order), updating the IBBO as appropriate.

The *PriceProtectionScope* (1092) field, on both the **New Order Multileg** and **Multileg Cancel Replace Request** messages, is used to indicate if the order is allowed to trade through the away markets. The default value is '1' (Local) — the order is allowed to trade through. If set to '2' (National), the order is not allowed to trade through.

Table 26: No Trade Through (NTT) Order

Tag	Field name	Req	Comments
1092	PriceProtectionScope	N	1=Local (Default). Allowed to trade through away markets. 2=National. Do not trade through (NTT).

NOTE: A firm's FIX interface can be configured to indicate NTT on all complex orders by default. If so configured, the instruction can be overridden on an order-by-order basis by setting *PriceProtectionScope* (1092) equal to 1 (Local).

4.7 Auction Orders

An auction is a process whereby an order is exposed to the market for a small amount of time, called the exposure period. During the exposure period, other market participants can respond to the auction to provide liquidity or price improvement to the order being exposed. At the end of the exposure period, the order being exposed is executed against any responses and against the order book. There are many different types of auctions, each with different rules.

NOTE: IORS does *not* support responding to auctions. Auction responses can only be made through the DTI interface.

Types of auctions include:

- One-sided Auctions
  - Block Auctions
  - Complex Exposure Auctions
  - Flash Auctions
- Two-sided Auctions
  - Facilitation Auctions
  - Price Improvement (PIM) Auctions
  - Solicitation Auctions

Multiple auctions of any type can occur simultaneously for the same instrument, but only one PIM auction for an instrument can occur at a time. In other words, two facilitation auctions for the same instrument can occur at the same time, or a facilitation auction and a PIM auction for the same instrument, but two PIM auctions for the same instrument cannot occur at the same time.

The following table details the exposure times for the various auctions.

Table 27: Auction Exposure Times

Auction Type	Exposure Time
Block Order	500 milliseconds
Exposure Order	1 second
Facilitation	500 milliseconds
Flash Order	150 milliseconds
PIM	500 milliseconds
Solicitation	500 milliseconds

4.7.1   One-Sided Auction Orders

One-sided auctions are auctions where the submitting firm is seeking liquidity or price improvement from the marketplace.

There are three one-sided auction order types:

- Block
- Complex Exposure
- Flash

Block and Complex Exposure auctions are initiated by the member sending an order message with the appropriate instructions.

Flash auctions are automatic auctions, initiated by the system because of existing market conditions. Members cannot self-initiate Flash auctions; however, some orders may be excluded from the Flash auction.

4.7.1.1　Block Order

EAMs can use the block auction to solicit liquidity. A block order is an auctioned order with a minimum of 50 contracts. Block auctions are allowed for regular orders, only.

NOTE: A block auction for a mini option requires a minimum of 500 contracts.

Block orders are entered using the ***New Order Single*** message:

- *OrdType* (40) must be set equal to 2 (Limit)
- *OrderQty* (38) must be ≥ 50 (regular option) or ≥ 500 (mini option)
- *TimeInForce* (59) must be set equal to 4 (FOK)
- *SpecialOrdType* (9202) must be set equal to 'B' (Block Order)
- *ExposureFlag* (9203) may be used to *hide* specific order details

Table 28: Block Order

Tag	Field name	Req	Comments
38	OrderQty	Y	*n* ≥ 50 (regular option) or *n* ≥ 500 (mini option)
40	OrdType	Y	2=Limit
59	TimeInForce	Y	4=Fill Or Kill (FOK)
9202	SpecialOrdType	Y	B=Block order
9203	ExposureFlag	N	"H"=Hide All "I"=Instruction (Buy/Sell) "P"=Premium (Limit Price) "Q"=Quantity "H" is mutually exclusive with any other code.

Additional information:

- All client categories are allowed
- Block orders may be marked ISO
- Block orders may be canceled during the exposure period, terminating the auction
- Block orders cannot be modified
- Block orders cannot be preferred or directed

4.7.1.2　Exposure Order

EAMs can use the exposure auction to solicit price improvement for multi-leg (complex and complex w/stock) orders. Exposure auctions are allowed for multi-leg orders, only.

An exposure order (or Complex Auction Order [CAO]) is simply any regular multi-leg order with *SpecialOrdType* (9202) set equal to "A" (CAO):

- All client categories are allowed
- *TimeInForce* (59) must be IOC, DAY, GTC, or GTD

- *OrdType* (40) may be Market or Limit
- CAOs may be preferenced
- CAOs may be marked NTT
- CAOs may be canceled during the exposure period, terminating the auction
- CAOs may be modified during the exposure period, terminating the auction. If the modified order is also marked CAO, a new auction is started.

Table 29: Complex Exposure Order

Tag	Field name	Req	Comments
59	TimeInForce	N	0=Day (Default) 1=Good 'Til Canceled (GTC) 3=Immediate or Cancel (IOC) 6=Good 'Til Date (GTD)
9202	SpecialOrdType	Y	A=CAO

If any CAO quantity remains after the auction, the order is canceled if marked IOC; otherwise, it is posted to the order book.

NOTE: A firm's FIX interface can be configured to default all multi-leg orders as CAO, as appropriate. If so configured, a firm can indicate that an order should *not* be exposed by setting *SpecialOrdType* (9202) equal to "N" (non-CAO).

4.7.1.3   Flash

A regular (not multi-leg), marketable limit or market order, which is not an IOC or FOK, and which would execute through the ABBO, is automatically exposed by the trading system in a Flash auction in an attempt to get a better price for the order.

If any quantity remains at the end of the auction:

- a customer order is locked to the linkage handler for processing
- a non-customer order is canceled

An EAM may indicate, on non-customer orders only, that the order *should not* be exposed in a Flash auction (Do Not Flash [DNF]). In which case, the order, rather than being flashed, will be canceled.

Customer and professional customer orders **cannot be precluded** from the Flash auction.

DNF is indicated by setting *AuctionInst* (8601) equal to 1 (Do Not Flash):

Table 30: DNF Order

Tag	Field Name	Req	Comments
204	CustomerOrFirm	Y	1=Proprietary - Firm 2=Broker/Dealer - Firm 4=ISE Market Maker 5=Far Market Maker
8601	AuctionInst	Y	1=Do not start auction, do not flash (DNF)

4.7.2 Two-Sided Auction Orders

Two-sided auctions are auctions where the submitting member supplies its response and is seeking to cross the order.

There are three two-sided auction order types:

- Facilitation
- Price Improvement Mechanism (PIM)
- Solicitation

Two-sided auctions are available for both regular and complex orders and are initiated by sending a crossing order message with the appropriate instructions.

Please see **Appendix D: Table 59: Crossing Order Client Categories**, on page 92, for the allowed client categories (*CustomerOrFirm* [204]) for each auction.

NOTE: Two-sided complex auction orders can be entered with up to *eight* options legs plus a stock leg.

4.7.2.1 Facilitation Order

An EAM can use the facilitation auction to enter block-size — 50 contracts for regular options, 500 contracts for mini options — agency orders and trade against those orders as principal. The EAM that enters the order must be willing to execute the entire size of the order, although depending on responses received, the EAM could end up with all, some, or none of the order.

A facilitation order is entered using the **New Order Cross** or **New Order Cross — Multileg** message, as appropriate:

- **Either** *CrossType* (549) must be set equal to 2
  or *SpecialOrdType* (9202) must be set equal to "F" (fields are mutually exclusive)
- *OrderQty* (38) must be ≥ 50 (regular option) or ≥ 500 (mini option)
- Price must be within the NBBO, unless "stopped" (regular facilitation order, only)

Table 31: Facilitation Order

Tag	Field Name	Req	Comments
38	OrderQty	Y	*n* ≥ 50 (regular option) or *n* ≥ 500 (mini option)

Tag	Field Name	Req	Comments
549	CrossType	N	2=Facilitation Order Either CrossType (549) or SpecialOrdType (9202) must be set.
9202	SpecialOrdType	N	F=Facilitation Order Either CrossType (549) or SpecialOrdType (9202) must be set.

Additional information:

- Facilitation orders cannot be modified
- Facilitation orders may be canceled during the exposure period, terminating the auction
- Facilitation orders may be marked ISO (regular facilitation orders, only)
- *BrokerPct* (9204) may be used to change the default allocation. Valid values are 0 ≤ *pct* ≤ 40.
- *StepUpPrice* (9044) may be used to improve (hidden) the crossing price

NOTE: Legacy support for facilitation orders using the **New Order Single** and **New Order Multileg** messages is deprecated**.**

4.7.2.2   Price Improvement Mechanism (PIM) Order

The PIM is used to solicit price improvement for a customer order of any size, with the EAM willing to trade against the customer order as principal. The PIM must be priced at least one cent better than the IBBO and at least match the NBBO. The EAM that enters the order must be willing to execute the entire size of the order, although depending on responses received, the EAM could end up with all, some, or none of the order.

A PIM order is entered using the **New Order Cross** or **New Order Cross — Multileg** message, as appropriate:

- **Either** *CrossType* (549) must be set equal to 4
  or *SpecialOrdType* (9202) must be set equal to "P" (fields are mutually exclusive)
- Price must be at the NBBO *and* within the IBBO

Table 32: PIM Order

Tag	Field Name	Req	Comments
549	CrossType	N	4=Price Improvement Order Either CrossType (549) or SpecialOrdType (9202) must be set.
9202	SpecialOrdType	N	P=Price Improvement Order Either CrossType (549) or SpecialOrdType (9202) must be set.

Additional information:

- PIM orders cannot be canceled or modified

- *BrokerPct* (9204) may be used to change the default allocation. Valid values are 0 ≤ *pct* ≤ 40.
- *StepUpPrice* (9044) may be used to improve (hidden) the crossing price

4.7.2.3   Solicitation Order

A Solicitation auction is an auction mechanism by which an EAM can execute orders of at least 500 contracts — 5,000 contracts for mini options — by soliciting contra-orders. The EAM that enters the order must be willing to execute the entire size of the order; depending on responses received, the EAM could end up with all, some, or none of the order.

A PIM order is entered using the **New Order Cross** or **New Order Cross — Multileg** message, as appropriate:

- **Either** *CrossType* (549) must be set equal to 1
  or *SpecialOrdType* (9202) must be set equal to "S" (fields are mutually exclusive)
- *OrderQty* (38) must be ≥ 500 (regular option) or ≥ 5,000 (mini option)
- Price must be within the NBBO, unless "stopped" (regular solicitation order, only)

Table 33: Solicitation Order

Tag	Field Name	Req	Comments
38	OrderQty	Y	*n* ≥ 500 (regular option) or *n* ≥ 5,000 (mini option)
549	CrossType	N	1=Solicitation Order Either CrossType (549) or SpecialOrdType (9202) must be set.
9202	SpecialOrdType	N	S=Solicitation Order Either CrossType (549) or SpecialOrdType (9202) must be set.

Additional information:

- Solicitation orders cannot be modified
- Solicitation orders may be canceled during the exposure period, terminating the auction
- Solicitation orders may be marked ISO (regular solicitation orders, only)

NOTE: If *CrossType* (549) = 1 and client category on *both* sides is equal to "Customer," the order will be treated as a Customer-To-Customer cross (CCC) order. It will *not* be exposed in an auction.

4.7.2.4   Auction Order Step-Up

An optional, hidden, step-up price may be entered on the crossing order, indicating that the EAM is willing to match, up to the step-up price, any responses that improve on the published crossing price. The step-up price can also indicate a market price, which auto-matches all improving responses.

A step-up price is entered by setting *StepUpPrice* (9044) <u>better</u> than *Price* (44). For example, if the originating side is buying at $1.00, set *StepUpPrice* (9044) < $1.00 (e.g. $0.95). If the originating side is selling at $1.00, set *StepUpPrice* (9044) > $1.00 (e.g. $1.05).

For a multi-leg cross, the step-up price may be positive, negative, or zero, but is always <u>less than</u> Price (44).

To indicate "market price," set the step-up price equal to 999.

Table 34: Auction Step-up Price

Tag	Field Name	Req	Comments
9044	StepUpPrice	N	p better than Price (44) **or** 999="market price"

4.8   Cross Orders

Cross orders are used to cross and print two orders with each other. Cross orders are *not* exposed in an auction. Cross orders are sent using the **New Order Cross** or **New Order Cross — Multileg** message, as appropriate, and execute immediately upon entry — they cannot be modified or canceled.

