



**Member Firm**  
**Front End Systemic Capture (FESC)**  
**Drop Copy Application**  
**Interface Specification**

**Version 4.1.0**

**February 16, 2006**

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## REVISION LOG

Revision	Date	Description	Author
1.8	08/16/1999	1 <sup>st</sup> Official Release	M. Fissell
1.9.2	01/28/2000	Added FIX 4.2 Tags	M. Fissell
1.9.3	03/09/2000	Added FIX 4.1 backward compatibility section	M. Fissell
2.0.0	12/01/00	<ul style="list-style-type: none"> <li>• Revised contact information.</li> <li>• Deleted all references to FCS and CMS. This includes the deletion of <i>Section 5 [Floor Communication Standard (FCS)]</i>.</li> <li>• Revised all table numbers so that they are in sequential order as presented in the text.</li> <li>• Added <i>2.2.4 FIX Header Fields</i>.</li> <li>• Revised Section 3.</li> <li>• Deleted previous Figure 1. Figure 2 renumbered to become Figure 1.</li> <li>• Created new Figure 2 for NIST UTC time.</li> <li>• Deleted <i>Appendix B</i>.</li> <li>• Deleted 'Order M.'</li> <li>• Deleted Order M and revised description for 'Order K &amp; L.'</li> <li>• Revised description for Tag 9406.</li> <li>• Added entries for Tags 56 and 115.</li> </ul>	P. Rota
2.0.0 (additional)	1/3/01	Review edits.	M. Fissell/ S. Albert
2.0.0 (edits)	1/16/01	Incorporate final edits into document.	D. Bartges/ S. Albert
2.0.1	7/23/01	Clarifications Editing Addition of order identifiers to the text of the reject message.	G. Libretti S. Albert
2.0.2	1/15/02	Added section, Member Firms Using FIX 4.2. – Business Message Reject message	G. Libretti
3.0.0	3/19/02	Reorganized entire document and added specifications for Drop Copy reports to support Rule 123f	G. Libretti
3.0.1	4/10/02	Clarifications, edits, and list of reject codes.	G. Libretti
3.0.2	5/8/2002	OrderID maximum length restricted to 22 characters	G. Libretti
3.0.3	1/13/03	Corrected Table 10 – Reject Conditions and Reject Codes for Reason Codes 109 and 123. Specify OrderCapacity2 (Tag 9460) for the “Q” account type. Added Reject Reason Codes 129 and 130. Clarified Order J, Order K, and Order L.	G. Libretti
3.0.4	6/9/03	Added side of market to the list of required data elements for Rule 123f.	G. Libretti



		Specify fields Report N, M, and O and Report Mod D as optional for Rule 123f.	
3.0.5	8/6/03	Clarify use of tags 47 and 9460. Add header tag 145 for additional routing capability. Update reject reasons.	G. Libretti
3.0.6	5/7/2004	In Table 3: Designate Order J, Order K, Order L, and Order P as optional, and Order Q as conditionally required. In Table 5, clarify the description of Report F and Report H. Edit the text in paragraph 4.4.4. In Table 9 revise description of Tags 9457 and 9459. In Table 10, correct description of reject codes 121 and 122. In paragraphs 4.5.1 and 4.5.2, change contents of reject text. Add paragraph 4.5.3. In paragraph 5.2, remove reference to Order J as a required field. In Table 15, indicate Order J and Order K as optional. Updated contact information.	G. Libretti
4.0.0	June 1, 2005	Added Section 7. , which specifies the data submission requirements for the NYSE Hybrid Market e-Quote <sup>sm</sup> initiative.	G. Libretti
4.1.0	February 16, 2006	Added Section 8. , which specifies the data submission requirements for Rule 108.	G. Libretti

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## Executive Summary

This document describes the interaction between Member Firms (MF) and the New York Stock Exchange's (NYSE) Front End Systemic Capture (FESC) Drop Copy application. This document serves as a companion document to the *NYSE Common Access Point (CAP) Member Firm Interface Specification*. The *NYSE Information Memo #99-38* and *NYSE Information Memo 02-28* are paraphrased in the main sections of this document and should be referenced for exact wording. *Information Memo #99-38* specifically addresses Rule 123e (Records of Orders) and *Information Memo #02-28* addresses Rule 123f (Reports of Order Executions). Both address the interaction of the Member Firm's proprietary [or third-party system] Order Management System (OMS) and the NYSE's FESC Drop Copy application.

The Member Firm Drop Copy (MFDC) application is responsible for the receipt and storage of all information sent by the Member Firms as they comply with modifications to Rule 123. Drop copies are transmitted via the NYSE CAP network and then processed by MFDC. MFDC is the principal interface to the FESC database and serves as an interface component requesting FESC services. The FESC service processes, inserts, and updates the MFDC database in accordance with the Rule 123 filing with the Securities Exchange Commission (SEC). The FESC database forms the repository of the drop copy data that NYSE Surveillance monitors to verify Member Firm compliance.

FESC Drop Copies are copies of orders, reports, and modifications thereof, transmitted to the FESC system via the proprietary OMS's of the Member Firms. e-Quotes (referred to as the Broker Interest File) are part of the NYSE Hybrid Market initiative (NYSE Hybrid Market Rule Change Filing #SR-NYSE-2004-05 amendment #4). Member Firms will be required to send to FESC e-Quote<sup>sm</sup> Link Messages, which associate e-Quotes with the orders that underlie the e-Quotes. Changes (adds or removes) of the orders that underlie e-Quotes are also required to be sent to FESC.

**Note:** e-Quotes themselves are not required to be sent to FESC since they are sent to the Post via CMS.

This document addresses only the MFDC application interface between Member Firms and the Drop Copy application of the FESC system. As such, this document describes the FIX (Financial Information eXchange) formats for transmitting Drop Copies and e-Quote Link Messages. This document does not address the network interfaces between the Member Firms and the NYSE CAP network. Information regarding the network interface can be found in the document, *NYSE Common Access Point, Member Firm Interface Specification*.

All Member Firm orders and order modifications sent to the Floor via their proprietary OMS, as well reports and report modifications processed by their proprietary systems are required to be captured in the FESC database. Regardless of the Firm's origination point for the copies of the orders and reports, delivery of the drop copy shall be via the NYSE CAP network to the MFDC application interface of FESC.



NYSE, SIAC, and the FIX Committee work closely together and have come to an agreement on FIX message types and format usage as listed in *Appendix A*. They agree that the FIX message types supporting the FESC drop copies are the Execution Report and Reject messages.

# 1. Introduction

## 1.1 General

The MFDC has been implemented to support Member Firm's compliance with the modifications made to NYSE Rule 123.

The MFDC application interface of the FESC system receives drop copy messages (in electronic form) from Member Firms for processing and forwarding to the FESC database. The NYSE CAP network is an 'extranet' infrastructure that serves as a common point of access between the NYSE production networks and the networks of the Members Firms. It is the transmission medium for the FESC drop copies. As stated previously, NYSE CAP is the only portal for receipt of FESC drop copies.

## 1.2 Scope

This document addresses the interface between Member Firms and the MFDC application processing of the FESC system and describes the FIX protocol format and data content of the FESC drop copy messages. Figure 1 illustrates the application-level interaction addressed in this document.

## 1.3 Drop Copy

A "drop copy" is a copy of an order, order modification, report, or report modification that has been transmitted to or entered into a Member Firm proprietary/third-party OMS. The order and report data along with the required timestamps and indicator flags in the drop copy are recorded in the FESC database.

### **IMPORTANT NOTE**

Drop copies as used in this document are not to be confused with any of the following:

- Super Designated Order Turnaround (SuperDOT) drop copies (of reports and report modifications)
- Common Message Switch (CMS) drop copies (which are transmitted by the NYSE to Member Firms)
- Broker Booth Support System (BBSS) drop copies (of Orders that are submitted to trading desks by BBSS).

## 1.4 e-Quote<sup>sm</sup> Link Messages

For each proprietary e-Quote<sup>sm</sup> message sent to the NYSE via the CMS interface, a corresponding e-Quote Link message is required to be transmitted to the FESC Drop Copy system. Any changes of the underlying orders while the e-Quote is active also require the transmission of a link message. The link message identifies the underlying orders associated with each e-Quote. Full cancels do not require a corresponding link message.

