



Chi-X Drop Copy Application Notes (Participant Version)

May 11th, 2010
Version: 1.2

©2010 Chi-X Europe Ltd ("Chi-X"). All rights reserved. Chi-X is a registered mark. Approved for distribution in Europe by Chi-X Europe Limited which is authorised and regulated by the Financial Services Authority.

This information is provided for informational purposes only. It does not take into account the particular investment objectives, financial situation, or needs of any individual or entity. Under no circumstances is it to be used or considered as an offer to purchase or sell any security, or as a solicitation or recommendation of the purchase, sale, or offer to purchase or sell any security. While the information has been obtained from sources deemed reliable, neither Chi-X nor its licensors, nor any other party through whom the user obtains any such information: (i) makes any guarantees that it is accurate, complete, timely, or contains correct sequencing of information; (ii) makes any warranties with regard to the results obtained from its use; or (iii) shall have any liability for any claims, losses, or damages arising from or occasioned by any inaccuracy, error, delay, or omission, or from the use of the information or actions taken in reliance on the information. Reproduction or redistribution of this information is prohibited except with written permission from Chi-X.

System response times may vary for a number of reasons including market conditions, trading volumes and system performance.

Table of Contents

1	DOCUMENT SCOPE	3
1.1	VERSION HISTORY	3
2	INTRODUCTION	4
2.1	DROP COPIES	4
3	SESSION MANAGEMENT	5
3.1	DISCONNECT	5
3.1.1	Same Day Recovery after session disconnect.....	5
3.1.2	Previous Day Recovery after session disconnect.....	5
4	APPLICATION MESSAGES	6
4.1	NO ORDER ENTRY	6
4.2	SYMBOLOGIES	6
4.3	DIFFERENCES BETWEEN DROP COPY AND TRADING EXECUTION REPORTS	6
4.4	UNSOLICITED TRADE REPORT	6

1 DOCUMENT SCOPE

This document is intended to summarise the Drop Copy service of Chi-X Europe (Chi-X). It should be read in conjunction with the latest version of the Chi-X FIX specification.

These documents are available at the following link:

<http://www.chi-x.co.uk/get-connected/document-library.asp>

1.1 Version History

Date	Version	Changes
07/09/2009	1.0	Initial version
22/04/2010	1.1	Addition of Tag 1 to Section 4.4
11/05/2010	1.2	Addition of Tag 9730 to Section 4.4

2 INTRODUCTION

This document describes specifically what functionality is available through Chi-X's version FIX 4.2-based interface. It also describes how Chi-X uses the FIX protocol to achieve this functionality.

This document is intended to supplement the FIX Protocol Specification (www.fixprotocol.org), by describing:

- Where there are multiple ways to achieve a desired outcome with the protocol, this document describes which one(s) Chi-X supports.
- Where the protocol does not define the exact meaning or content of various fields, this document provides as much detail as possible to describe Chi-X's chosen implementation.
- Where there are possible alternative interpretations, this document describes which interpretation Chi-X has selected.

What is FIX?

FIX Connectivity enables the easy integration of Chi-X into your workflow and makes it easier for you to trade by reducing your keystrokes. FIX stands for the Financial Information eXchange Protocol. The FIX protocol is a 'language' created by a group of institutional clients and brokers to standardize the delivery of relevant pre-trade and trade information. It is a public-domain specification owned and maintained by FIX Protocol Ltd.

2.1 Drop Copies

Chi-X's Drop Copy service is one that Chi-X provides to its trading participants for the purpose of collecting trade information from orders executed on Chi-X. Drop Copy allows our trading participants to better manage firm wide positions and risk, while assisting in straight through processing (STP) for the Clearing & Settlements processes. A Drop Copy is a trade execution report or message that is sent back to a trading participant's system using the FIX protocol. Trade Reports are sent to the trading participant as soon as an order executes on Chi-X. With real-time position updating to a trading participant's trader console, the Drop Copy feature improves both the transparency of order executions and a trading participant's overall trading efficacy by eliminating the re-entry of data and therefore reducing the possibility of errors.

3 SESSION MANAGEMENT

In addition to the standard header, trailer, and -accepted symbol definition fields as defined in the Chi-X FIX 4.2 Notes, only the following fields are processed differently for a Drop Copy trading participant:

3.1 Disconnect

3.1.1 Same Day Recovery after session disconnect

When a trading participant's Drop Copy session is disconnected and subsequently reestablished within the same trading day, all Execution Reports messages sent by Chi-X but not received by the trading participant will be available for re-sending. This is accomplished via the FIX message recovery process and is detected via the tracking of incoming sequence numbers. The trading participant must issue a Resend Request, which Chi-X will fill. All Execution Reports retransmitted as a result of the Resend request will contain a PossDupFlag field.