NOTE: Complex cross orders can be entered with up to *eight* options legs plus a stock leg.

4.8.1   Customer-To-Customer Cross (CCC)

A CCC order is used to cross two customer orders of any size:

- **Either** *CrossType* (549) must be set equal to 1
  or *SpecialOrdType* (9202) must be set equal to "C" (fields are mutually exclusive)
- *CustomerOrFirm* (204) on *both* sides must be set equal to 0 (zero — Customer)
- Price must be within the NBBO, unless "stopped" (regular CCC, only)

Table 35: Customer-To-Customer Cross Order

Tag	Field Name		Req	Comments
549	CrossType		N	1=Customer Match (CCC) Either CrossType (549) or SpecialOrdType (9202) must be set.
9202	SpecialOrdType		N	C=Customer Match (CCC) Either CrossType (549) or SpecialOrdType (9202) must be set.
Side 1 (Originating side)				
→	204	CustomerOrFirm	Y	0=Customer
Side 2 (Counterparty side)				
→	204	CustomerOrFirm	Y	0=Customer

4.8.2   Qualified Contingent Cross (QCC)

A QCC order (also called a "tied to stock" order) is used to cross one or more options legs with the EAM executing the stock component separately, away from the ISE. QCCs must be for a minimum

of 1,000 contracts for regular options and 10,000 contracts for mini options, and must be priced at or within the NBBO. QCCs cannot be "stopped."

If only a single option is being crossed, use the **New Order Cross** message. If two or more options are being crossed, use the **New Order Cross — Multileg**:

- *SpecialOrdType* (9202) must be set equal to "Q" — do not use the *CrossType* (549) field
- Price must be within the NBBO
- *OrderQty* (38) must be ≥ 1,000 (regular options) or ≥ 10,000 (mini options)
- *TimeInForce* (59) must be IOC
- A multi-leg cross cannot contain a stock leg

Please see **Appendix D: Table 59: Crossing Order Client Categories**, on page 92, for the allowed client categories (*CustomerOrFirm* [204]).

Optional fields, as described in the following table, may be used to specify the delta, quantity, and price of a stock trade associated with the QCC order. These fields are for informational purposes, only, and are not passed-through to the core trading system.

Table 36: Qualified Contingent Cross Order

Tag	Field Name	Req	Comments
38	OrderQty	Y	$n \geq 1,000$ (regular option) or $n \geq 10,000$ (mini option)
59	TimeInForce	Y	3=IOC
810	UnderlyingPx	N	Traded price of the stock trade associated with the QCC order.
879	UnderlyingQty	N	Traded quantity of the stock trade associated with the QCC order.
9202	SpecialOrdType	Y	Q=Qualified Contingent Cross
9811	PriceDelta	N	Price delta of the stock trade associated with the QCC order.

4.9   Cross Order Execution Reports

Execution reports for regular two-sided auction and crossing orders are sent per cross side, identified using *CrossID* (548), and the side *ClOrdID* (11).

Execution reports for multi-leg two-sided auction and crossing orders are sent per leg per cross side, identified using *CrossID* (548), side *ClOrdID* (11), and *LegRefID* (654).

Cardinality is not guaranteed on execution reports. In other words, execution reports for the second leg or side may precede execution reports for the first leg or side.

4.10   Post-Trade Allocation

The **Allocation** message is used to adjust — or alter — certain trade information, including clearing information and free text. A single trade can also be split among multiple, separate clearing accounts, but the sum total allocations must equal the original trade quantity.

A trade can only be altered once. In addition, a trade can only be split a maximum of ten times. Only the current day's trades can be adjusted. If additional adjustments beyond these constraints are required, please contact ISE Market Operations.

NOTE: Members cannot bust trades, or adjust trade price or quantity; only ISE Market Operations can perform those functions.

The trade to be altered is identified by the order *ClOrdID* (11) and the trade *ExecID* (17). Only one trade can be altered at a time, multiple trades for an order cannot be altered using a single Allocation message. The following trade data are allowed to change:

- *Account* (1) — Add or change free text
- *Text* (58) — Add or change free text
- *ExecBroker* (76) — Add or change default clearing or give-up
- *OpenClose* (77)
- *CustomerOrFirm* (204) — *Cannot* change Customer to Firm
- *ClearingFirm* (439) — Add or change CMTA
- *ClearingAccount* (440) — Add or change sub-account
- *BranchSeqNbr* (9861) — Add or change free text

A single **Allocation Ack** message is sent in response to the **Allocation** message, indicating that the **Allocation** is either accepted or rejected. If accepted, an execution report canceling the original trade is sent, followed by a new execution report (or reports) reporting the altered data.

If the **Allocation** is rejected, the Ack contains the reason for the reject.

The **Allocation** message is described in **Section 5.14, Allocation**, on page 63.

The **Allocation Ack** message is described in **Section 5.15, Allocation Acknowledgement**, on page 65.

5. IORS FIX Message Specifications

This section describes each of the FIX application messages supported by ISE. Attributes common to all messages are described, as well as the standard FIX header and trailer used by ISE.

Tables defining the messages are sorted numerically by tag, except as required by the protocol (e.g., Standard Header), or as required to indicate anchor tags in repeating groups.

Exceptions to the 4.2 protocol, including messages, fields, and values defined in later FIX versions (4.3, 4.4, etc.), will be identified as **NON-STANDARD** in the descriptions, below.

NOTE: FIX application messages, fields, and field values that are not explicitly described or enumerated in this document, are not supported by the ISE.

5.1 Common Order Attributes

This section describes various attributes that are common to most, if not all messages.

5.1.1 *HandlInst* (21) Field

The *HandlInst* (21) field is required by the 4.2 protocol, but is not used by the ISE. The field *must* be present, but any valid value is allowed.

5.1.2 *SecurityExchange* (207) Field

The *SecurityExchange* (207) field is **required** on all FIX application level messages.

5.1.3 Default Field Values

Field values that are described as "(default)" indicate that the field need not be included in the message if the default value is used. The field must be included if a non-default value is used. For example, if *TimeInForce* (59) is not provided on an order message, the order will be entered with a default time in force of "Day."

5.1.4 String Fields

Unless otherwise specified, the *maximum* length for any string field is 20 characters. In addition, depending on usage and context, the maximum length may be less than 20 characters. Legacy support for more than 20 characters on some fields is deprecated (and is noted).

5.2 Standard Header

The standard FIX header precedes each message. The header identifies the:

- Message type
- Length
- Destination
- Sequence number
- Point and time of origin

The following table specifies the standard header required by ISE on inbound messages:

Table 37: ISE Standard FIX Header

Tag	Field Name	Required	Description
8	BeginString	Y	"FIX 4.2" Must be the first field in the message.
9	BodyLength	Y	Must be the second field in the message.
35	MsgType	Y	Must be the third field in the message. Refer to each message section, below, for the MsgType value.
34	MsgSeqNum	Y	
43	PossDupFlag	N	This field is required for resend messages.
49	SenderCompID	Y	As assigned by ISE (member → ISE). "ISE" (ISE → member).
50	SenderSubID	N	
52	SendingTime	Y	
56	TargetCompID	Y	"ISE" (member → ISE). As assigned by ISE (ISE → member).
57	TargetSubID	N	
122	OrigSendingTime	N	This field is required for resend messages. If these data are not available, set the field to the same value as SendingTime.

5.2.1 Using the *SenderSubId* (50) field to route orders

It is possible to route orders to the ISE on behalf of multiple members over a single FIX connection using *SenderSubID* (50). This feature is useful for service bureaus that are not ISE members, but can route orders on behalf of ISE members.

For example:

- Service bureau sets *SenderSubID* (50) to "ABCD" to send orders as member ABCD, which are cleared by Firm 0123.
- Service bureau sets *SenderSubID* (50) to "WXYZ" to send orders as member WXYZ, which are cleared by Firm 0456.

5.3 Standard Trailer

The standard FIX trailer terminates each message. The following table specifies the standard header required by ISE on inbound messages:

Table 38: ISE Standard FIX Trailer

Tag	Field Name	Required	Description
10	CheckSum	Y	Three-digit character. Must be the last field in the message.

5.4 New Order Single

New Order Single is used to send a regular or Block order. The following tags are supported on the *New Order Single* request message:

Table 39: New Order Single Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = D
1	Account	N	Maximum 10 characters. Additional information about the order. OCC pass-through field.
11	ClOrdID	Y	Maximum 20 characters. (Support for up to 37 characters is **DEPRECATED**.)
18	ExecInst	N	'1'=Not held (ALO, re-price [with '6']) '6'=Participate don't initiate (ALO, cancel) 'G'=All Or None (AON) 'H'=Reinstate on System Failure (Persist)* 'Q'=Cancel on System Failure (Do not persist)** 'f'=Intermarket Sweep Order (ISO)† 'h'=Do Not Route order (DNR)† * **NON-STANDARD** value (FIX ver. 4.3) ** **NON-STANDARD** value (FIX ver. 4.4) † **NON-STANDARD** value (FIX ver. 5.0)
21	HandlInst	Y	Required by FIX protocol, but ignored by ISE.
38	OrderQty	Y	
40	OrdType	Y	1=Market 2=Limit 3=Stop 4=Stop Limit 7=Limit or Better (**DEPRECATED** — treated as **Limit**)
44	Price	N	Required if OrdType = 2, 4, or 7
54	Side	Y	1=Buy 2=Sell
55	Symbol	Y	OSI symbol for a series.
58	Text	N	Additional information about the order. OCC pass-through field (first 15 characters).
59	TimeInForce	N	0=Day (Default) 1=Good 'Til Canceled (GTC) 2=Opening Orders (OPG) 3=Immediate Or Cancel (IOC) 4=Fill Or Kill (FOK) 6=Good 'Til Date (GTD)
60	TransactTime	Y	

Tag	Field name	Req	Comments
76	ExecBroker	N	1 ≤ *n* ≤ 999 Give-up
77	OpenClose	Y	O=Open C=Close For FARMM orders, this value must be **Open**.
99	StopPx	N	Required if OrdType = 3 or 4
110	MinQty	N	Minimum number of contracts desired for execution (MEQ)
111	MaxFloor	N	Display Quantity Required for Reserve Orders
167	Security Type	Y	OPT
200	MaturityMonthYear	Y	
201	PutOrCall	Y	0=Put 1=Call
202	StrikePrice	Y	
204	CustomerOrFirm	Y	0=Customer 1=Proprietary — Firm 2=Broker/Dealer — Firm* 3=Broker/Dealer — Customer* 4=ISE Market Maker* 5=Far Market Maker* 7=Proprietary — Customer* 8=Customer Professional* * **NON-STANDARD** value (ISE)
205	MaturityDay	Y	1 ≤ *n* ≤ 31
207	SecurityExchange	Y	XISX=ISE Exchange GMNI=ISE Gemini Exchange
432	ExpireDate	N	Required if TimeInForce = 6 (GTD)
439	ClearingFirm	N	1 ≤ *n* ≤ 999 CMTA
440	ClearingAccount	N	OCC sub-account. Required for FARMM orders.
1083	DisplayWhen	N	1=Immediate 2=Exhaust Required for Reserve Orders **NON-STANDARD** field (FIX ver. 4.4)
7901	ExecutingParticipantID	N	Directed or Preferred MM **NON-STANDARD** field (ISE)
8020	DisplayRange	N	Random Refresh Quantity Optional for Reserve Orders **NON-STANDARD** field (ISE)
8601	AuctionInst	N	0=Start auction (default) 1=Do not start auction (do not flash — DNF) **NON-STANDARD** field (ISE)

Tag	Field name	Req	Comments
9044	StepUpPrice	N	**DEPRECATED** Specifies the step-up price. Facilitation orders only. **NON-STANDARD** field (ISE)
9077	CounterPartyOpenClose	Y	**DEPRECATED** O=Open C=Close Facilitation orders only. **NON-STANDARD** field (ISE)
9202	SpecialOrdType	N	B=Block order F=Facilitation Order (**DEPRECATED**) **NON-STANDARD** field (ISE)
9203	ExposureFlag	N	Attributable orders: "C"=Customer ID "E"=Expose All "G"=Give-up "M"=CMTA Block orders: (including the above) "H"=Hide All "I"=Instruction (Buy/Sell) "P"=Premium (Limit Price) "Q"=Quantity "E" and "H" are each mutually exclusive with any other code. **NON-STANDARD** field (ISE)
9204	BrokerPct	N	**DEPRECATED** $0 \leq n \leq 40$ (default = 40) Facilitation orders only **NON-STANDARD** field (ISE)
9861	BranchSeqNbr	N	Additional information about the order. OCC pass-through field **NON-STANDARD** field (ISE)
<Standard Trailer>		Y	