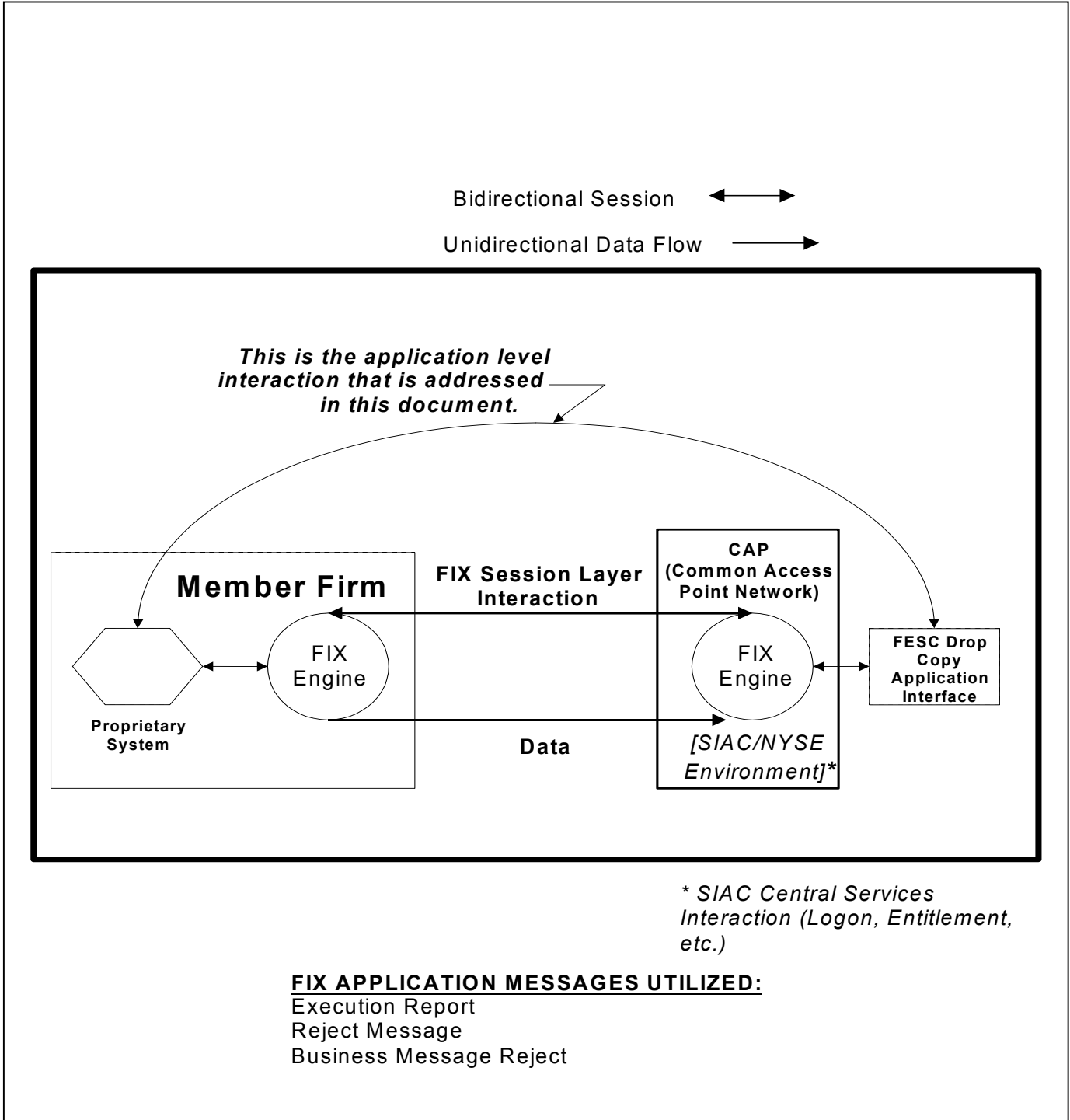
The e-Quote link messages are described in Section 7. All tables for message formats, message tags, and reject message conditions are contained in this section.

## 1.5 Rule 108

The Exchange interprets NYSE Rule 108(a) as permitting a specialist to be on parity with orders in the Crowd when the specialist is establishing or increasing his or her position, provided that the brokers representing orders in the Crowd permit the specialist to trade along with them by not objecting to such participation. In accordance with Information Memo 05-81 published on October 26th 2005, the Floor Broker must document his or her objection/agreement at the time a report execution is issued for an order and must keep appropriate records of their objection/agreement pursuant to Securities Exchange Act Rule 17a-3 and NYSE Rule 440. This specification outlines the necessary requirements to submit this information systemically to FESC in accordance with NYSE Rule 123f.

Data submission requirements for NYSE Rule 108 are described in Section 8.

**Figure 1. FESC/FIX Drop Copy Interaction Overview**



## 1.6 Document References

Table 1 lists reference documents used in preparing this interface specification.

**Table 1. Document References**

Reference Number	Title	Prepared by:
1	<i>NYSE Common Access Point Member Firm Interface Specification</i>	SIAC
2	<i>NYSE CAP Member Firm Security Interface Specification</i>	SIAC
3	<i>Financial Information Exchange Protocol (FIX)</i>	FIX Committee
4	<i>NYSE 19b-4 Rule Filing #SR-NYSE-98-25 - Addendum #2</i>	NYSE
5	<i>NYSE Information Memo #99-38 - Front End System Capture</i>	NYSE
6	<i>NYSE Information Memo #00-23 - Rule 123 Readiness Survey</i>	NYSE
7	<i>SEC approval order Release No. 34-43689; File No. SR-NYSE-98-25, dated December 7, 2000</i>	SEC
8	<i>NYSE Information Memo #01-43 – Electronic Capture of Orders on the Floor/Rule 123</i>	NYSE
9	<i>NYSE Information Memo #02-4 – Electronic Capture of Orders on the Floor - Rule 123</i>	NYSE
10	<i>NYSE Information Memo #02-28 – Execution Report Drop Copy and Order Tracking System</i>	NYSE
11	<i>NYSE Information Memo #02-59, December 17, 2002 – New Identification Code/Audit Trail Account Type “Q”</i>	NYSE
12	<i>NYSE Information Memo #03-26, June 10, 2003 – Rule 123f</i>	NYSE
13	<i>NYSE Information Memo #05-13, March 4, 2005</i>	NYSE
14	<i>NYSE Hybrid Market Rule Change Filing #SR-NYSE-2004-05 amendment #4</i>	NYSE
15	<i>NYSE e-Quotes<sup>sm</sup> Proprietary and Vendor Systems Interface Specifications</i>	SIAC
16	<i>NYSE Information Memo #05-81, October 26, 2005 (for Rule 108)</i>	NYSE
17	<i>NYSE e-Quotes<sup>sm</sup> PROPRIETARY AND VENDOR SYSTEMS Interface Specifications, Version 1.0, April 15, 2005</i>	NYSE

The NYSE Information Memos can be retrieved from the NYSE web site at:  
[www.nyse.com/regulation](http://www.nyse.com/regulation)

The NYSE Technical Specifications can be retrieved from the NYSE web site at:  
[www.nyse.com/techspecs](http://www.nyse.com/techspecs)

## 2. Regulatory Requirements

This section presents a summary of the text of Rule 123e (Records of Orders) and Rule 123f (Reports of Order Executions).

### 2.1 Rule 123e – Records of Orders

No Floor member may represent or execute an order on the Floor of the Exchange unless the details of the order have been first recorded in an electronic system on the Floor. Any member organization proprietary system used to record the details of an order must be capable of transmitting these details to a designated Exchange database within such time frame as the Exchange may prescribe. The details of each order required to be recorded shall include the following data elements, any changes in the terms of the order and cancellations, in such form as the Exchange may from time to time prescribe.

1. Symbol;
2. Clearing member organization;
3. Order identifier that uniquely identifies the order;
4. Identification of member or member organization recording order details;
5. Number of shares or quantity of security;
6. Side of market;
7. Designation as market, limit, stop, stop limit;
8. Any limit price and/or stop price;
9. Time in force;
10. Designation as held or not held;
11. Any special conditions;
12. System-generated time of recording order details, modification of terms of order or cancellation of order;
13. Such other information as the Exchange may from time to time require.

Pursuant to item #13, NYSE Information Memo #02-59, December 17, 2002, the NYSE has added the “Q” account type to the list of prescribed data elements. This extends Rule 123e in that the firm must include the “Q” account type for orders that cover an error position in the firm’s error account. Otherwise, the specification of account type for orders remains optional.

#### 2.1.1 Time Standards

Any member organization proprietary system used to record the details of an order for purposes of this rule must be synchronized to a commonly used time standard and format acceptable to the Exchange.