3.1.2 Previous Day Recovery after session disconnect

If a trading participant's Drop Copy session goes down during the day and Chi-X's overnight process is performed (i.e. new business day exists), all unsent Trade Reports from the previous business day will not be sent to the trading participant upon reconnection.

4 APPLICATION MESSAGES

4.1 No Order Entry

A Drop Copy session may not be used for entering orders. All order messages from trading participants will be rejected.

Unsolicited trade reports do not contain the details of the original order from which it executed. As a consequence, each trade report is treated as if it originated from a completely isolated order.

4.2 Symbolologies

Chi-X will always place the Chi-X symbol in the *Symbol* (55) field for Drop Copy sessions. Chi-X automatically includes the *Currency* field with all symbol information.

The configuration of a Drop Copy session may be set up so that, in addition to the Chi-X symbol in the *Symbol* (55) field, the trading participant may request one of the following additional security identifiers in the trade report as identified in the table below:

Security Identifier	<i>IDSource</i> (22)	<i>SecurityID</i> (48)	<i>SecurityExchange</i> (207)
ISIN	4	Isin Value	Will identify the market the ISIN trades in.
RIC	5	Ric Value	Not supplied.

4.3 Differences between Drop Copy and Trading execution reports

For a trading participant configured to receive Drop Copy trade reports, the following **Execution Report** fields behave differently to that of a trade report received via the order entry session:

- *OrderID* has a unique value.
- *OrdStatus* is always *Filled* (unless the trade is cancelled).
- *CumQty* is the same as *LastShares*, i.e. the size of the trade.
- *AvgPx* is the same as *Last Price*, i.e. the price of the trade.
- *OrdType* is omitted.

4.4 Unsolicited Trade Report

Chi-X sends unsolicited trade reports via the **Execution Report** message. The trade report provides fill information including: shares traded, transaction time and trade date. Please note that this does not include settlement information such as commission or tax information.

NOTE: The ExecID is considered to be the unique identifier of an execution message by Chi-X. It is the trading participant's responsibility to detect and appropriately process possible duplicate ExecIDs, regardless of whether the PossResend flag has been set on the message or not.

In addition to the standard header, trailer, and Chi-X-accepted symbol definition fields as defined in the Chi-X FIX 4.2 Notes, only the following fields are processed for a Drop Copy trading participant:

Tag	Field Name	Req'd	Comments
1	Account	Y	Present in all execution reports. If no value was specified in the original order then the values contained in this tag are shown below; H = House C = Client If a value is supplied on the original order then the value will be sent in this tag prepended by H: or C:. For more information on the use of this tag in the Trading FIX sessions please consult the Trading FIX Specification on the Chi-X website.
6	AvgPx	Y	Always equal to LastPx.
11	ClOrdId	Y	OrderId as on the traded order
14	CumQty	Y	Always equal to LastShares.
15	Currency	N	Currency in which the security is traded.
17	ExecID	Y	A unique identifier of execution message as assigned by Chi-X.
19	ExecRefID	N	Used in a trade cancel message (i.e. <i>ExecTransType</i> = 1) to refer to the previous Execution Report to which the current message applies.
20	ExecTransType	Y	Values supported by Chi-X: 0 = New to indicate a trade report 1 = Cancel to indicate a trade cancel
22	IDSource	N	Value supported by Chi-X: 4 = ISIN 5 = RIC
29	LastCapacity	N	Values supported by Chi-X: 1 = Agent 2 = Cross as Agent 3 = Cross as Principal 4 = Principal
31	LastPx	Y	Price of shares bought or sold on this fill.
32	LastShares	Y	Quantity of shares bought or sold on this fill.

Tag	Field Name	Req'd	Comments
37	OrderID	Y	A unique identifier of the originating order.
38	OrderQty	Y	Always equal to LastShares.
39	OrdStatus	Y	Always set to 2 (Filled)
48	SecurityID	N	Security ID of traded security when IDSource is set. ISIN if IDSource = 4 RIC if IDSource = 5
54	Side	Y	Values supported by Chi-X: 1 = Buy 2 = Sell
55	Symbol	Y	Returns the Chi-X Symbol of the security traded.
60	TransactTime	Y	Time and date of execution (expressed as GMT).
109	Trading participantID	N	Identifier of trading participant entering the order.
150	ExecType	Y	Will have value of 2 (Fill)
151	LeavesQty	Y	Will have value of 0
207	SecurityExchange	N	Security Exchange of ISIN of traded security when IDSource = 4.
9730	TradeLiquidityIndicator	N	Values supported by Chi-X: A = Order added liquidity R = Order removed liquidity D = Dark Trade X = Onward routed trade