5.5 Order Cancel Request

The *Order Cancel Request* message is used to cancel a regular or multi-leg order. The following tags are supported on the *Order Cancel Request* message:

Table 40: Order Cancel Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = F

Tag	Field name	Req	Comments
11	ClOrdID	Y	
38	OrderQty	Y	Number of known open contracts.
41	OrigClOrdID	Y	ClOrdID of the order to be canceled.
54	Side	N	Must match the original order. Req'd for single leg order
55	Symbol	N	Must match the original order. Req'd for single leg order.
60	TransactTime	Y	
167	SecurityType	Y	Must match the original order — **OPT** or **MLEG**
200	MaturityMonthYear	N	Must match the original order. Req'd for single leg order.
201	PutOrCall	N	Must match the original order. Req'd for single leg order.
202	StrikePrice	N	Must match the original order. Req'd for single leg order.
205	MaturityDay	N	Must match the original order. Req'd for single leg order.
207	SecurityExchange	Y	Must match the original order.
Component block <InstrmtLegGrp>		N	Must match the original order. Req'd for multi-leg order. Please see **Table 46: Leg Component Block <InstrmtLegGrp>**, on page 54.
<Standard Trailer>		Y	

5.6   Order Cancel Replace Request

The *Order Cancel Replace Request* message is used to modify a regular order. The following tags are supported on the *Order Cancel Replace Request* message:

Table 41: Order Cancel Replace Request Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = G
1	Account	N	This value must be specified if it is to be carried over.
11	ClOrdID	Y	
18	ExecInst	N	This value must be specified if it is to be carried over.
21	HandlInst	Y	Ignored by ISE.
38	OrderQty	Y	
40	OrdType	Y	1=Market 2=Limit 3=Stop 4=Stop Limit 7=Limit or Better (**DEPRECATED** — treated as **Limit**)
41	OrigClOrdID	Y	ClOrdID of the order to be modified.
44	Price	N	Required if OrdType = 2, 4, or 7
54	Side	Y	Must match the original order.
55	Symbol	Y	Must match the original order.
58	Text	N	This value must be specified if it is to be carried over.
59	TimeInForce	N	Absence of this field indicates DAY order.

Tag	Field name	Req	Comments
60	TransactTime	Y	
76	ExecBroker	N	This value must be specified if it is to be carried over.
77	OpenClose	Y	
99	StopPx	N	Required if OrdType = 3 or 4
110	MinQty	N	Specifies minimum number of contracts desired for execution (MEQ)
111	MaxFloor	N	Display Quantity – Reserve Order
167	SecurityType	Y	Must match the original order.
200	MaturityMonthYear	Y	Must match the original order.
201	PutOrCall	Y	Must match the original order.
202	StrikePrice	Y	Must match the original order.
204	CustomerOrFirm	Y	Must match the original order.
205	MaturityDay	Y	Must match the original order.
207	SecurityExchange	Y	Must match the original order.
432	ExpireDate	N	Required if TimeInForce = 6 (GTD)
439	ClearingFirm	N	This value must be specified if it is to be carried over.
440	ClearingAccount	N	This value must be specified if it is to be carried over.
1083	DisplayWhen	N	Instruction to determine when the Displayed Quantity should be refreshed. **NON-STANDARD** field (FIX ver. 4.4)
1092	PriceProtectionScope	N	Must match the original order. **NON-STANDARD** field (FIX ver. 4.4)
8020	DisplayRange	N	Random Refresh Quantity for Reserve Order. **NON-STANDARD** field (ISE)
8601	AuctionInst	N	This value must be specified if it is to be carried over. 0=Start auction (default) 1=Do not start auction (do not flash — DNF) **NON-STANDARD** field (ISE)
9861	BranchSeqNbr	N	This value must be specified if it is to be carried over. OCC pass-through field **NON-STANDARD** field (ISE)
<Standard Trailer>		Y	

5.7   Order Cancel Reject

An Order Cancel Reject message is returned by the exchange in the event of an invalid cancel or modify request. The following tags are supported on the *Order Cancel Reject* message:

Table 42: Order Cancel Reject Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = 9

Tag	Field name	Req	Comments
11	ClOrdID	Y	
39	OrdStatus	Y	Status of order that was to have been canceled or modified.
41	OrigClOrdID	Y	ClOrdID of the order that was to have been canceled or modified.
58	Text	Y	Reject reason
102	CxlRejReason	N	
207	SecurityExchange	Y	
434	CxlRejResponseTo	Y	1=Order Cancel Request 2=Order Cancel Replace Request
<Standard Trailer>		Y	

5.8   Order Status Request

The Order Status message is used to request the status of a regular or multi-leg order. A status request can only be made for open orders. A status request for a "completed" order (filled, canceled, or rejected) will result in a reject ("order not found"). The following tags are supported on the *Order Status Request* message:

Table 43: Order Status Request Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = H
11	ClOrdID	Y	The ClOrdID of the order being statused.
54	Side	N	Must match the original order. Req'd for single leg order
55	Symbol	N	Must match the original order. Req'd for single leg order
167	SecurityType	Y	Must match the original order — **OPT** or **MLEG**
200	MaturityMonthYear	N	Must match the original order. Req'd for single leg order
201	PutOrCall	N	Must match the original order. Req'd for single leg order
202	StrikePrice	N	Must match the original order. Req'd for single leg order
205	MaturityDay	N	Must match the original order. Req'd for single leg order
207	SecurityExchange	Y	Must match the original order.
Component block <InstrmtLegGrp>		N	Must match the original order. Req'd for multi-leg order. Please see **Table 46: Leg Component Block <InstrmtLegGrp>**, on page 54.
<Standard Trailer>		Y	

5.9   New Order Cross

NOTE: This message is **NON-STANDARD** in FIX ver. 4.2. This message is defined in FIX ver. 4.3.

A *New Order Cross* message is used to submit two-sided regular auctions (PIM, Facilitation, or Solicitation), or CCC or single-leg QCC orders

The following tags are supported on the *New Order Cross* message:

Table 44: New Order Cross Message Format

Tag	Field Name		Req	Comments
<Standard Header>			Y	MsgType = s (lowercase S)
18	ExecInst		N	'f'=Intermarket Sweep Order (ISO) ExecInst (18) and PriceProtectionScope (1092) are mutually exclusive.
38	OrderQty		Y	
40	OrdType		Y	2=Limit
44	Price		Y	
55	Symbol		Y	
59	TimeInForce		Y	3=IOC 4=FOK
60	TransactTime		Y	
167	SecurityType		Y	
168	EffectiveTime		N	Stopped Cross Order. Defined as a UTC Timestamp in either of the following formats: YYYYMMDD-HH:MM:SS (whole seconds) YYYYMMDD-HH:MM:SS.sss (milliseconds)
200	MaturityMonthYear		Y	
201	PutOrCall		Y	
202	StrikePrice		Y	
205	MaturityDay		Y	
207	SecurityExchange		Y	XISX=ISE Exchange GMNI=ISE Gemini Exchange
548	CrossID		Y	Maximum 20 characters. (Support for up to 37 characters is **DEPRECATED**.)
549	CrossType		N	1=Solicitation or CCC Order 2=Facilitation 4=PIM CrossType (549) and SpecialOrdType (9202) are mutually exclusive.
552	NoSides		Y	2 The 1st side is considered the "Originating" side The 2nd side is considered the "Counter-Party" side
→	54	Side	Y	**ANCHOR**. 1=Buy 2=Sell The Counter-Party side must be the opposite of the Originating side.
→	1	Account	N	Maximum 10 characters. Additional information about the order. OCC pass-through field

Tag		Field Name	Req	Comments
→	11	ClOrdID	Y	Unique per side. Maximum 20 characters. (Support for up to 37 characters is **DEPRECATED**.)
→	58	Text	N	Additional information about the order. OCC pass-through field
→	76	ExecBroker	N	1 ≤ *n* ≤ 999 Give-up
→	77	PositionEffect	Y	O=Open C=Close For FARMM orders, this value must be O (open).
→	204	CustomerOrFirm	Y	Please see **Appendix D: Table 59: Crossing Order Client Categories**, on page 92, for the allowed client categories.
→	439	ClearingFirm	N	1 ≤ *n* ≤ 999 CMTA
→	440	ClearingAccount	N	OCC sub-account. Required on FARMM orders.
→	9861	BranchSeqNbr	N	Additional information about the order. OCC pass-through field **NON-STANDARD** field (ISE)
1092	PriceProtectionScope		N	1=Local (default). Stopped cross — allowed to trade through away markets ExecInst (18) and PriceProtectionScope (1092) are mutually exclusive. **NON-STANDARD** field (FIX ver. 4.4)
9044	StepUpPrice		N	Better than Price or 999="market price" Facilitation and PIM orders only. **NON-STANDARD** field (ISE)
9202	SpecialOrdType		N	C=Customer Match (CCC) F=Facilitation P=PIM S=Solicitation Q=Qualified Contingent Cross (QCC) CrossType (549) and SpecialOrdType (9202) are mutually exclusive. **NON-STANDARD** field (ISE)
9203	ExposureFlag		N	"C"=Customer ID "E"=Expose All "G"=Give-Up "M"=CMTA "E" is mutually exclusive with any other code. **NON-STANDARD** field (ISE)

Tag	Field Name	Req	Comments
9204	BrokerPct	N	0 ≤ n ≤ 40 (default value = 40) Facilitation orders only **NON-STANDARD** field (ISE)
9861	BranchSeqNbr	N	**NON-STANDARD** field (ISE)
<Standard Trailer>		Y	

5.10   New Order Multileg

NOTE: This message is **NON-STANDARD** in FIX ver. 4.2. This message is as defined in FIX ver. 4.3.

The **New Order Multileg** message is used to send new multi-leg orders. Orders may contain two to five legs.

The following tags are supported on the **New Order Multileg** message:

Table 45: New Order Multileg Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = AB
1	Account	N	Maximum 10 characters. Additional information about the order. OCC pass-through field
11	ClOrdID	Y	
18	ExecInst	N	'G'=All Or None (AON).
21	HandlInst	Y	
38	OrderQty	Y	Number of times the spread is available.
40	OrdType	Y	1=Market 2=Limit 7=Limit or Better (**DEPRECATED** — treated as **Limit**)
44	Price	N	Required if OrdType ≠ 1 Price > 0: "Debit" — willing to pay Price < 0: "Credit" — wants cash back Price = 0: "Even" order
58	Text	N	Additional information about the order. OCC pass-through field
59	TimeInForce	N	0=Day (default) 1=GTC 2=OPG 3=IOC 4=FOK 6=GTD
60	TransactTime	Y	

Tag	Field name	Req	Comments
76	ExecBroker	N	1 ≤ *n* ≤ 999 Give-up
110	MinQty	N	Specifies minimum number of contracts desired for execution (MEQ)
111	MaxFloor	N	Display Quantity. Required for Reserve Order only.
167	SecurityType	Y	**MLEG**
204	CustomerOrFirm	Y	0=Customer 1=Proprietary — Firm 2=Broker/Dealer — Firm* 3=Broker/Dealer — Customer* 4=ISE Market Maker* 5=Far Market Maker* 7=Proprietary — Customer* 8=Customer Professional* * **NON-STANDARD** value (ISE)
207	SecurityExchange	Y	XISX=ISE Exchange GMNI=ISE Gemini Exchange
432	ExpireDate	N	Required if TimeInForce = 6 (GTD)
439	ClearingFirm	N	1 ≤ *n* ≤ 999 CMTA
440	ClearingAccount	N	OCC sub-account. Required for FARMM orders.
526	SecondaryClOrdId	N	**DEPRECATED** ClOrdID for counterparty order. Required if SpecialOrdType field is present and ≠ "A" or "N."
1083	DisplayWhen	N	Reserve Order. Instruction to determine when the displayed quantity should be refreshed. **NON-STANDARD** field (FIX ver. 4.4)
1092	PriceProtectionScope	N	1=Local (Default) 2=National (NTT — Consider Away Markets) **NON-STANDARD** field (FIX ver. 4.4)
7901	ExecutingParticipantID	N	Preferenced MM **NON-STANDARD** field (ISE)
8020	DisplayRange	N	Reserve Order. Random Refresh Quantity. **NON-STANDARD** field (ISE)
9044	StepUpPrice	N	**DEPRECATED** Optional step-up price for crossing order. **NON-STANDARD** field (ISE)
9076	StockLegGiveUp	N	Stock leg give-up. **NON-STANDARD** field (ISE)