## 2.2 Rule 123f – Reports of Order Executions

Order execution reports must be entered into the same database as required by this rule for the entry of orders. Any member organization that records the details of an order pursuant to Rule 123e must also transmit a report of the order's execution to such database. Order execution reports must be entered into such system within such time frame as the Exchange may prescribe. The details of each execution report required to be recorded shall include the following data elements, and any modifications to the report, in such form as the Exchange may from time to time prescribe:

1. Order identifier that uniquely identifies the order as required by Rule 123, paragraph (e);
2. Symbol;
3. Number of shares or quantity of security;
4. Transaction price;
5. Time the trade was executed;
6. Executing broker badge number, or alpha symbol as may be used from time to time, in regard to its side of the contract;
7. Executing broker badge number, or alpha symbol as may be used from time to time, of the contra side to the contract;
8. Clearing firm number, or alpha symbol as may be used from time to time, in regard to its side of the contract;
9. Clearing firm number, or alpha symbol as may be used from time to time, in regard to the contra side of the contract;
10. Whether the account for which the order was executed was that of a member or member organization or of a non-member or non-member organization;
11. Identification of member or member organization which recorded order details as required by paragraph (e);
12. Date the order was entered into an Exchange system;
13. Indication as to whether this is a modification to a previously submitted report;
14. Settlement instructions (e.g., cash, next day, or seller's option);
15. Special Trade Indication, if applicable;
16. Online Comparison System (OCS) Control Number;
17. Such other information as the Exchange may from time to time require.

Pursuant to item #17:

1. NYSE Information Memo #02-59, December 17, 2002, the NYSE has added the "Q" account type to the list of prescribed data elements. Account type is a required data element as specified by item #10 but the value of "Q" is a new designation.
2. NYSE Information Memo #03-26, June 10, 2003, the NYSE has added side of market to the list of prescribed data elements.
3. Display Book Link ID is added to the prescribed data elements for reports against orders that underlie e-Quotes.



4. Rule 108 indicator and sponsoring/witnessing broker badge are added to the data submission requirements for Rule 123f reports.

### 3. MFDC Interface Functional Requirements

This section describes the functional requirements for the Drop Copy interface. It specifies the functional messages that require submission of drop copies; the data element requirements for order and report drop copies, and timestamp requirements.

#### 3.1 Summary of Messages Requiring Submission to FESC Drop Copy

Proprietary or third party system messages that require drop copy messages to be transmitted to FESC are shown in Table 2, which is organized as follows:

- The first column lists the message types.
- If the message type requires that a drop copy be sent, it is indicated in the second column with a 'Yes' response. These are the message types supported by FESC.

**Table 2. Messages Requiring Submission to FESC Drop Copy**

Proprietary OMS Message Types	Drop Copy Message Required to FESC
Orders	Yes
Cancel	
Cancel/Replace	
Execution Reports	Yes
Bust	
Corrected Price	
Report Change	
Admin Inquiries Admin Responses Status Names Later Price Is Correct	No
Market Looks, etc.	No
e-Quote Link Messages	Yes (Refer to Section 7. )

### 3.2 Drop Copy Data Requirements

This section describes the data element requirements for orders, order modifications, reports, and report modifications. Each data element has an assigned identifier (i.e., Order A, Report B, etc).

#### 3.2.1 Order Drop Copy Data Requirements

When transmitting a drop copy of an order to the MFDC interface, the Member Firm proprietary system shall include the data fields listed in Table 3.

**Table 3. Required Drop-Copy Order Fields**

Drop Copy Field	Description
Order A	Symbol
Order B	Clearing member organization
Order C	Order identifier that uniquely identifies the order
Order D	Identification of member or member organization recording order details
Order E	Number of shares or quantity of security
Order F	Side of market
Order G	Designation as market, limit, stop, stop limit
Order H	Any limit price and/or stop price
Order I	Time in force
Order J	Designation as held or not held (optional)
Order K	Any special conditions (optional)
Order L	Any special instructions (optional)
Order N	(Optional) data for new orders related to equity trades as defined by the FIX specification and identified in the <i>NYSE's Member Firm Information Memo #99-38</i> .
Order O	FloorAvailableTime
Order P	WriteInTime (optional))
Order Q	AsOfIndicator (conditionally required)
Order R	SendingTime
Order S	DropCopyFlag
Order T	Account Type Q (Conditionally Required)

#### 3.2.2 Order Modification Drop Copy Data Requirements

When transmitting a drop copy of an order modification to the MFDC interface, the Member Firm proprietary system shall include the data fields listed in Table 4.

**Table 4. Required Drop-Copy Order Modification Fields**

Drop Copy Field	Description
Order Mod A	Order identifier that uniquely identifies the original order.
Order Mod B	Any modifications to data items Order E through Order K listed in Table 3.
Order Mod C	Any modifications to data items Order L through Order N listed in Table 3. (Optional)
Order Mod D	Data items Order O through Order R and Order T (if applicable) listed in Table 3.
Order Mod E	DropCopyFlag

**NOTE: Any transmitted data--other than what is described here--may be disregarded by the NYSE.**

### 3.2.3 Report Drop Copy Data Requirements

When transmitting a drop copy of an execution report to the MFDC interface, the Member Firm proprietary system shall include the data fields listed in Table 5.

**Table 5. Required Drop-Copy Report Fields**

Drop Copy Field	Description
Report A	Order identifier that uniquely identifies the order that was executed
Report B	Symbol
Report C	Number of shares or quantity of security
Report D	Transaction price
Report E	Time the trade was executed
Report F	Executing broker badge number, or alpha symbol of its (the submitter's) side of the trade
Report G	Executing broker badge number, or alpha symbol of the contra side of the trade
Report H	Clearing firm number or alpha symbol of its (the submitter's) side of the trade
Report I	Clearing firm number or alpha symbol of the contra side of the trade
Report J	Whether the account for which the order was executed was that of a member or of a non-member (includes the Q account type designation)
Report K	Identification of the member which recorded the order details
Report L	Date the order was entered into an Exchange system
Report M	Settlement instructions (optional)
Report N	Special trade indication, if any (optional)
Report O	Online Comparison System (OCS) Control Number (optional)

Drop Copy Field	Description
Report P	DropCopyFlag
Report Q	Side of Market

### 3.2.4 Report Modification Drop Copy Data Requirements

When transmitting a drop copy of an execution report modification to the MFDC interface, the Member Firm proprietary system shall include the data fields listed in Table 6.

**Table 6. Required Drop-Copy Report Modification Fields**

Drop Copy Field	Description
Report Mod A	Order identifier that uniquely identifies the order that was executed
Report Mod B	Indication as to whether this is a modification to a previously submitted report
Report Mod C	Any modifications to data items Report B through Report N and Report Q listed in Table 5.
Report Mod D (optional)	Online Comparison System (OCS) Control Number (of the original report)
Report Mod E	DropCopyFlag

### 3.3 Timestamp Requirements

Timestamps must include hours, minutes, and seconds in 24-hour format and have a granularity of one second. All timestamps shall adhere to the FIX UTCTimestamp or UTCTimeOnly format:

YYYYMMDD-HH:MM:SS (dash and colons required).

Universal Time Coordinated (UTC), previously known as Greenwich Mean Time (GMT), is the standard designation of time in the FIX protocol, and shall be the standard designation of time within the FESC.

All Member Firms must synchronize their system clocks with the UTC and must maintain the synchronization. Refer to the document NYSE *Common Access Point Member Firm Interface Specification* for synchronization methods.

## 4. MFDC Application FIX Messaging Interface

### 4.1 Drop-Copy Applicable FIX Messages

The Member Firm systems shall use FIX format (versions 4.1, 4.2, or higher), as amended by this document, when transmitting drop copies of orders, order modifications, reports, and report modifications to the MFDC interface.

The FIX Execution Report template is the only FIX application message type that a Member Firm may use to send a drop copy. The format and contents of the Execution Report message are presented in *Appendix A*.

The only message that a Member Firm may receive from FESC is a reject message. FIX 4.1 users will receive a session level reject (MsgType = 3). FIX 4.2 users will receive a Business Message Reject (MsgType j).

### 4.2 FIX Header Fields

On behalf of the NYSE, SIAC assigns a SenderCompID (FIX Tag 49) for all entering Member Firms. The SenderCompID tag is a required field in the FIX header that identifies the system that is source of the message. The assigned value is not the mnemonic of the submitting Firm. Firms that may interface with MFDC with more than one system would have an assigned SenderCompID for each interfacing system. Messages that do not have a valid SenderCompID are rejected back to the sender.