Tag	Field name	Req	Comments
9202	SpecialOrdType	N	A=Combo Auction Order (CAO) (a.k.a. Exposure Auction) N=Non-CAO The following are **DEPRECATED**: C=Customer Match (CCC) F=Facilitation Order Q=Qualified Contingent Cross (QCC) S=Solicitation **NON-STANDARD** field (ISE)
9203	ExposureFlag	N	"C"=Customer ID "E"=Expose All "G"=Give-Up "M"=CMTA "E" is mutually exclusive with any other code. **NON-STANDARD** field (ISE)
9204	BrokerPct	N	**DEPRECATED** $0 \leq n \leq 40$ (default = 40) Facilitation orders only **NON-STANDARD** field (ISE)
9861	BranchSeqNbr	N	Additional information about the order. OCC pass-through field **NON-STANDARD** field (ISE)
Leg Component block <InstrmtLegGrp>		Y	Please see **Table 46: Leg Component Block <InstrmtLegGrp>**, on page 54.
<Standard Trailer>		Y	

Table 46: Leg Component Block <InstrmtLegGrp>

Tag		Field name	Req	Comments
555		NoLegs	Y	$2 \leq n \leq 5$ ($2 \leq n \leq 9$ for crossing orders)
→	654	LegRefID	Y	**ANCHOR**. Maximum 10 characters. Must be unique per leg.
→	564	LegPositionEffect	N	Required if LegCFICode = OC or OP. O=Open C=Close FARMM orders must be **Open**.
→	600	LegSymbol	Y	
→	608	LegCFICode	Y	OC=Option — Call [OPT] OP=Option — Put [OPT] ES=Equity Common Shares [CS]
→	611	LegMaturityDate	N	Required if LegCFICode = OC or OP.
→	612	LegStrikePrice	N	Required if LegCFICode = OC or OP.

Tag	Field name	Req	Comments
→	623	LegRatioQty	Y	$1 \leq n \leq 9{,}999$ This value *must* be an integer.
→	624	LegSide	Y	1=Buy 2=Sell 5=Sell Short (valid only if LegCFICode = ES) 6=Sell Short Exempt (valid only if LegCFICode = ES)
→	9564	ContraLegPositionEffect	N	Required for crossing orders, option leg, only. O=Open C=Close FARMM orders must be **Open**. **NON-STANDARD** field (ISE)
→	9624	ContraSideShortSell	N	Optional for crossing orders, stock leg, only. 5=Sell Short (valid only if LegCFICode = ES) 6=Sell Short Exempt (valid only if LegCFICode = ES) **NON-STANDARD** field (ISE)

5.11 Multileg Order Cancel Replace

NOTE: This message is **NON-STANDARD** in FIX ver. 4.2. This message is as defined in FIX ver. 4.3.

The ***Multileg Order Cancel Replace*** message is used to modify multi-leg orders.

The following tags are supported on the ***Multileg Order Cancel Replace*** message:

Table 47: Multileg Order Cancel Replace Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = AC
1	Account	N	This value must be specified if it is to be carried over.
11	ClOrdID	Y	
18	ExecInst	N	This value must be specified if it is to be carried over.
21	HandlInst	Y	
38	OrderQty	Y	
40	OrdType	Y	1=Market 2=Limit 7=Limit or Better (**DEPRECATED** — treated as **Limit**)
41	OrigClOrdID	Y	ClOrdID of the order to be modified.
44	Price	Y	The net price of the spread. Required if OrdType ≠ 1 Price > 0: "Debit" — willing to pay Price < 0: "Credit" — wants cash back Price = 0: "Even" order

Tag	Field name	Req	Comments
58	Text	N	This value must be specified if it is to be carried over.
59	TimeInForce	N	0=Day (default) 1=GTC 2=OPG 3=IOC 4=FOK 6=GTD
60	TransactTime	Y	
76	ExecBroker	N	This value must be specified if it is to be carried over.
110	MinQty	N	Minimum execution quantity (MEQ).
111	MaxFloor	N	Display Quantity. Required for Reserve Order only.
167	SecurityType	Y	**MLEG**
204	CustomerOrFirm	Y	Must match the original order.
207	SecurityExchange	Y	Must match the original order.
432	ExpireDate	N	Required if TimeInForce = 6 (GTD)
439	ClearingFirm	N	This value must be specified if it is to be carried over.
440	ClearingAccount	N	This value must be specified if it is to be carried over.
1083	DisplayWhen	N	Reserve Order. Instruction to determine when the Displayed Quantity should be refreshed. **NON-STANDARD** field (FIX ver. 4.4)
1092	PriceProtectionScope	N	This value must be specified if it is to be carried over. **NON-STANDARD** field (FIX ver. 4.4)
8020	DisplayRange	N	Reserve Order. Random Refresh Quantity. **NON-STANDARD** field (ISE)
9203	ExposureFlag	N	This value must be specified if it is to be carried over. **NON-STANDARD** field (ISE)
9861	BranchSeqNbr	N	This value must be specified if it is to be carried over. **NON-STANDARD** field (ISE)
Component block <InstrmtLegGrp>		Y	Must match the original order. Please see **Table 46: Leg Component Block <InstrmtLegGrp>**, on page 54.
<Standard Trailer>		Y	

5.12   New Order Cross — Multileg

NOTE: This message is **NON-STANDARD** in FIX ver. 4.2. This message is an ISE defined message.

The **New Order Cross — Multileg** message is used to submit two-sided multi-leg auction orders (Facilitation, Solicitation, or PIM), or multi-leg CCC or QCC orders. Multi-leg cross orders may contain two to nine legs.

The following tags are supported on the **New Order Cross — Multileg** message:

Table 48: New Order Cross – Multileg Message Format

Tag	Field Name		Req	Comments
<Standard Header>			Y	MsgType = As (uppercase A, lowercase S)
38	OrderQty		Y	Number of times the Spread is available
40	OrdType		Y	2=Limit
44	Price		Y	The net price of the spread to the customer (originating side). Price > 0: "Debit" — willing to pay Price < 0: "Credit" — wants cash back Price = 0: "Even" order
60	TransactTime		Y	
207	SecurityExchange		Y	XISX=ISE Exchange GMNI=ISE Gemini Exchange
548	Cross ID		Y	Unique identifier of entire crossing order
549	CrossType		Y	1=Solicitation *or* CCC 2=Facilitation 4 =PIM CrossType (549) and SpecialOrdType (9202) are mutually exclusive.
552	NoSides		Y	2 The 1st side is the "Originating" side The 2nd side is the "Counter-Party" side
→	11	ClOrdID	Y	**ANCHOR**. Unique per side. Maximum 20 characters. (Support for up to 37 characters is **DEPRECATED**.)
→	1	Account	N	Maximum 10 characters. Additional information about the order. OCC pass-through field.
→	58	Text	N	Additional information about the order. OCC pass-through field.
→	76	ExecBroker	N	$1 \leq n \leq 999$ Option leg Give-up

Tag		Field Name	Req	Comments
→	204	CustomerOrFirm	Y	Please see **Appendix D: Table 59: Crossing Order Client Categories**, on page 92, for the allowed client categories.
→	439	ClearingFirm	N	$1 \leq n \leq 999$ Option leg CMTA
→	440	ClearingAccount	N	Option leg OCC sub-account. Required on FARMM order.
→	9076	StockLegGiveUp	N	Stock leg give-up. **NON-STANDARD** field (ISE)
→	9861	BranchSeqNbr	N	Additional information about the order. OCC pass-through field. **NON-STANDARD** field (ISE).
9044	StepUpPrice		N	Optional step-up price. p < Price or 999="market price." **NON-STANDARD** field (ISE)
9202	SpecialOrdType		N	C=Customer Match (CCC) F=Facilitation P=PIM Q=Qualified Contingent Cross (QCC) S=Solicitation **NON-STANDARD** field (ISE) CrossType (549) and SpecialOrdType (9202) are mutually exclusive.
9203	ExposureFlag		N	"C"=Customer ID "E"=Expose All "G"=Give-Up "M"=CMTA "E" is mutually exclusive with any other code. **NON-STANDARD** field (ISE)
9204	BrokerPct		N	$0 \leq n \leq 40$ (Default = 40) Facilitation and PIM orders only.
Component block <InstrmtLegGrp>			Y	Please see **Table 46: Leg Component Block <InstrmtLegGrp>**, on page 54.
<Standard Trailer>			Y	

5.13 Execution Report

The *Execution Report* message is used to:

- confirm the receipt of an order
- confirm changes to an existing order
- confirm cancelation of an existing order
- relay order status information
- relay fill information on working orders
- reject orders
- report trade busts or other post-trade corrections

Regular orders are reported atomically.

Multi-leg orders are reported per leg, in any order. *SecurityType* (167) can be configured to report MLEG (default) for all legs, or CS and OPT (depending on the leg instrument type).

Regular crossing orders are reported per side, in any order.

Multi-leg crossing orders are reported per leg per side, in any order.

Fields that simply carry-over from order messages will be as specified on the order, and are shaded in the table below. The following tags are supported on the *Execution Report* message:

Table 49: Execution Report Message Format

Tag	Field Name	Req	Comments
<Standard Header>		Y	MsgType = 8
1	Account	N	
6	AvgPx	N	
11	ClOrdID	Y	
14	CumQty	Y	
17	ExecID	Y	
18	ExecInst	N	
19	ExecRefID	N	Present if ExecTransType = 1 (Cancel)
20	ExecTransType	Y	0=New 1=Cancel 2=Correct 3=Status
30	LastMkt	N	Market that executed the stock leg. 1=BNY ConvergEx U.S. Transaction Services 3=BNY ConvergEx Millennium ATS 4=Knight Match 5=Knight Link 6=Instinet CBX (US) 7=Deutsche Bank ATS All values **NON-STANDARD** (ISE)

Tag	Field Name	Req	Comments
31	LastPx	N	
32	LastShares	N	
37	OrderID	Y	Unique ID assigned by exchange
38	OrderQty	Y	
39	OrdStatus	Y	0=New 1=Partially Filled 2=Filled 4=Canceled 5=Replaced 6=Pending Cancel 8=Rejected E=Pending Replace
40	OrdTyp	N	
41	OrigClOrdID	N	
44	Price	N	
48	SecurityID	Y	
54	Side	Y	
55	Symbol	Y	
58	Text	N	
59	TimeInForce	N	
60	TransactTime	Y	Time of execution.
76	ExecBroker	N	
77	OpenClose	Y	
99	StopPx	N	
103	OrdRejReason	N	0=Broker / Exchange option 1=Unknown symbol 2=Exchange closed 3=Order exceeds limit 4=Too late to enter 5=Unknown Order 6=Duplicate Order (e.g. duplicate ClOrdID) 8=Stale Order 11=Unsupported order characteristic* 13=Incorrect quantity** 99=Other** * **NON-STANDARD** value (FIX ver. 4.3) ** **NON-STANDARD** value (FIX ver. 4.4)
110	MinQty	N	
111	MaxFloor	N	

Tag	Field Name	Req	Comments
150	ExecType	Y	0=New 1=Partially Filled 2=Filled 4=Canceled 5=Replace 6=Pending Cancel 8=Rejected D=Restated E=Pending Replace
151	LeavesQty	Y	0, if OrdStatus is Canceled or Rejected, otherwise (OrderQty - CumQty)
167	SecurityType	Y	CS OPT MLEG (Configurable by request)
168	EffectiveTime	N	
200	MaturityMonthYear	Y	
201	PutOrCall	Y	
202	StrikePrice	Y	
204	CustomerOrFirm	Y	
205	MaturityDay	N	
207	SecurityExchange	Y	
378	ExecRestatementReason	N	5=Partial decline of OrderQty The exchange has initiated a partial cancel.
424	DayOrderQty	N	GTC/GTD orders only: DayOrderQty is the OrderQty minus the contracts that were traded on previous days.
425	DayCumQty	N	GTC/GTD orders only: The number of contracts that have traded today.
426	DayAvgPx	N	GTC/GTD orders only: The average price of contracts that have traded today.
439	ClearingFirm	N	CMTA
440	ClearingAccount	N	OCC sub-account
442	MultiLegReportingType	N	2=Individual leg of a multi-leg security 3=Multi-leg security
548	CrossID	N	
549	CrossType	N	
654	LegRefID	Y	
797	CopyMsgIndicator	N	**NON-STANDARD** field (FIX ver. 4.4)
1092	PriceProtectionScope	N	
1506	SideTradeID	N	Carried to OCC TrdID field **NON-STANDARD** field (FIX ver. 5.0SP2 EP107)
8601	AuctionInst	N	

Tag	Field Name	Req	Comments
9176	CounterpartyExecBroker	N	Trade counter-party clearing account **NON-STANDARD** field (ISE)
9202	SpecialOrdType	N	
9205	DealSource	Y	101=Directed 104=Complex 110=Facilitation 112=PIM (Price Improvement Mechanism) 114=Solicitation order 116=Block order 126=Flash order **NON-STANDARD** field (ISE)
9404	CounterpartyCustomerOrFirm	N	Trade counter-party client category 0=Customer 1=Prop - Firm 2=B/D - Firm 3=B/D - Customer 4=ISE MM 5=FARMM 7=Prop - Customer 8=Customer - Pro **NON-STANDARD** field (ISE)
9439	CounterpartyExecBrokerClearing Firm	N	Trade counter-party CMTA **NON-STANDARD** field (ISE)

Tag	Field Name	Req	Comments
9730	LiquidityIndicator	N	X=undefined M=Maker T=Taker H=Hidden O=Opening C=Cross R=Response 8=Flashed Order 9=Flash Response 10=Routed Out 11=Trade Report 12=Combo Maker Against Combo 13=Combo Taker Against Combo 14=Combo Response Against Combo 15=Combo Hidden Against Combo 16=Combo Opening Rotation 17=Combo Cross 18=Combo Taker Against Regular 19=Regular Maker Against Combo 20=Combo Taker Against IO 21=Regular Taker Against IO (incl. PIM) 22=IO Maker Against Combo 23=IO Maker Against Regular 24=Regular Maker Against IO Participant 25=IO Participant Taker Against Regular **NON-STANDARD** field (ISE)
9861	BranchSeqNbr	N	
<Standard Trailer>		Y	

5.14   Allocation

The Allocation message is used to perform post-trade clearing changes. The following tags are supported on the *Allocation* message:

Table 50: Allocation Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = J
22	IDSource	N	8=Exchange Symbol
48	SecurityID	N	Underlying symbol of the option series
53	Shares	Y	Total quantity of original execution
54	Side	Y	1=Buy 2=Sell
55	Symbol	Y	OCC options symbol for a series.
60	TransactTime	N	

Tag	Field name		Req	Comments
70	AllocID		Y	Unique identifier for Allocation message.
71	AllocTransType		Y	0=New
73	NoOrders		Y	1
→	11	ClOrdID	Y	Identifier of the original order.
75	TradeDate		N	Current trading day, only.
78	NoAllocs		Y	$1 \le n \le 10$
→	80	AllocShares	Y	**ANCHOR**. Quantity for this allocation. Sum of all AllocShares must be equal to Shares
→	1	Account	N	Maximum 10 characters. Additional information about the order. OCC pass-through field
→	58	Text	N	Additional information about the order. OCC pass-through field
→	76	ExecBroker	N	$1 \le n \le 999$ Give-up
→	77	OpenClose	N	O=Open C=Close
→	204	CustomerOrFirm	Y	0=Customer 1=Proprietary — Firm 2=Broker/Dealer — Firm* 3=Broker/Dealer — Customer* 4=ISE Market Maker* 5=Far Market Maker* 7=Proprietary — Customer* 8=Customer Professional* * **NON-STANDARD** value (ISE)
→	439	ClearingFirm	N	$1 \le n \le 999$ CMTA
→	440	ClearingAccount	N	OCC sub-account.
→	9861	BranchSeqNbr	N	Additional information about the order. OCC pass-through field **NON-STANDARD** field (ISE)
124	NoExecs		Y	1
→	17	ExecID	Y	Identifier of the original execution.
167	SecurityType		N	OPT (default) MLEG
200	MaturityMonthYear		Y	
201	PutOrCall		Y	0=Put 1=Call
202	StrikePrice		Y	
205	MaturityDay		Y	

Tag	Field name	Req	Comments
207	SecurityExchange	Y	XISX=ISE Exchange GMNI=ISE Gemini Exchange
<Standard Trailer>		Y	

5.15   Allocation Acknowledgement

The Allocation Acknowledgement message is returned by the exchange and acknowledges or rejects the Allocation request. The following tags are supported on the *Allocation ACK* message:

Table 51: Allocation ACK Message Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = P
58	Text	N	Additional information, including an explanation for the rejected allocation.
60	TransactTime	Y	Date and time (GMT) when the Allocation ACK was generated.
70	AllocID	Y	Identifier of the Allocation message.
75	TradeDate	N	Date when the Allocation ACK was generated.
87	AllocStatus	Y	0=Accepted (successfully processed) 1=Rejected
88	AllocRejCode	N	Present if AllocStatus = 1 (Rejected). 0=Unknown account(s) 1=Incorrect quantity 3=Unknown executing broker mnemonic 5=Unknown Order ID 7=Other
207	SecurityExchange	Y	
<Standard Trailer>		Y	

5.16   Member Kill Switch

NOTE: This message is **NON-STANDARD** in FIX ver. 4.2. This message is an ISE defined message.

The *Member Kill Switch* message is used to block another user's or BU's ability to enter new orders or alter existing orders. The transaction also causes all open orders for the specified BU/user to be deleted.

This message is *not* exchange specific. The BU/user is blocked and orders deleted regardless of the exchange. *SecurityExchange* (207) is required on the message, but the field is ignored.

The following tags are supported on the *Member Kill Switch* message:

Table 52: Member Kill Switch Request

Tag	Field name			Req	Comments
<Standard Header>				Y	MsgType = UDA
207	SecurityExchange			Y	Required on message but **IGNORED**
1770	EntitlementRequestID			Y	
1772	NoPartyEntitlements			Y	1
→	1324	ListUpdateAction		Y	**ANCHOR.** D=Delete
→	1671	NoPartyDetails		Y	1 ≤ *n* ≤ 2
→	→	1691	PartyDetailID	Y	**ANCHOR.** BU or user to be blocked, e.g. "ABC01E" or "1"
→	→	1693	PartyDetailRole	Y	59=Executing Unit 55=Session ID (user)
<Standard Trailer>				Y	

5.17 Member Kill Switch Response

NOTE: This message is **NON-STANDARD** in FIX ver. 4.2. This message is an ISE defined message.

The following tags are supported on the *Member Kill Switch Response* message:

Table 53: Member Kill Switch Response

Tag	Field name			Req	Comments
<Standard Header>				Y	MsgType = UDB
58	Text			N	Present if EntitlementRequestStatus = 2 (Reject)
207	SecurityExchange			Y	
1770	EntitlementRequestID			Y	
1772	NoPartyEntitlements			Y	1
→	1324	ListUpdateAction		Y	**ANCHOR.** D=Delete
→	1671	NoPartyDetails		Y	1 ≤ *n* ≤ 2
→	→	1691	PartyDetailID	Y	**ANCHOR.** BU or user to be blocked, e.g. "ABC01E" or "1"
→	→	1693	PartyDetailRole	Y	59=Executing Unit 55=Session ID (user)
→	1883	EntitlementStatus		Y	0=Accepted 2=Rejected
1881	EntitlementRequestResult			N	Present if EntitlementRequestStatus = 2 (Reject) 99=Other
1882	EntitlementRequestStatus			Y	0=Accept 2=Reject

Tag	Field name	Req	Comments
<Standard Trailer>		Y	

5.18   News

The News message is used by the exchange to provide real-time news and information. The following tags are supported on the **News** message:

Table 54: News Message Format

Tag	Field name		Req	Comments
<Standard Header>			Y	MsgType = B
33	NoLinesOfText		Y	Specifies the number of repeating text lines.
→	58	Text	Y	
42	OrigTime		N	Current time.
148	Headline		Y	News_from_ISE_MKT_OPS
207	SecurityExchange		Y	XISX=ISE Exchange GMNI=ISE Gemini Exchange
<Standard Trailer>			Y	

5.19   Business Message Reject

The **Business Message Reject** message is used to reject an application message that fulfills session-level rules but that cannot be rejected by other means. For example, an order message missing a required ISE-specific field. The following tags are supported on the **Business Message Reject** message:

Table 55: Business Message Reject Format

Tag	Field name	Req	Comments
<Standard Header>		Y	MsgType = j (lowercase J)
45	RefSeqNum	Y	MsgSeqNum of rejected message
58	Text	N	Textual reject reason
207	SecurityExchange	N	If present on rejected message
372	RefMsgType	Y	MsgType of rejected message
379	BusinessRejectRefID	N	ID of rejected message (for example, ClOrdID from rejected New Order Single)
380	BusinessRejectReason	Y	0=Other 3=Unsupported Message Type 99=Other* * **NON-STANDARD** value (ISE)
<Standard Trailer>		Y	

6. Drop Copy Configurations

This section describes the available drop copy configurations, and highlights messaging and data differences between the drop copy interfaces, and between drop copy and order entry interfaces.

Drop copy sessions are one-way sessions. Execution reports are sent only from the exchange to the member. Except for FIX session-level messages, drop copy sessions do not support any application messages sent by the member.

6.1 Trade-Drop Copy

Any member that wishes to receive trade notices for any trade to which they are a party, regardless of how the order was entered, can use a trade-drop copy session.

Trade-drop copy is a stateless session. That is, no state information is reported or maintained about the order that generated the trade. Only trades (executions) are reported. All trades are reported in isolation for the quantity indicated with no calculations performed for remaining quantity, cumulative quantity, or average price – even if multiple executions for the same order occur consecutively.

Same-day trade cancels and corrections are reported, but corrections to previous days' trades are not reported.

The following table details *only* the differences between a "normal" execution report and a trade-drop copy execution report. Fields not indicated below are as described in **Section 5.13, Execution Report**, on page 59:

Table 56: Trade-Drop Copy Report Message Format

Tag	Field name	Req	Comments
6	AvgPx	Y	0 (zero)
11	ClOrdID	Y	Unique order identifier. Not guaranteed to be same as original order
14	CumQty	Y	0 (zero)
17	ExecID	Y	Internal product ID(dot)OrderID(dot)internal trade ID E.g., 1766.1351771216724044507.59
20	ExecTransType	Y	0=New 1=Cancel
38	OrderQty	Y	0 (zero)
39	OrdStatus	Y	0=New
150	ExecType	Y	0=New
151	LeavesQty	Y	0 (zero)

Tag	Field name	Req	Comments
204	CustomerOrFirm	Y	0=Customer 1=Proprietary — Firm 5=Far Market Maker Additional values can be enabled by request: 2=Broker/Dealer — Firm 3=Broker/Dealer — Customer 4=ISE Market Maker 7=Proprietary — Customer 8=Customer Professional

6.2   Order-Drop Copy

An order-drop copy session provides stateful execution reports, including order acknowledgment ("new"), modifications, cancels, and trades.

The following table details *only* the differences between a "normal" execution report and an order-drop copy execution report. Fields not indicated below are as described indicated in **Section 5.13, Execution Report**, on page 59:

Table 57: Order-Drop Copy Message Format

Tag	Field name	Req	Comments
11	ClOrdID	Y	Unique order identifier. Not guaranteed to be same as original order
109	ClientID	N	Give-up value if specified on order.
797	CopyMsgIndicator	Y	"Y"

6.3   PrecISE AMR-Drop Copy

A PrecISE AMR-drop copy session provides trade notifications for orders routed to away markets from the PrecISE trading terminal. Functionally similar to the trade-drop copy, above, it provides only stateless trade (execution) notifications. Unlike trade-drop copy, AMR-drop copy does *not* report trade cancels or corrections.