#### 4.2.1 FIX Tag 115

For the FESC Drop Copy application, Tag 115 (OnBehalfOfCompID) is designated as a required header field in all application messages for *all* submitting parties. This field must contain the mnemonic (as assigned by the NYSE) of the owning Member Firm (i.e., the Firm that owns or originates the message).

FIX defines Tag 115 as “assigned value used to identify the Firm originating the message if the message was delivered by a third party.” The use of Tag 115 typically applies to service bureaus. Its use for the MFDC interface allows Firms to interface with MFDC from multiple systems. Its usage for the MFDC interface is consistent with the NYSE CAP Interface standards.

Note: Tag 115 must be supplied in the header of all application messages transmitted to FESC. Tag 115 is not required in the header of any administrative messages (i.e., Logon, Resend, Heartbeat, etc.).

### 4.3 Timestamp Requirements

Definitions of all of the FESC-required timestamps are presented in Table 7.

The term timestamp as used in the following paragraphs, is defined as a **system-produced time** that is inserted into the various timestamp fields required by Rule 123.

**Table 7. FESC Drop Copy Timestamp Field Definitions**

Field Name	Messages to FESC Usage for Rule 123 Compliance	Field Description
FloorAvailableTime (UTCTimestamp)	Required for Order Drop Copy messages	<p>The time the details of an order or order modification are first displayed on or entered into a device on the NYSE trading floor. This time may be different from the time the Floor receives an order. For example, if the Floor receives an order via telephone and afterwards, enters it into a system, the FloorAvailableTime would be later than the time the order was received on the Floor. See also WriteInTime.</p> <p>For example, if an order is received on the Floor via telephone and is entered into the system afterwards, the system-produced FloorAvailableTime would be later than the time the order was actually received on the Floor. Any system used on the Floor to enter telephone orders for submission to FESC should allow for a WriteInTime.</p> <p>For 'dumb' devices, the time an order is sent to the Floor device is sufficient. A 'dumb' device is any terminal or printer that cannot send a positive acknowledgement to its host. For these device types, the FloorAvailableTime is the time the host delivered the order to that device. It is presumed that the system that delivered the order to the Floor device is the system that submits the order to FESC.</p> <p><i>This is the same as the TransactTime (Tag = 60) in the existing FIX Execution Report.</i></p> <p><i>Tag 60 is now an optional field in the FIX Execution Report template.</i></p> <p><i>This is a required field for drop copy messages.</i></p>
WriteInTime (UTCTimeOnly)	Optional for Order Drop Copy messages	<p>An additional field is provided in the Exchange's FESC database to accommodate a 'Write In' time. This field is optional and may be used in the case of a system failure or to indicate the actual time an order was received on the Floor if prior to the time that the order is actually recorded in the system. This field allows Members to synchronize their electronic order records with time-stamped paper tickets when used in situations such as system failures.</p> <p>Note that an AsOfIndicator flag must always be set when order details are being recorded late due to a system failure, regardless of whether a 'Write In' time is entered.</p> <p><i>This is an optional field for drop copy messages (Tag = 9404).</i></p>
SendingTime (UTCTimestamp)	Required for all Drop Copy	<p>A system produced timestamp of the time a drop copy of an order, order modification, report, or report modification is transmitted to the NYSE by a Firm's OMS.</p>

Field Name	Messages to FESC Usage for Rule 123 Compliance	Field Description
	messages	<i>Tag 52, SendingTime, is a required field in the existing FIX Message Header.</i>
NYSEReceiveTime (UTCTimestamp)	Required (Set by FESC)	The NYSE shall timestamp all drop copies with the time that drop copies are received by the NYSE (MFDC application). The NYSE shall not reject any messages based on time of receipt. See Reference 4 in Table 1 for further explanation.
TransactTime (UTCTimestamp)	Required for Report Drop Copy messages	A system produced timestamp of the time and date the trade was executed.

#### 4.4 Drop Copy-Specific User-Defined FIX Tags

This section describes the user-defined FIX tags that support the data requirements of Rule 123. The adoption of user-defined tags for this purpose was made on the recommendation of the FIX committee since these items are not universal to the financial industry. These tags include the DropCopyFlag, several tags specific to drop copy of orders (Rule 123e), and several tags specific to drop copy of reports (Rule 123f).

##### 4.4.1 Drop Copy Flag

The user-defined Drop Copy Flag is a required data field in all drop copy messages. Its specification, as defined on the FIX web site, is as follows:

Tag	Field/Msg	Field/Msg Description	Contact
9406	DropCopyFlag (string)	NYSE - Front End Systemic Capture (FESC) Field: A flag that indicates that a message is a drop copy. This flag is required in all drop copy messages. Value when tag is present = 'D'.	Michael Fissell SIAC

##### 4.4.2 Q Account Type

NYSE Information Memo #02-59, December 17, 2002, added a new “Q Account Type” designation. Firms are required to include this designation for trades that cover error positions in the firm’s error account. Tag 47 (Rule80A) would be the reasonable means for supplying this account type on a submission to FESC. However, the FIX specification does not specify Q as a valid account type and some FIX engines may reject messages that contain a “Q” in Tag 47. The user-defined field, OrderCapacity2 (Tag 9460) is to be used whenever an account type of “Q” is submitted to FESC.

When Tag 9460 is used, Tag 47 must not be in the message as this produces an ambiguity. The converse is also true. The message will be rejected if both Tag 47 and Tag 9460 are present.

### 4.4.3 User-Defined Tags for Drop Copy Order Messages

Table 8 describes the user-defined tags specific to drop copy of orders. These include tags for write-in-time and to indicate late-entered orders. In addition, user-defined tags that represent special order instructions have been defined for users of FIX 4.1.

FIX tags 21, 110, 111, 210 represent special instructions that, prior to FIX 4.2, were not allowed in the Execution Report message type but were allowed tags in New Order and New Order List message types. Because these tags represent data items that may be included in drop copy order data, they were added to the Execution Report template in FIX 4.2.

To provide compatibility for these tags for Member Firms using FIX 4.1, user-defined tags 9407, 9408, 9409, and 9410 have been defined. These tags correspond to tags 21, 110, 111, and 210 respectively.

**Table 8. User-Defined Tags for Drop Copy Order Messages**

As defined on the FIX website: <a href="http://www.fixprotocol.org">http://www.fixprotocol.org</a>			
Tag	Field/Msg	Field/Msg Description	Contact
9404	WriteInTime (UTCTimeOnly)	NYSE - Front End Systemic Capture Field (FESC): This is an optional field that may be used in case of a system failure or otherwise, to indicate the actual time an order was received on the Floor if prior to the time that the order is actually recorded in the system. This field allows members to synchronize their electronic order records with time-stamped paper tickets when used in situations such as system failures. Note that the 'AsOfIndicator' flag must always be set when order details are being recorded late due to a system failure, regardless of whether a WriteInTime is entered.	Michael Fissell SIAC
9405	AsOfIndicator (char)	NYSE - Front End Systemic Capture (FESC) Field: Conditionally required. A flag that is manually entered by a user to indicate that an order or order modification was represented at a point of sale on the NYSE trading floor before being entered into a system. Such orders and order modifications are referred to as 'late entered orders.' The AsOfIndicator should only be used in situations where orders are entered into a system late due to system failure. The AsOfIndicator must be transmitted to the NYSE with all late entered orders and order modifications and drop copies of such. Value when tag is present = 'A'.	Michael Fissell SIAC
9407	HandlInst	Same as Tag 21. Added as a user-defined field for inclusion in Execution Reports generated by FIX engine versions < 4.2 in support of the drop copy functionality.  Required in New Order and Cancel Replace messages – is considered a special instruction; Rule 123 states that special instructions in a drop copy are optional; the expectation is that special instructions will be included in the drop copy.	Avner Gelb SIAC
9408	MinQty	Same as Tag 110. Added as a user-defined field for inclusion in Execution Reports generated by FIX engine versions < 4.2 in support of the drop copy functionality.  Not required in New Order or Cancel Replace, but is considered a special instruction; Rule 123 states that special instructions in a drop copy are optional; the expectation is that special instructions will be included in the drop copy.	Avner Gelb SIAC
9409	MaxFloor	Same as Tag 111. Added as a user-defined field for inclusion in Execution Reports generated by FIX engine versions < 4.2 in support of the drop copy	Avner Gelb SIAC

As defined on the FIX website: <a href="http://www.fixprotocol.org">http://www.fixprotocol.org</a>			
Tag	Field/Msg	Field/Msg Description	Contact
		<p>functionality.</p> <p>Not required in New Order or Cancel Replace, but is considered a special instruction; Rule 123 states that special instructions in a drop copy are optional; the expectation is that special instructions will be included in the drop copy.</p>	
9410	MaxShow	<p>Same as Tag 210. Added as a user-defined field for inclusion in Execution Reports generated by FIX engine versions &lt; 4.2 in support of the drop copy functionality.</p> <p>Not required in New Order or Cancel Replace, but is considered a special instruction; Rule 123 states that special instructions in a drop copy are optional; the expectation is that special instructions will be included in the drop copy.</p>	Avner Gelb SIAC
9460	OrderCapacity2 (char)	<p>NYSE - Additional tag to represent a "Q" Account Type. Account Type "Q" indicates a trade to cover an error transaction. Valid Value = Q .</p> <p>Required on trades to cover an error position in the firm's error account.</p>	Jeanne Breuer SIAC

#### 4.4.4 User-Defined Tags for Drop Copy Report Messages

Table 9 lists user-defined tags specific to drop copy of reports. Also listed are user-defined tags previously specified for the FIX interface with CMS that have been adopted for report drop copy (Rule 123f).