The following table details *only* the differences between a "normal" execution report and an AMR-drop copy execution report. Fields not indicated below are as described in **Section 5.13, Execution Report**, on page 59:

Table 58: PrecISE AMR-Drop Copy Message Format

Tag	Field name	Req	Comments
6	AvgPx	Y	0 (zero)
11	ClOrdID	Y	Unique order identifier. Not guaranteed to be same as original order
14	CumQty	Y	0 (zero)

Tag	Field name	Req	Comments
20	ExecTransType	Y	0=New
38	OrderQty	Y	0 (zero)
39	OrdStatus	Y	0=New
150	ExecType	Y	0=New
151	LeavesQty	Y	0 (zero)
167	SecurityType	Y	OPT
1506	SideTradeID	N	**IS NOT PRESENT**

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Appendix A: Glossary

Terms used in this document are described below:

Terms	Description
American Options	American options can be exercised at any time during the option life.
AMM	Away Market Maker. An options market maker on an away exchange.
At-the-Money series (ATM)	The strike price that is closest to the market price of the underlying security.
Away Market	All US option exchanges, other than ISE.
Best Bid and Offer (BBO)	Consolidated quantity, and best price for bids and offers on the ISE market. An away BBO refers to the best bid and offer price on the away exchanges.
Bin	To manage the assignment of market makers, each symbol is assigned to a bin. There are 10 bins, each with one PMM and multiple CMMs. A market maker is required to quote for symbols in their own bin and cannot quote outside the assigned bin. The bin concept is not applicable to EAMs. EAMs can trade on all symbols, regardless of the assigned bin. The symbols in a bin might not all be assigned to the same order book server.
Broadcast	A message sent to participants.
Broker-Dealer	A US-registered broker-dealer.
Cabinet Order	A Cabinet order is used to give away a position for tax reasons. A premium is not specified. However, the price is set implicitly by the ISE.
Call Option	An option contract that entitles the buyer to purchase a fixed number of shares of the underlying security at a stated price on or before a fixed expiry date.
Central Database	The ISE database that contains member names, user names, stock symbols, and series descriptions.
Class	An option class refers to all options of the same type – calls or puts, which also have the same underlying security.
Client	The client of a broker-dealer, or EAM. The client categories are: Away Market Maker (AMM) Proprietary (Clearing Firm or Customer) Broker Dealer (Clearing Firm or Customer) Customer
CMTA	Clearing Member Transfer Agreement. CMTA is recorded with OCC and permits one clearing member to transfer contracts to another clearing member.
Combo	A trade or order that consists of two of more option series, or stocks and options in one combination order. Also known as spreads.
Commodity	See Underlying or Product.

Terms	Description
Competitive Market Maker (CMM)	A market maker that is required to provide continuous quotations in a portion of the options classes within their assigned group. There are multiple CMMs appointed to each of the 10 groups of options that are traded on the exchange. Each CMM quotes independently. In addition to providing quotes in their assigned options classes, CMMs can also conduct a limited amount of trading in other options classes that are traded on the exchange. CMMs must purchase or lease CMM memberships. Each membership entitles a CMM to enter quotes in one group of options. CMMs are not permitted to represent agency orders.
Contract	Options are traded in contracts. At ISE, a contract is usually for 100 shares of the underlying security. A "mini" contract is usually for 10 shares. The contract size might change due to corporate actions.
Crossing Order Mechanism	Crossing orders permit an EAM to execute a portion of its own Block size orders (50 contracts or more) as principal.
Customer order	An order that is entered on behalf of a member's customer, who is not a registered broker-dealer.
Deal	A deal occurs when buy orders are matched with sell orders. One deal involves at least two orders and generates at least two trades. However, there can be several orders and several trades in one deal.
Direct Trading Interface (DTI)	This is also referred to as the DTI. The DTI contains the sub-routines that must be used to communicate with the T7 trading system.
Directed Market Maker (DMM)	A market maker that receives a directed order.
Directed Order	A Directed Order is a simple order that is sent to a specific market participant. The order is no longer directed if it is released or changed to a PIM order.
Electronic Access Member (EAM)	A broker-dealer that represents customer and non-customer orders on the exchange, as well as their own proprietary orders.
European Options	European options can only be exercised at maturity.
Exercise	Declaring the desire to use the right to buy or to sell an option.
Exercise Price	The price at which the underlying security can be bought or sold. This is also known as the strike price.
Expiration Date	The last day on which the option can be exercised. All the rights and obligations conferred by the option are null and void after the expiration date.
Far Market Maker (FARMM)	See AMM, above.
Fast Market	Indicates exceptional market conditions. A fast market occurs when the PMM is present but has not rotated the series, or there is a market broadcast that has made the market volatile. In fast markets, the away market prices are not checked and there are no minimum volume requirements.
Fill Or Kill (FOK)	An order that immediately trades the whole order within the limit price, or is deleted without trading at all. The order is not placed on the order book.
Firm Order	An order that is entered for the member's proprietary account.

Terms	Description
Guaranteed Directed Order (GDO)	A snapshot of a quote at the NBBO that is only available for a specific directed order. The GDO is saved for later use by the market maker that is on the opposite side of the order.
Immediate Or Cancel (IOC)	An order that trades up to the limit price. Any remaining quantity is deleted. The order is not placed on the order book.
Instrument	Represents a trade-able entity at the exchange. Also called a Series.
Intermarket Sweep Order (ISO)	An order that should execute, if possible, without regard to protection of other markets' prices.
Limit Order	An order that must specify the premium.
Market	A forum in which market participants can trade. An exchange can operate multiple markets. Each market can open and close at different times, and trade different securities.
Market Order	An order without a limit price that trades at the BBO until the quantity is satisfied.
Member	US-registered broker-dealer that has received approval to trade on ISE.
Mini Option	An option delivering 10 shares of the underlying security per contract, rather than the usual 100 shares per contract.
Non-Customer	Primary Market Maker (PMM), Competitive Market Maker (CMM), FIRM, Broker-Dealer, or Far Market Maker (FARMM).
OPRA	Options Price Reporting Authority. The authority that disseminates the prices from all US options exchanges through a single feed.
Option	An agreement between a buyer and a seller that gives the buyer the right, through exercise, to require the seller to perform certain specific obligations. An option, which is left unexercised, expires worthless after a stated period of time.
Order	An entry into the trading system that indicates the intention to buy or sell.
Order book	The central order book contains the orders and quotes for all participants. A participant might have a local order book on their trading application to manage the orders. The trading system operates multiple order book servers to process trading transactions.
PrecISE Trade	A trader workstation that is used by EAMs.
Premium	The price of an option.
Price Improvement Mechanism (PIM)	An order that allows an EAM to trade against its own orders as principal and at least one cent better than the National Best Bid or Offer (NBBO).
Primary Market	Each underlying is assigned to one primary market by ISE, even if it is traded in several markets or systems. Only the price from the designated primary market is posted.
Primary Market Maker (PMM)	A market maker that has significant market-making responsibilities, such as overseeing the opening, providing continuous quotations in all of their assigned options classes, and handling customer's orders (with respect to available prices from other options exchanges). One PMM is assigned to each of the 10 options bins that are traded on the exchange.
Product	The set of options over an Underlying Security. Also known as Commodity, Symbol, or Name.
Put Option	An option contract that entitles the buyer to sell a fixed number of shares of the underlying security at the stated prices on or before a fixed expiry date.
Special Orders	Block, Crossing, and Cabinet order transactions.
Spot	The underlying security.

Terms	Description
Stock option	A contract that gives its holder the right to buy or sell shares of the underlying security at a specified price by a specified date. There are two types of options: **Calls** – the right to buy an underlying security **Puts** – the right to sell an underlying security
Strike Price	The price at which the option can be exercised.
T7	The computer system that processes the transactions and generates broadcasts. This system is operated by ISE.
The trading system	The computer system that processes the transactions and generates broadcasts. This system is operated by ISE.
Tick-Worse	A mechanism that moves a quote away from the market.
Time-In-Force (TIF)	See Validity Time
Time Value	The amount by which the option premium (actual cost) is above the intrinsic value of the option.
Trade	One side of a deal. When a buy order matches a sell order, the buy side is one trade and the sell side is another trade. Each user is informed of their member's trades.
Transaction	A trade. This term also refers to the processing cycle in which a message is received by the trading system, processed, and a reply is returned.
Underlying (underlying security)	An underlying security is the stock on which the options contract is based. Options can trade on many kinds of assets, such as commodity options and stock options. See Product.
User	For Direct Trading Interface applications, the user is the member's computer system that is logged onto ISE. A Valid Username and password are needed to establish a trading session to the DTI.
Validity Time	Also known as Time-In-Force. The life of an order that does not trade out completely. Validity can be applied to Day, Good until Canceled (GTC), Fill Or Kill (FOK), and Immediate Or Cancel (IOC) orders.

Appendix B: FIX Field Index (Numeric)

Tag	Field Name	FIX Data Type	Comments
1	Account	String	Maximum 10 characters.
6	AvgPx	Price	
8	BeginString	String	"FIX 4.2"
9	BodyLength	Length	
10	CheckSum	String	
11	ClOrdID	String	Support for up to 37 characters is **DEPRECATED**.
14	CumQty	Qty	
17	ExecID	String	
18	ExecInst	MultipleCharValue	'1'=Not held (ALO, re-price [with '6']) '6'=Participate don't initiate (ALO, cancel) 'G'=All Or None (AON) 'H'=Reinstate on System Failure (Persist)* 'Q'=Cancel on System Failure (Do not persist)** 'f'=Intermarket Sweep Order (ISO)† 'h'=Do Not Route order (DNR)† * **NON-STANDARD** value (FIX ver. 4.3) ** **NON-STANDARD** value (FIX ver. 4.4) † **NON-STANDARD** value (FIX ver. 5.0)
19	ExecRefID	String	
20	ExecTransType	Char	0=New 1=Cancel 2=Correct 3=Status
21	HandlInst	Char	Ignored by ISE.
22	SecurityIDSource	String	8=Exchange Symbol
30	LastMkt	Exchange	1=BNY ConvergEx U.S. Transaction Services 3=BNY ConvergEx Millennium ATS 4=Knight Match 5=Knight Link 6=Instinet CBX (US) 7=Deutsche Bank ATS All values **NON-STANDARD** (ISE)
31	LastPx	Price	
32	LastQty	Qty	
33	NoLinesOfText	Int	
34	MsgSeqNum	SeqNum	
35	MsgType	String	
37	OrderID	String	
38	OrderQty	Qty	

Tag	Field Name	FIX Data Type	Comments
39	OrdStatus	Char	0=New 1=Partially Filled 2=Filled 4=Canceled 5=Replaced 6=Pending Cancel 8=Rejected E=Pending Replace
40	OrdType	Char	1=Market 2=Limit 3=Stop 4=Stop Limit 7=Limit or Better (**DEPRECATED**)
41	OrigClOrdID	String	
42	OrigTime	UTCTimeStamp	Current time.
43	PossDupFlag	Boolean	
44	Price	Price	
45	RefSeqNum	SeqNum	
48	SecurityID	String	
49	SenderCompID	String	
50	SenderSubID	String	
52	SendingTime	UTCTimeStamp	
53	Quantity	Qty	
54	Side	Char	1=Buy 2=Sell
55	Symbol	String	
56	TargetCompID	String	
57	TargetSubID		
58	Text	String	Additional information about the order. OCC pass-through field (first 15 characters).
59	TimeInForce	Char	0=Day (Default) 1=Good 'Til Canceled (GTC) 2=Opening Orders (OPG) 3=Immediate Or Cancel (IOC) 4=Fill Or Kill (FOK) 6=Good 'Til Date (GTD)
60	TransactTime	UTCTimeStamp	
70	AllocID	String	
71	AllocTransType	Char	0=New
73	NoOrders	Int	
75	TradeDate	LocalMktDate	