Note: several of the fields specified by Rule 123f identify the participating firm/clearing firm; these identifiers must be the firm's mnemonic as assigned by the NYSE.

**Table 9. User-Defined Tags for Drop Copy Report Messages**

As defined on the FIX website: <a href="http://www.fixprotocol.org">http://www.fixprotocol.org</a>			
Tag	Field/Msg	Field/Msg Description	Contact
9454 (new)	ContraClrFirm (String)	<p>NYSE - Front End Systemic Capture Field (FESC): This is a required field when submitting a report drop copy.</p> <p>Specifies the clearing firm mnemonic (as assigned by the NYSE) of the contra side of a trade.</p>	Gerry Libretti SIAC
9431 (existing)	GiveUpID (String)	<p>This is a required field when submitting a report drop copy by FIX 4.1 users.</p> <p>Specifies the clearing firm mnemonic (as assigned by the NYSE) for settlement of its (the submitter's)</p>	Avner Gelb SIAC

As defined on the FIX website: <a href="http://www.fixprotocol.org">http://www.fixprotocol.org</a>			
Tag	Field/Msg	Field/Msg Description	Contact
		side of the trade. GiveUpID [9431] is for use in FIX 4.1 only and corresponds to tag ClearingFirm[439] in FIX 4.2.	
9455 (new)	EnteringFirm (String)	NYSE - Front End Systemic Capture (FESC) Field: This is a required field when submitting a report drop copy.  Specifies the mnemonic (as assigned by the NYSE) of the member or member organization which recorded the order details (as required by Rule 123e).	Gerry Libretti SIAC
9456 (new)	OrderRefDate (UTCDate)	NYSE - Front End Systemic Capture (FESC) Field: This is a required field when submitting a report drop copy.  Specifies the date the order was entered into an Exchange system.	Gerry Libretti SIAC
9457 (new)	OCSControlNum (String)	NYSE - Front End Systemic Capture (FESC) Field: This is an optional field when submitting a report drop copy.  Specifies the NYSE Online Comparison System (OCS) control number that is returned to the firm by OCS after submission of a side.	Gerry Libretti SIAC
9458 (new)	MajorBadge (String)	NYSE - Front End Systemic Capture (FESC) Field: This is a required field when submitting a report drop copy.  Specifies the badge number of the executing broker of its (the submitter's) side of the trade	Gerry Libretti SIAC
9441 (existing)	ContraTrader (String)	This is a required field when submitting a report drop copy by FIX 4.1 users.  Specifies the badge number of the executing broker of the contra side of the trade. ContraTrader [9441] is for use in FIX 4.1 only and corresponds to tag ContraTrader[337] in FIX 4.2.	Avner Gelb SIAC
9459 (new)	SpecialTradeInd (String)	NYSE - Front End Systemic Capture (FESC) Field: This is an optional field when submitting a report drop copy.  Indicates any special trade indication:  ' ' = Not a special trade 'X' = Special trade 'E' = Ex-clearing trade	Gerry Libretti SIAC
9460	OrderCapacity2 (char)	NYSE - Additional tag to represent a "Q" Account Type. Account Type "Q" indicates a trade to cover an error transaction. Valid Value = Q .  Required on trades to cover an error position in the firm's error account.	Jeanne Breuer SIAC

## 4.5 Messages from FESC to Member Firms

Rejects are the only messages that a Member Firm may receive from FESC. FIX 4.1 users will receive a session level reject (MsgType = 3). FIX 4.2 users will receive a Business Message Reject (MsgType j).

All messages received by FESC are validated to insure that the fields required by Rule 123e and 123f are present. In addition, content validation is performed where appropriate. Messages that fail the validations are rejected back to the submitter. All reject messages and the associated original message text are captured in an Error Log maintained by FESC.

Each rejection carries a code that specifies the condition that caused the reject. For FIX 4.1 users, the reject code is incorporated into the Text [58] field of the reject message. For FIX 4.2 users, the reject code is carried in Tag 380 of the Business Message Reject message.

Rejection conditions, the associated reject code, and whether the condition applies to drop copy order (O), and/or report (R) are listed in Table 10.

Refer to Section 7.1.4 for reject conditions applicable to e-Quote link messages.

Refer to Section 8.4.1 for reject conditions applicable to the Rule108Indicator in report messages.

**Table 10. FESC Message Rejection Conditions**

Condition	Reject Reason Code Tag 380	Applies To	Description
MsgType exception	101	O, R	Tag 35 is not equal to '8'
OnBehalfOfCompID exception	102	O, R	Tag 115 is missing or contains an invalid value
DropCopyFlag exception	103	O, R	Tag 9406 is missing or not equal to 'D'
ClOrdID exception	104	O, R	Tag 11 is missing or exceeds the maximum length of 22 characters
Symbol exception	105	O, R	Tag 55 is missing or contains an invalid value
SendingTime exception	106	O, R	Tag 52 is missing or not in Timestamp format
TransActTime exception	107	O, R	Tag 60 is missing or not in Timestamp format
ExecType exception	108	O, R	Tag 150 is missing or contains an invalid value
Order Capacity exception	109	O	Either Tag 47 or Tag 9460, if present, contains an invalid value



Condition	Reject Reason Code Tag 380	Applies To	Description
		R	Either Tag 47 or Tag 9460 is missing or contains an invalid value
OrderQty exception	110	O	Tag 38 is missing or contains an invalid value
Side exception	111	O, R	Tag 54 is missing or contains an invalid value
OrdType exception	112	O	Tag 40 is missing or contains an invalid value
Price exception	113	O	Tag 44 is missing for a limit OrdType or contains an invalid value
StopPx exception	114	O	Tag 99 is missing for a stop OrdType or contains an invalid value
OrigClOrdID exception	115	O	Tag 41 is missing for a cancel or cancel/replace message
TimeInForce exception	116	O	Tag 59, if present, contains an invalid value (absence of Tag 59 implies a day order)
LastShares exception	118	R	Tag 32 is missing or contains an invalid value
LastPx exception	119	R	Tag 31 is missing or contains an invalid value
MajorBadge exception	121	R	Tag 9458 is missing
ContraTrader exception	122	R	Tag 9441 (FIX 4.1) or Tag 337 (FIX 4.2) is missing
ClearingFirm exception	123	O	Tag 76, Tag 9431 (FIX 4.1) or Tag 439 (FIX 4.2) contains an invalid value
		R	Tag 9431 (FIX 4.1) or Tag 439 (FIX 4.2) is missing or contains an invalid value
ContraClrFirm exception	124	R	Tag 9454 is missing or contains an invalid value
EnteringFirm exception	125	R	Tag 9455 is missing or contains an invalid value
OrderRefDate exception	126	R	Tag 9456 is missing or is not in Date format
SettlmntType exception (if present in the message)	127	R	Tag 63 contains an invalid value (absence of Tag 63 implies regular way)
SpecialTradeInd exception (if present in the message)	128	R	Tag 9459 contains an invalid value
OrderCapacity2 exception	129	O, R	Tag 9460 contains an invalid value (must = Q)
OrderCapacity ambiguity	130	O, R	Tag 47 and Tag 9460 are both present in the message
Message cannot be processed	199	O, R	Message is unreadable and cannot be stored

### 4.5.1 Member Firms Using FIX 4.1

Although a rejection is generated at the application level, FESC sends the session level reject message to FIX 4.1 users. In order to identify the cause of the rejection and the identity of the rejected application message, the Text field (Tag = 58) contains the text illustrated in Figure 2.