Tag	Field Name	FIX Data Type	Comments
76	ExecBroker	String	1 ≤ n ≤ 999 Give-up
77	PositionEffect	Char	O=Open C=Close
78	NoAllocs	Int	1 ≤ n ≤ 10
80	AllocQty	Qty	
87	AllocStatus	int	0=Accepted 1=Rejected
88	AllocRejCode	int	0=Unknown account(s) 1=Incorrect quantity 3=Unknown executing broker mnemonic 5=Unknown Order ID 7=Other
99	StopPx	Price	
102	CxlRejReason	int	
103	OrdRejReason	int	0=Broker / Exchange option 1=Unknown symbol 2=Exchange closed 3=Order exceeds limit 4=Too late to enter 5=Unknown Order 6=Duplicate Order (e.g. dupe ClOrdID) 8=Stale Order 11=Unsupported order characteristic* 13=Incorrect quantity ** 99=Other** * **NON-STANDARD** value (FIX ver. 4.3) ** **NON-STANDARD** value (FIX ver. 4.4)
109	ClientID	String	
110	MinQty	Qty	Minimum execution quantity (MEQ).
111	MaxFloor	Qty	Display Quantity – Reserve Order
122	OrigSendingTime	UTCTimeStamp	
124	NoExecs	Int	
148	Headline	String	News_from_ISE_MKT_OPS
150	ExecType	Char	0=New 1=Partially Filled 2=Filled 4=Canceled 5=Replace 6=Pending Cancel 8=Rejected D=Restated E=Pending Replace
151	LeavesQty	Qty	

Tag	Field Name	FIX Data Type	Comments
167	SecurityType	String	OPT (default) MLEG
168	EffectiveTime	UTCTimeStamp	Stopped Cross Order. Defined as a UTC Timestamp in either of the following formats: YYYYMMDD-HH:MM:SS (whole seconds) YYYYMMDD-HH:MM:SS.sss (milliseconds)
200	MaturityMonthYear	MonthYear	
201	PutOrCall	int	0=Put 1=Call
202	StrikePrice	Price	
204	CustomerOrFirm	int	0=Customer 1=Proprietary — Firm 2=Broker/Dealer — Firm* 3=Broker/Dealer — Customer* 4=ISE Market Maker* 5=Far Market Maker* 7=Proprietary — Customer* 8=Customer Professional* * **NON-STANDARD** value (ISE)
205	MaturityDay	DayOfMonth	1 ≤ n ≤ 31
207	SecurityExchange	String	XISX=ISE Exchange GMNI=ISE Gemini Exchange
372	RefMsgType	String	
378	ExecRestatementReason	int	5=Partial decline of OrderQty
379	BusinessRejectRefID	String	
380	BusinessRejectReason	int	0=Other 3=Unsupported Message Type 99=Other* * **NON-STANDARD** value (ISE)
424	DayOrderQty	Qty	
425	DayCumQty	Qty	
426	DayAvgPx	Price	
432	ExpireDate	LocalMktDate	
434	CxlRejResponseTo	Char	1=Order Cancel Request 2=Order Cancel Replace Request
439	ClearingFirm	String	1 ≤ n ≤ 999 CMTA
440	ClearingAccount	String	OCC sub-account.
442	MultiLegReportingType	Char	2=Individual leg of a multi-leg security 3=Multi-leg security
526	SecondaryClOrdId	String	**DEPRECATED**
548	CrossID	String	Support for up to 37 characters is **DEPRECATED**.

Tag	Field Name	FIX Data Type	Comments
549	CrossType	int	1=Solicitation or CCC 2=Facilitation 4=PIM CrossType (549) and SpecialOrdType (9202) are mutually exclusive.
552	NoSides	Int	
555	NoLegs	Int	2 ≤ n ≤ 9
564	LegPositionEffect	Char	O=Open C=Close
600	LegSymbol	String	
608	LegCFICode	String	OC=Option — Call [OPT] OP=Option — Put [OPT] ES=Equity Common Shares [CS]
611	LegMaturityDate	LocalMktDate	
612	LegStrikePrice	Price	
623	LegRatioQty	float	1 ≤ n ≤ 9,999 This value must be an integer.
624	LegSide	Char	1=Buy 2=Sell 5=Sell Short 6=Sell Short Exempt
654	LegRefID	String	Maximum 10 characters.
797	CopyMsgIndicator	Boolean	**NON-STANDARD** field (FIX ver. 4.4)
810	UnderlyingPx	Price	Traded price of the stock trade associated with the QCC order.
879	UnderlyingQty	Qty	Traded quantity of the stock trade associated with the QCC order.
1083	DisplayWhen	Char	1=Immediate 2=Exhaust **NON-STANDARD** field (FIX ver. 4.4)
1092	PriceProtectionScope	Char	1=Local 2=National (Consider Away Markets) **NON-STANDARD** field (FIX ver. 4.4)
1324	ListUpdateAction	Char	D=Delete
1506	SideTradeID	String	Carried to OCC TrdID field **NON-STANDARD** field (FIX ver. 5.0SP2 EP107)
1671	NoPartyDetails	Int	1 ≤ n ≤ 2
1691	PartyDetailID	String	BU or user to be blocked, e.g. "ABC01E" or "1"
1693	PartyDetailRole	int	59=Executing Unit 55=Session ID (user)
1770	EntitlementRequestID	String	
1772	NoPartyEntitlements	Int	1

Tag	Field Name	FIX Data Type	Comments
1881	EntitlementRequestResult	int	99=Other
1882	EntitlementRequestStatus	int	0=Accept 2=Reject
1883	EntitlementStatus	int	0=Accepted 2=Rejected
7901	ExecutingParticipantID	String	Directed or Preferenced MM **NON-STANDARD** field (ISE)
8020	DisplayRange	Qty	Random Refresh Quantity for Reserve Order. **NON-STANDARD** field (ISE)
8601	AuctionInst	int	0=Start auction (default) 1=Do not start auction (do not flash — DNF) **NON-STANDARD** field (ISE)
9044	StepUpPrice	Price	999="market price" **NON-STANDARD** field (ISE)
9076	StockLegGiveUp	String	**NON-STANDARD** field (ISE)
9077	CounterPartyOpenClose	Char	**DEPRECATED** O=Open C=Close **NON-STANDARD** field (ISE)
9176	CounterpartyExecBroker	String	**NON-STANDARD** field (ISE)
9202	SpecialOrdType	Char	A=Combo Auction Order (CAO) (a.k.a. Exposure Auction) B=Block order C=Customer Match (CCC) F=Facilitation N=Non-CAO P=PIM Q=Qualified Contingent Cross (QCC) S=Solicitation CrossType (549) and SpecialOrdType (9202) are mutually exclusive. **NON-STANDARD** field (ISE)

Tag	Field Name	FIX Data Type	Comments
9203	ExposureFlag	MultipleValueString	Attributable orders: "C"=Customer ID "E"=Expose All "G"=Give-up "M"=CMTA Block orders: (including the above) "H"=Hide All "I"=Instruction (Buy/Sell) "P"=Premium (Limit Price) "Q"=Quantity "E" and "H" are each mutually exclusive with any other code. **NON-STANDARD** field (ISE)
9204	BrokerPct	int	0 ≤ n ≤ 40 (default value = 40) **NON-STANDARD** field (ISE)
9205	DealSource	int	101=Directed 104=Complex 110=Facilitation 112=PIM (Price Improvement Mechanism) 114=Solicitation order 116=Block order 126=Flash order **NON-STANDARD** field (ISE)
9404	CounterpartyCustomerOrFirm	int	0=Customer 1=Prop - Firm 2=B/D - Firm 3=B/D - Customer 4=ISE MM 5=FARMM 7=Prop - Customer 8=Customer - Pro **NON-STANDARD** field (ISE)
9439	CounterpartyExecBrokerClearingFirm	String	**NON-STANDARD** field (ISE)
9564	ContractLegPositionEffect	Char	O=Open C=Close **NON-STANDARD** field (ISE)
9624	ContraSideShortSell	int	5=Sell Short 6=Sell Short Exempt **NON-STANDARD** field (ISE)

Tag	Field Name	FIX Data Type	Comments
9730	LiquidityIndicator	String	X=undefined M=Maker T=Taker H=Hidden O=Opening C=Cross R=Response 8=Flashed Order 9=Flash Response 10=Routed Out 11=Trade Report 12=Combo Maker Against Combo 13=Combo Taker Against Combo 14=Combo Response Against Combo 15=Combo Hidden Against Combo 16=Combo Opening Rotation 17=Combo Cross 18=Combo Taker Against Regular 19=Regular Maker Against Combo 20=Combo Taker Against IO 21=Regular Taker Against IO (incl. PIM) 22=IO Maker Against Combo 23=IO Maker Against Regular 24=Regular Maker Against IO Participant 25=IO Participant Taker Against Regular **NON-STANDARD** field (ISE)
9811	PriceDelta	Price	
9861	BranchSeqNbr	String	Additional information about the order. OCC pass-through field **NON-STANDARD** field (ISE)

Appendix C: FIX Field Index (Alphabetic)

Tag	Field Name	FIX Data Type	Comments
1	Account	String	Maximum 10 characters. Additional information about the order. OCC pass-through field
70	AllocID	String	Identifier of the Allocation message.
80	AllocQty	Qty	Quantity for this allocation. Sum of all AllocShares must be equal to Shares
88	AllocRejCode	int	Present if AllocStatus = 1 (Rejected). 0=Unknown account(s) 1=Incorrect quantity 3=Unknown executing broker mnemonic 5=Unknown Order ID 7=Other
87	AllocStatus	int	0=Accepted (successfully processed) 1=Rejected
71	AllocTransType	Char	0=New
8601	AuctionInst	int	0=Start auction (default) 1=Do not start auction (do not flash — DNF) **NON-STANDARD** field (ISE)
6	AvgPx	Price	0 (zero)
8	BeginString	String	"FIX 4.2"
9	BodyLength	Length	
9861	BranchSeqNbr	String	Additional information about the order. OCC pass-through field **NON-STANDARD** field (ISE)
9204	BrokerPct	int	0 ≤ n ≤ 40 (default value = 40) **NON-STANDARD** field (ISE)
380	BusinessRejectReason	int	0=Other 3=Unsupported Message Type 99=Other* * **NON-STANDARD** value (ISE)
379	BusinessRejectRefID	String	
10	CheckSum	String	Three-digit character
440	ClearingAccount	String	OCC sub-account.
439	ClearingFirm	String	1 ≤ n ≤ 999 CMTA
109	ClientID	String	Give-up value if specified on order.
11	ClOrdID	String	Support for up to 37 characters is **DEPRECATED**.
9564	ContractLegPositionEffect	Char	O=Open C=Close **NON-STANDARD** field (ISE)

Tag	Field Name	FIX Data Type	Comments
9624	ContraSideShortSell	int	5=Sell Short 6=Sell Short Exempt **NON-STANDARD** field (ISE)
797	CopyMsgIndicator	Boolean	**NON-STANDARD** field (FIX ver. 4.4)
9404	CounterpartyCustomerOrFirm	int	0=Customer 1=Prop - Firm 2=B/D - Firm 3=B/D - Customer 4=ISE MM 5=FARMM 7=Prop - Customer 8=Customer - Pro **NON-STANDARD** field (ISE)
9176	CounterpartyExecBroker	String	Trade counter-party clearing account **NON-STANDARD** field (ISE)
9439	CounterpartyExecBrokerClearingFirm	String	Trade counter-party CMTA **NON-STANDARD** field (ISE)
9077	CounterPartyOpenClose	Char	**DEPRECATED** O=Open C=Close **NON-STANDARD** field (ISE)
548	CrossID	String	Support for up to 37 characters is **DEPRECATED**.
549	CrossType	int	1=Solicitation or CCC 2=Facilitation 4=PIM CrossType (549) and SpecialOrdType (9202) are mutually exclusive.
14	CumQty	Qty	0 (zero)
204	CustomerOrFirm	int	0=Customer 1=Proprietary — Firm 2=Broker/Dealer — Firm* 3=Broker/Dealer — Customer* 4=ISE Market Maker* 5=Far Market Maker* 7=Proprietary — Customer* 8=Customer Professional* * **NON-STANDARD** value (ISE)
102	CxlRejReason	int	
434	CxlRejResponseTo	Char	1=Order Cancel Request 2=Order Cancel Replace Request
426	DayAvgPx	Price	GTC/GTD orders only: The average price of contracts that have traded today.

Tag	Field Name	FIX Data Type	Comments
425	DayCumQty	Qty	GTC/GTD orders only: The number of contracts that have traded today.
424	DayOrderQty	Qty	GTC/GTD orders only: DayOrderQty is the OrderQty minus the contracts that were traded on previous days.
9205	DealSource	int	101=Directed 104=Complex 110=Facilitation 112=PIM (Price Improvement Mechanism) 114=Solicitation order 116=Block order 126=Flash order **NON-STANDARD** field (ISE)
8020	DisplayRange	Qty	Random Refresh Quantity for Reserve Order. **NON-STANDARD** field (ISE)
1083	DisplayWhen	Char	1=Immediate 2=Exhaust Required for Reserve Orders **NON-STANDARD** field (FIX ver. 4.4)
168	EffectiveTime	UTCTimeStamp	Stopped Cross Order. Defined as a UTC Timestamp in either of the following formats: YYYYMMDD-HH:MM:SS (whole seconds) YYYYMMDD-HH:MM:SS.sss (milliseconds)
1770	EntitlementRequestID	String	
1881	EntitlementRequestResult	int	99=Other
1882	EntitlementRequestStatus	int	0=Accept 2=Reject
1883	EntitlementStatus	int	0=Accepted 2=Rejected
76	ExecBroker	String	1 ≤ n ≤ 999 Give-up
17	ExecID	String	
18	ExecInst	MultipleCharValue	'1'=Not held (ALO, re-price [with '6']) '6'=Participate don't initiate (ALO, cancel) 'G'=All Or None (AON) 'H'=Reinstate on System Failure (Persist)* 'Q'=Cancel on System Failure (Do not persist)** 'f'=Intermarket Sweep Order (ISO)† 'h'=Do Not Route order (DNR)† * **NON-STANDARD** value (FIX ver. 4.3) ** **NON-STANDARD** value (FIX ver. 4.4) † **NON-STANDARD** value (FIX ver. 5.0)
19	ExecRefID	String	Present if ExecTransType = 1 (Cancel)

Tag	Field Name	FIX Data Type	Comments
378	ExecRestatementReason	int	5=Partial decline of OrderQty The exchange has initiated a partial cancel.
20	ExecTransType	Char	0=New 1=Cancel 2=Correct 3=Status
150	ExecType	Char	0=New 1=Partially Filled 2=Filled 4=Canceled 5=Replace 6=Pending Cancel 8=Rejected D=Restated E=Pending Replace
7901	ExecutingParticipantID	String	Directed or Preferred MM **NON-STANDARD** field (ISE)
432	ExpireDate	LocalMktDate	Required if TimeInForce = 6 (GTD)
9203	ExposureFlag	MultipleValueString	Attributable orders: "C"=Customer ID "E"=Expose All "G"=Give-up "M"=CMTA Block orders: (including the above) "H"=Hide All "I"=Instruction (Buy/Sell) "P"=Premium (Limit Price) "Q"=Quantity "E" and "H" are each mutually exclusive with any other code. **NON-STANDARD** field (ISE)
21	HandlInst	Char	Ignored by ISE.
148	Headline	String	News_from_ISE_MKT_OPS
30	LastMkt	Exchange	1=BNY ConvergEx U.S. Transaction Services 3=BNY ConvergEx Millennium ATS 4=Knight Match 5=Knight Link 6=Instinet CBX (US) 7=Deutsche Bank ATS All values **NON-STANDARD** (ISE)
31	LastPx	Price	
32	LastQty	Qty	

Tag	Field Name	FIX Data Type	Comments
151	LeavesQty	Qty	0 (zero)
608	LegCFICode	String	OC=Option — Call [OPT] OP=Option — Put [OPT] ES=Equity Common Shares [CS]
611	LegMaturityDate	LocalMktDate	Required if LegCFICode = OC or OP.
564	LegPositionEffect	Char	Required if LegCFICode = OC or OP. O=Open C=Close FARMM orders must be Open.
623	LegRatioQty	float	1 ≤ n ≤ 9,999 This value must be an integer.
654	LegRefID	String	Maximum 10 characters. Must be unique per leg.
624	LegSide	Char	1=Buy 2=Sell 5=Sell Short (valid only if LegCFICode = ES) 6=Sell Short Exempt (valid only if LegCFICode = ES)
612	LegStrikePrice	Price	Required if LegCFICode = OC or OP.
600	LegSymbol	String	

Tag	Field Name	FIX Data Type	Comments
9730	LiquidityIndicator	String	X=undefined M=Maker T=Taker H=Hidden O=Opening C=Cross R=Response 8=Flashed Order 9=Flash Response 10=Routed Out 11=Trade Report 12=Combo Maker Against Combo 13=Combo Taker Against Combo 14=Combo Response Against Combo 15=Combo Hidden Against Combo 16=Combo Opening Rotation 17=Combo Cross 18=Combo Taker Against Regular 19=Regular Maker Against Combo 20=Combo Taker Against IO 21=Regular Taker Against IO (incl. PIM) 22=IO Maker Against Combo 23=IO Maker Against Regular 24=Regular Maker Against IO Participant 25=IO Participant Taker Against Regular **NON-STANDARD** field (ISE)
1324	ListUpdateAction	Char	D=Delete
205	MaturityDay	DayOfMonth	$1 \leq n \leq 31$
200	MaturityMonthYear	MonthYear	
111	MaxFloor	Qty	Display Quantity – Reserve Order
110	MinQty	Qty	Minimum execution quantity (MEQ).
35	MsgType	String	Must be the third field in the message. Refer to each message section, below, for the MsgType value.
34	MsgSeqNum	SeqNum	
442	MultiLegReportingType	Char	2=Individual leg of a multi-leg security 3=Multi-leg security
78	NoAllocs	Int	
124	NoExecs	Int	
555	NoLegs	Int	$2 \leq n \leq 9$
33	NoLinesOfText	Int	
73	NoOrders	Int	
1671	NoPartyDetails	Int	
1772	NoPartyEntitlements	Int	

Tag	Field Name	FIX Data Type	Comments
552	NoSides	Int	
37	OrderID	String	Unique ID assigned by exchange
38	OrderQty	Qty	
103	OrdRejReason	int	0=Broker / Exchange option 1=Unknown symbol 2=Exchange closed 3=Order exceeds limit 4=Too late to enter 5=Unknown Order 6=Duplicate Order (e.g. dupe ClOrdID) 8=Stale Order 11=Unsupported order characteristic* 13=Incorrect quantity ** 99=Other** * **NON-STANDARD** value (FIX ver. 4.3) ** **NON-STANDARD** value (FIX ver. 4.4)
39	OrdStatus	Char	0=New 1=Partially Filled 2=Filled 4=Canceled 5=Replaced 6=Pending Cancel 8=Rejected E=Pending Replace
40	OrdType	Char	1=Market 2=Limit 3=Stop 4=Stop Limit 7=Limit or Better (**DEPRECATED**)
41	OrigClOrdID	String	ClOrdID of the order to be canceled.
122	OrigSendingTime	UTCTimeStamp	Conditional field. This field is required for resend messages. If these data are not available, set the field to the same value as SendingTime.
42	OrigTime	UTCTimeStamp	Current time.
1691	PartyDetailID	String	BU or user to be blocked, e.g. "ABC01E" or "1"
1693	PartyDetailRole	int	59=Executing Unit 55=Session ID (user)
77	PositionEffect	Char	O=Open C=Close
43	PossDupFlag	Boolean	Conditional field. This field is required for resend messages.
44	Price	Price	
9811	PriceDelta	Price	

Tag	Field Name	FIX Data Type	Comments
1092	PriceProtectionScope	Char	1=Local 2=National (Consider Away Markets) **NON-STANDARD** field (FIX ver. 4.4)
201	PutOrCall	int	0=Put 1=Call
53	Quantity	Qty	Total quantity of original execution
372	RefMsgType	String	
45	RefSeqNum	SeqNum	
526	SecondaryClOrdId	String	**DEPRECATED**
207	SecurityExchange	String	XISX=ISE Exchange GMNI=ISE Gemini Exchange
48	SecurityID	String	Underlying symbol of the option series
22	SecurityIDSource	String	8=Exchange Symbol
167	SecurityType	String	OPT (default) MLEG
49	SenderCompID	String	Assigned by ISE (member → ISE). "ISE" (ISE → member).
50	SenderSubID	String	
52	SendingTime	UTCTimeStamp	
54	Side	Char	1=Buy 2=Sell
1506	SideTradeID	String	Carried to OCC TrdID field **NON-STANDARD** field (FIX ver. 5.0SP2 EP107)
9202	SpecialOrdType	Char	A=Combo Auction Order (CAO) B=Block order C=Customer Match (CCC) F=Facilitation N=Non-CAO P=PIM Q=Qualified Contingent Cross (QCC) S=Solicitation **NON-STANDARD** field (ISE)
9044	StepUpPrice	Price	999="market price" **NON-STANDARD** field (ISE)
9076	StockLegGiveUp	String	**NON-STANDARD** field (ISE)
99	StopPx	Price	
202	StrikePrice	Price	
55	Symbol	String	OCC options symbol for a series.
56	TargetCompID	String	"ISE" (member → ISE). Assigned by ISE (member → ISE).
57	TargetSubID	String	

Tag	Field Name	FIX Data Type	Comments
58	Text	String	Additional information about the order. OCC pass-through field (first 15 characters).
59	TimeInForce	Char	0=Day (Default) 1=Good 'Til Canceled (GTC) 2=Opening Orders (OPG) 3=Immediate Or Cancel (IOC) 4=Fill Or Kill (FOK) 6=Good 'Til Date (GTD)
75	TradeDate	LocalMktDate	Current trading day, only.
60	TransactTime	UTCTimeStamp	
810	UnderlyingPx	Price	Traded price of the stock trade associated with the QCC order.
879	UnderlyingQty	Qty	Traded quantity of the stock trade associated with the QCC order.

Appendix D: Client Categories for Auctions and Crosses

The following table defines the allowed client category (*CustomerOrFirm* [204]) combinations for two-sided auction and cross orders.

Table 59: Crossing Order Client Categories

Order Type	Order Client Categories															
	Originating Side								Counterparty Side							
	Cust	Pro-Cust	BD-Cust	BD-Firm	Prop-Cust	Prop-Firm	Far MM	ISE MM	Cust	Pro-Cust	BD-Cust	BD-Firm	Prop-Cust	Prop-Firm	Far MM	ISE MM
Two-Sided Auctions (Regular and Complex)																
Facilitation	√	√	√	√			√		√	√	√	√	√	√	√	
Solicitation	√	√	√	√			√		√	√	√	√			√	
PIM	√	√	√	√			√		√	√	√	√	√	√	√	√
Cross Orders (Regular and Complex)																
CCC	√								√							
QCC	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

NOTE: A Solicitation order with "Customer" on both sides will be treated as a CCC order.

Additional Information

Member Website

In order to ensure market participants are informed in a timely manner about the detailed changes that come with the ISE T7 system, more information, including (but not limited to) FAQs and other documentation, is available on the member website at https://members.ise.com.

Contact Information

If you need support, please use the contacts matrix below. When in doubt, contact Market Operations and they can direct your call.

Table 60: Support Contact Information

Department	Email Address	Phone
Market Operations	helpdesk@ise.com	877-473-9989
Technology Member Services	tms@ise.com	212-897-0244
Membership	membership@ise.com	800-518-7360
FIX and Connectivity Support	connect@ise.com	800-518-1564
Member Billing	billing@ise.com	800-518-7360
Surveillance	Surveillance@ise.com	800-518-7360

Document Revision Table

Version	Date	Change
6.0.5	July 5, 2013	Rebranded to T7 Section 4.1 — Merged Exchange Codes tables Section 5.8 — Clarified Order Status Request Add'l misc. edit & corrections.
6.0.4	May 14, 2013	Section 4.4 — Corrected tag #, *CustomerOrFirm* (204) field
6.0.3	May 9, 2013	Ignore Away Market (IAM functionality deleted. Added missing *ExecType* (150) value 8 (Rejected). Sect. 4.1 subsections replaced with tables.
6.0.2	May 6, 2013	ISO MIC for ISE Gemini = GMNI — Sect. 4.1 CAO allowed TIFs included IOC — Sect. 4.7.1.2
6.0.1	May 2, 2013	New *SecurityExchange* (207) code defined — "GMNI" ("XTPZ" removed). ISO MIC for ISE Gemini pending.
6.0.0	May 1, 2013	Complete rewrite of manual. Version updated to correspond with core system version. New *SideTradeID* (1506) field, Section 5.13 Execution Report. New *LiquidityIndicator* (9730) values, Section 5.13 Execution Report.
5.0.0	There is no version 5.0.0	
4.4.4	March 2013	Removed ContraBroker field (375)
Please see version 4.4.4 for all previous versions and changes.		