**Figure 2. FESC Reject Message Text for FIX 4.1 Users**

```

FESC Reject****{reject code}****{contents of Tag
11}****{contents of Tag 37}
```

Tag 11 is ClOrdID; Tag 37 is OrderID. Note that the four asterisks are present as delimiters to facilitate parsing of the text by the receiving application.

The header and body tags to be included in the session level reject message are itemized in Table 11.

**Table 11. Reject Message to FIX 4.1 Users**

Reject Message Fields to be Populated			
Tag	Field Name	FIX Req'd	Comments
8	BeginString	Y	
9	BodyLength	Y	
34	MsgSeqNum	Y	
35	MsgType	Y	= 3
49	SenderCompID	Y	= FESC
52	SendingTime	Y	
56	TargetCompID	Y	Populated from Tag 49 (SenderCompID) of the message being rejected
128	DeliverToCompID	N	Populated from Tag 115 (OnBehalfOfCompID) of the message being rejected
129	DeliverToSubID	N	Populated from Tag 116 (OnBehalfOfSubID) of the message being rejected (if present)
145	DeliverToLocationID	N	Populated from Tag 145 if present in the header of the message being rejected
45	RefSeqNum	N	Populated from Tag 34 (MsgSeqNum) of the message being rejected
58	Text	N	See Figure 2

### 4.5.2 Member Firms Using FIX 4.2

Firms that communicate with FESC using FIX 4.2 may receive the FIX Business Message Reject message. The Text field (Tag 58) of the Business Message Reject contains the text illustrated in Figure 3.

**Figure 3. FESC Reject Message Text for FIX 4.2 Users**

```
FESC Reject****{contents of Tag 11}****{contents of Tag 37}
```

Tag 11 is ClOrdID; Tag 37 is OrderID. Note that the four asterisks are present as delimiters to facilitate parsing of the text by the receiving application.

In the Business Message Reject message, Tag 380 (BusinessRejectReason) contains the reject code that describes the reason for the rejection.

The header and body tags to be included in the Business Message Reject are listed in Table 12.

**Table 12. Business Message Reject Message to FIX 4.2 Users**

Business Message Reject Fields to be Populated			
NOTE: Sorted numerically by tag			
Tag	Field Name	FIX Req'd	Comments
8	BeginString	Y	
9	BodyLength	Y	
34	MsgSeqNum	Y	
35	MsgType	Y	= j (lower case); Business Message Reject
49	SenderCompID	Y	= FESC
52	SendingTime	Y	
56	TargetCompID	Y	Populated from Tag 49 (SenderCompID) of the message being rejected
128	DeliverToCompID	N	Populated from Tag 115 (OnBehalfOfCompID) of the message being rejected
129	DeliverToSubID	N	Populated from Tag 116 (OnBehalfOfSubID) of the message being rejected (if present)
145	DeliverToLocationID	N	Populated from Tag 145 if present in the header of the message being rejected

<b>Business Message Reject Fields to be Populated</b>			
NOTE: Sorted numerically by tag			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
45	RefSeqNum	N	Populated from Tag 34 (MsgSeqNum) of the message being rejected
58	Text	N	See Figure 3
372	RefMsgType	Y	Populated from Tag 35 (MsgType) of the message being rejected
380	BusinessRejectReason	Y	Refer to Table 10

### 4.5.3 Use of Tag 145

For both FIX 4.1 and FIX 4.2 users, Tag 145, DeliverToLocationID, is specified as an optional field that may be included in the header of input messages. It is intended as an additional routing field to support processing of rejects by submitting firms. Tag 145 will be included (turned around) in the header of the reject message if and only if the tag was supplied in the input message.

## 5. FESC Processing of FIX Drop Copy of Orders

### 5.1 Introduction

The use of the FIX Execution Report for transmitting drop copy order messages to FESC was not arbitrarily selected, but was adopted upon advice from the FIX Committee. It is based on the FIX dialog between the sending OMS and the receiving (Floor) OMS. Specifically:

When an order is sent, the Floor OMS responds with an order acknowledgement message (FIX Execution Report message, OrdStatus = Pending New). Upon receipt of the acknowledgement, the sending OMS may echo the acknowledgement to FESC.

When the order is accepted by the Floor broker, the Floor OMS sends an acceptance message (FIX Execution Report message, OrdStatus = New). Upon receipt of the acceptance message, the OMS may echo the acceptance message to FESC.

FESC accepts and processes both FIX Acknowledgement and Acceptance messages, although technically the Acceptance message is not required to be transmitted to the NYSE according to the Rule 123 filing.

Table 13 shows examples of the FIX messages for the following sequence of transactions:

1. Acknowledgement and Acceptance messages for a new order.
2. Acknowledgement and Acceptance messages for the cancel/replace of that order.
3. Acknowledgement and Acceptance messages for the cancel of the replacement order (simple cancel).

Note the values of ClOrdID (Tag 11) and OrigClOrdID (Tag 41).

**Table 13. Examples of Acknowledgement/Acceptance Messages**

Message/Action	Message Tags (partial)
<b>New Order</b>	
New order acknowledgement (when the Floor receives the order)	ClOrdID=1; OrderQty=1000; Price=150; Symbol=IBM; ExecType=PendingNew; OrdStatus=PendingNew; TransactTime=xxxxx
New order acceptance (when the Floor accepts the order)	ClOrdID=1; OrderQty=1000; Price=150; Symbol=IBM; ExecType=New; OrdStatus=New; TransactTime=xxxxx
<b>Cancel/Replace</b>	

Message/Action	Message Tags (partial)
Cancel/replace acknowledgement (when the Floor receives the cancel/replace)	ClOrdID=2;OrigClOrdID=1; OrderQty=1800; Price=150; Symbol=IBM; ExecType=PendingReplace; OrdStatus=PendingReplace; TransactTime=xxxxx
Cancel/replace acceptance (when the Floor accepts the cancel/replace)	ClOrdID=2;OrigClOrdID=1; OrderQty=1800; Price=150; Symbol=IBM; ExecType=Replaced; OrdStatus=Replaced; TransactTime=xxxxx
<b>Cancel</b>	
Cancel acknowledgement (when the Floor receives the cancel of the replacement order)	ClOrdID=3;OrigClOrdID=2; OrderQty=1800; Price=150; Symbol=IBM; ExecType=PendingCancel; OrdStatus=PendingCancel; TransactTime=xxxxx
Cancel acceptance (when the Floor accepts the cancel of the replacement order)	ClOrdID=3;OrigClOrdID=2; OrderQty=1800; Price=150; Symbol=IBM; ExecType=Cancelled; OrdStatus=Cancelled; TransactTime=xxxxx

Note: the cancel/replace acknowledgement in Table 13 uses the FIX 4.2 code value for ExecType and OrdStatus = E (PendingReplace). In FIX 4.1 the value is = 6 (PendingCancel/Replace). FESC is able to distinguish the difference.

Table 14 shows the values for three required fields (ExecTransType, OrdStatus, and ExecType) in the Execution Report that are used to define the actions/functions for order drop copy. These examples illustrate the doubling effect of issuing acknowledgements to the receipt of a message and another acknowledgment when the Floor accepts the message (Items numbers 1, 2, and 3).

**Table 14. Fields That Define FIX Functions/Actions**

Item	Action/Function	ExecTrans Type (Tag = 20)	OrdStatus (Tag = 39)	ExecType (Tag = 150)
1	New order acknowledgement (when the Floor receives the order)	New	PendingNew	PendingNew
	New order accept (when the floor accepted the order)	New	New	New
2	Cancel/replace (when the Floor receives the Cancel/Replace)	New	PendingCancel	PendingCancel
	Cancel/replace acceptance (when the Floor definitively accepts the change)	New	Replaced	Replaced
3	Cancel (when the Floor receives the cancel)	New	PendingCancel	PendingCancel
	Cancel acceptance (when the Floor definitively accepts the cancel)	New	Cancelled	Cancelled
4	Partial fill while order is still in pending cancel (replace) state	New	PendingCancel	PartiallyFilled
5	e-Quote Link Message	Status	New	New

## 5.2 Mapping of Required Order Drop Copy Fields to the FIX Execution Report Record

The mapping of the FESC fields to the FIX Execution Report record is delineated in Table 15. Except where noted, all fields are required or conditionally required.

Tag 18 (ExecInst) is an optional field for both Order J and Order L. This anomaly is due to the FIX definition of Tag 18 (i.e., it is a multi-value string that may contain codes to designate order handling on the Exchange floor).

Order K may be specified by setting “G” or “10b18” in Tag 58 if applicable.

Note that some FIX-required fields are not required by FESC. For these FIX-required fields, it will be necessary for the sending party to populate the FIX-required fields in order to satisfy the validation performed by the sending FIX engine.

**Table 15. Mapping Order Drop Copy Fields to FIX Execution Report Record**

FESC Order Drop Copy Data item		FIX ER Record	
(See Table 3.)			
Field	Description	FIX Tag	FIX Tag Name
Order A	Symbol	55 & 65	Symbol & SymbolSfx
Order B	Clearing organization (only to override the firm's default clearing firm as maintained by FESC – only for this order)	76 (see note)	ExecBroker
		9431 (FIX 4.1)	GiveUpID
		439 (FIX 4.2)	ClearingFirm
Order C	Order ID	11	CIOrdID (FESC defined maximum length is 22 characters)
Order D	Member Firm organization	115 <sup>in FIX header, only</sup>	OnBehalfOfCompID (in application messages only - Refer to section 4.2.1)
Order E	Quantity	38	OrderQty
Order F	Side of market	54	Side
Order G	Market, Limit, Stop, Stop Limit	40	OrdType
Order H	Limit price and/or stop price	44 and/or 99	Price, StopPx
Order I	Time in force	59	TimeInForce
Order J	Held or not held (optional)	18	ExecInst
Order K	Special conditions, e.g., Rule 10b-18 and G) (optional)	58	Text (there are no FIX fields that support special conditions for Rule 10b-18)
Order L	Special instructions, e.g., go along, percent of volume, and beat the VWAP (optional)	18	ExecInst
		21	HandlInst
		110	MinQty
		111	MaxFloor
		210	MaxShow
Order N	Data for new orders related to equity trades, as defined by the FIX specification (optional)	Various FIX tags, as needed, to represent the optional data	See FIX specification for the corresponding field names.
Order O	FloorAvailableTime	60	TransactTime
Order P	WriteInTime (optional)	9404	WriteInTime
Order Q	AsOfIndicator	9405	AsOfIndicator
Order R	SendingTime	52 <sup>in FIX header, only</sup>	SendingTime

FESC Order Drop Copy Data item		FIX ER Record	
(See Table 3.)			
Field	Description	FIX Tag	FIX Tag Name
Order S	DropCopyFlag	9406	DropCopyFlag
Order T	Account Type Q	9460	OrderCapacity2

Note: FIX 4.1 users may use Tag 9431 and FIX 4.2 users may use Tag 439 in place of Tag 76. This change is being made because the use of Tag 76 to specify an override to the default-clearing firm (as maintained by FESC) is not entirely in keeping with the FIX definition of Tag 76. However, Tag 76 will continue to be supported by FESC for this purpose in order to provide backward compatibility.

**Table 16. Mapping Order Modification Drop Copy Fields to Execution Report Record**

FESC Order Modification Drop Copy Data Item (See Table 4.)		FIX ER Record	
Field	Description	FIX Tag	FIX Tag Name
Order Mod A	Order identifier that uniquely identifies the order to be cancelled	41	OrigClOrdID (identifies the cancelled order; FESC defined maximum length is 22 characters)
Order Mod B	Any and all modifications to data items Order E through Order K	Use Table 15.	
Order Mod C	Any modifications to data items Order L through Order N (optional)	Use Table 15.	
Order Mod D	Data items Order O through Order T	Use Table 15.	

## 6. FESC Processing of FIX Drop Copy of Reports

The FIX Execution Report is to be used for transmitting drop copy report messages to FESC. The report drop copy message adapts a subset of the full context of the FIX Execution Report message and includes user-defined tags (refer to Table 9).

### 6.1 FESC Processing of FIX Drop Copy of Reports

The inclusion of the OCS Control Number in the Rule 123f specification requires that the report submission to FESC derive from the Firm's submission to OCS. Because an OCS submission is one side of a trade (one executing broker and one contra), the report drop copy message is also the submission of one side of a trade along with the additional data required by Rule 123f.

Table 17 shows the values for the three fields (ExecTransType, OrdStatus, and ExecType) in the Execution Report message that are used to specify a report drop copy.

**Table 17. Fields that Define FIX Functions/Actions for Report Drop Copy**

Item	Action/Function	ExecTrans Type (Tag = 20)	OrdStatus (Tag = 39)	ExecType (Tag = 150)
1	Fill	New	Filled	Filled
2	Partial fill	New	PartiallyFilled	PartiallyFilled
3	Price correction	Correct	PartiallyFilled/Filled	PartiallyFilled/Filled
4	Busted trade	Cancel	PartiallyFilled/Filled	PartiallyFilled/Filled
5	Fill information change	Correct	PartiallyFilled/Filled	PartiallyFilled/Filled

### 6.2 Mapping of Required Report Drop Copy Fields to the FIX Execution Report record

The mappings of the report drop copy fields to the FIX Execution Report record for report drop copies are delineated in Table 18 and Table 19.

Note that some FIX-required fields are not required by FESC. For these FIX-required fields, it will be necessary for the sending party to populate the FIX-required fields in order to satisfy the validation performed by the sending FIX engine.

Note: Table 18 identifies the Rule 123f fields that are optional. All other fields are required.

**Table 18. Report Drop Copy Data Element Mapping to FIX**

FESC Report Drop Copy Data Element		FIX ER Record	
(See Table 5.)			
Field	Description	FIX Tag	FIX Tag Name
Report A	Order identifier that uniquely identifies the order that was executed	11	ClOrdID
Report B	Symbol	55 65	Symbol SymbolSfx
Report C	Number of shares or quantity of security	32	LastShares
Report D	Transaction price	31	LastPx
Report E	Time the trade was executed	60	TransactTime (UTCTimestamp)  The time and date of the trade
Report F	Executing broker badge number of its (the submitter's) side of the trade	9458	MajorBadge
Report G	Executing broker badge number of the contra side of the trade	9441	ContraTrader (FIX 4.1)
		337	ContraTrader (FIX 4.2)
Report H	Clearing firm mnemonic as assigned by the NYSE of its (the submitter's) side of the trade	9431	GiveUpID (FIX 4.1)
		439	ClearingFirm (FIX 4.2)
Report I	Clearing firm mnemonic as assigned by the NYSE of the contra side of the trade	9454	ContraClrFirm
Report J	Whether the account for which the order was executed was that of a member or non-member	47	Rule80A (values A thru Z with the exception of G, Q, S, V)
		9460	OrderCapacity2 (value Q only)
Report K	Identification of the member or member organization which recorded the order details	9455	EnteringFirm (Firm mnemonic as assigned by the NYSE)
Report L	Date the order was entered into an Exchange system	9456	OrderRefDate
Report M	Settlement instructions (optional)	63	SettlmntType
Report N	Special trade indication, if any (optional)	9459	SpecialTradeInd
Report O	Online Comparison System (OCS) Control Number (optional)	9457	OCSCtrlNum
Report P	Drop Copy Flag	9406	DropCopyFlag

FESC Report Drop Copy Data Element		FIX ER Record	
(See Table 5.)			
Field	Description	FIX Tag	FIX Tag Name
Report Q	Side of Market	54	Side
Report R	DBK Report Link ID	9483	DBKLinkID Required in reports against orders that underlie an e-Quote (also required in busts and changes to reports)
Report S	Rule108Indicator and sponsoring broker badge	9436	MemoAB Refer to Section 8.

**Table 19. Report Modification Drop Copy Data Element Mapping to FIX**

FESC Report Modification Drop Copy Data Element		FIX ER Record	
(See Table 6.)			
Field	Description	FIX Tag	FIX Tag Name
Report Mod A	Order identifier that uniquely identifies the order that was executed	11	CIOrdID
Report Mod B	Indication as to whether this is a modification to a previously submitted report	20	ExecTransType = '2' (Correct) for any report modification (corrected price or report change) = '1' (Cancel) for a Bust
Report Mod C	Any modifications to data items Report B through Report N and Report Q	Use Table 18	
Report Mod D (optional)	Online Comparison System (OCS) Control Number	9457	OCSCControlNum
Report Mod E	Drop Copy Flag	9406	DropCopyFlag
Report Mod F	Rule108Indicator and sponsoring broker badge	9436	MemoAB Refer to Section 8.

## 7. Hybrid Market e-Quote Data Submission

This section of the Member Firm FESC Drop Copy Interface Specification addresses the data submission requirements associated with the NYSE Hybrid Market e-Quote<sup>sm</sup> initiative. These requirements are:

- e-Quote<sup>sm</sup> Link Message, which is a new requirement for FESC submissions and contains the order identifiers that underlie an e-Quote<sup>sm</sup>.
- Display Book Report Link ID (DBKLinkID), which is a new data field to be included in the submission to FESC of reports against orders that underlie an e-Quote.

### 7.1 e-Quote Link Messages

For each e-Quote<sup>sm</sup> submitted to Display Book by the OMS via CMS, there must be a corresponding e-Quote<sup>sm</sup> link message transmitted to FESC Drop Copy. The link message must contain an e-Quote<sup>sm</sup> identifier, a layer link identifier (to associate the layers of the e-Quote - even if there is only one layer), and the list of order ID's that underlie the e-Quote. These underlying order IDs should have been transmitted previously to FESC as part of the normal Rule 123e requirement.

FESC requires the e-Quote ID in the link message so that a link message can be associated with the e-Quote sent via CMS (the e-Quote submission to Display Book must also contain the e-Quote ID and the layer link ID). In addition, if there is a change (add or remove) of the orders that underlie the e-Quote, a revised link message must be transmitted.

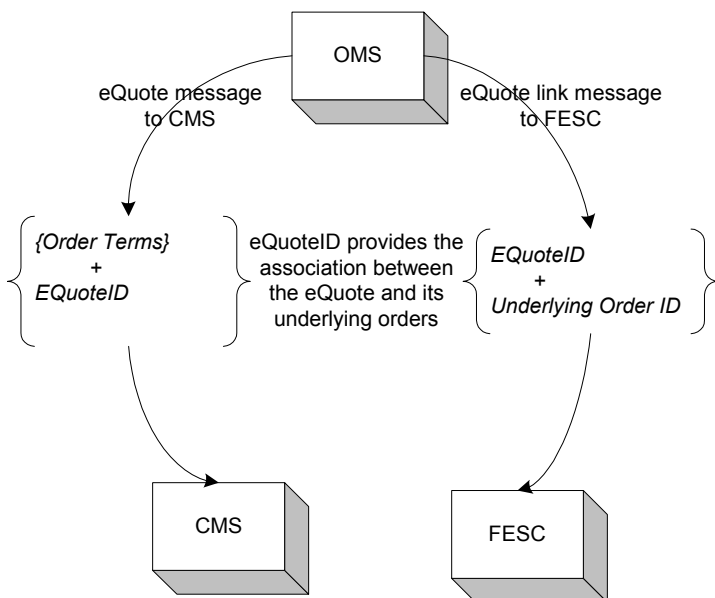
As a general rule, any modifications to an e-Quote or an e-Quote layer that generates a replacement e-Quote (has a new e-Quote ID), requires transmission of a new e-Quote link message referencing that new e-Quote ID.

Note that a layered e-Quote is actually an e-Quote for each price point (i.e., one order message to CMS for each price point). The layer link ID for each layer has the same value, which "links" the layers of the layered e-Quote. For example, for a 2-layer e-Quote:

- Layer 1 is assigned e-Quote ID = EQID1;
- Layer 2 is assigned e-Quote ID = EQID2;
- Both Layer 1 and Layer 2 are assigned layer link ID LLID123.

Note that e-Quotes are not required to be transmitted to FESC Drop Copy. Note also that a canceled eQuote does not require the submission of a link message.

Figure 4 depicts how the e-Quote ID associates the e-Quote with its underlying order ID's.



**Figure 4. Association of an e-Quote with its Underlying Order ID**

### 7.1.1 FESC Processing of e-Quote Link Messages

The FIX e-Quote link message to be submitted by Firms is specified by the contents of the FIX tags, ExecTransType[20], OrdStatus[39], and ExecType[150]. The tag values that specify the link message are itemized in Table 20.

**Table 20. FIX Field Values that Specify an e-Quote Link Message**

Action/Function	ExecTrans Type (Tag = 20)	OrdStatus (Tag = 39)	ExecType (Tag = 150)
Link Message	Status (= '3')	New (='0')	New (='0')

### 7.1.2 FIX User-Defined Tags for e-Quote Link Messages

The e-Quote link message sent by Firms to FESC Drop Copy is to be transmitted in a FIX Type 8 (Execution Report) message that carries the linking information associated with e-Quotes. New user-defined tags have been defined for the link message. These fields are itemized in Table 21.

**Table 21. FIX User-Defined Fields in the e-Quote Link Message**

As defined on the FIX website: <a href="http://www.fixprotocol.org/">http://www.fixprotocol.org/</a>			
Tag	Field/Msg	Field/Msg Description	Contact
9481	eQuoteID	Unique identifier of the e-Quote – must be unique within broker badge – associates the e-Quote with its underlying orders	Jeanne Bueuer SIAC
9482	LayerLinkID	Unique identifier – must be unique within broker badge – associates the layers of an e-Quote  Required for both layered and non-layered e-Quotes	Jeanne Bueuer SIAC
9448	BrokerBadgeNo	Introducing broker badge	Jeanne Bueuer SIAC
9406	DropCopyFlag	Must = 'D'	Michael Fissell SIAC
9484	NumULID	Number of repeats in the repeating group	Jeanne Bueuer SIAC
9450	ParentOrdXrefID	First field in the repeating group.  Proprietary OMS Firm Symbol and Order ID – one occurrence for each order that underlies an e-Quote	Jeanne Bueuer SIAC
9485	ULProprietaryCode	Second field in the repeating group.  Indicates whether the underlying order ID is the ID of a proprietary OMS or not  '0' → not a proprietary ID '1' → is a proprietary ID	Jeanne Bueuer SIAC
9486	ULDisposeCode	Third field in the repeating group.  Indicates the disposition of the order ID; supports the ability to add or remove orders that underlie the e-Quote  'C' → current ID 'R' → remove the ID 'X' → delete the ID	Jeanne Bueuer SIAC

### 7.1.3 FIX e-Quote Link Message Fields

The FIX Type 8 message contains a number of FIX-required fields, some of which are not applicable to the link message. These fields must be included in the message to satisfy FIX validations, but they need only be populated with a value that satisfies the FIX data type requirements. Table 22 lists the fields of the e-Quote link message.

**Table 22. FIX e-Quote Link Message Fields**

FIX Tag	Field Name	Usage in the Link Message	FIX Req'd	Link Msg Req'd
<b>Header Tags</b>				
8	BeginString	FIX Header	Y	Y
9	BodyLength	FIX Header	Y	Y
34	MsgSeqNum	FIX Header	Y	Y
35	MsgType	FIX Header	Y	Y
49	SenderCompID	FIX Header	Y	Y
52	SendingTime	FIX Header	Y	Y
56	TargetCompID	FIX Header	Y	Y
115	OnBehalfOfCompID	FIX Header	N	Y
145	DeliverToLocationID	FIX Header	N	N
<b>Body Tags</b>				
6	AvgPx	Any valid value	Y	N
14	CumQty	Any valid value	Y	N
17	ExecID	Set = '0' (as per FIX spec when Tag 20 = '3')	Y	N
20	ExecTransType	Must = '3' (Status)	Y	Y
37	OrderID	Any valid value	Y	N
39	OrdStatus	Set = '0' (New)	Y	Y
54	Side	Any valid value	Y	N
55	Symbol	StockSymbol	Y	Y
60	TransactTime	Time of link message creation (UTCTimestamp)	N	Y
65	SymbolSfx	Symbol suffix – conditionally required	N	N
97	PossResend	Application Poss Dup	N	N
150	ExecType	Set = '0' (New)	Y	Y
151	LeavesQty	Any valid value	Y	N
9481	eQuoteId	Unique identifier of the e-Quote – must be unique within broker badge – associates the e-Quote with its underlying orders	N	Y
9482	LayerLinkId	Unique identifier – must be unique within broker badge – associates the layers of an e-Quote Required for both layered and non-layered e-Quotes Refer to Note 1	N	Y
9448	BrokerBadgeNo	Introducing broker badge	N	Y
9406	DropCopyFlag	Must = 'D'	N	Y

FIX Tag	Field Name		Usage in the Link Message	FIX Req'd	Link Msg Req'd
9484	NumULID		Number of repeats in the repeating group	N	Y
→	9450	ParentOrdXrefID	Firm Symbol and Order ID – one occurrence for each order that underlies an e-Quote; the Firm Symbol represents the firm that “owns” the underlying order (may not necessarily be the firm submitting the link message) Refer to Note 2	N	Y
→	9485	ULProprietaryCode	Indicates whether the underlying order ID is the ID of a proprietary OMS or not  '0' → not a proprietary ID '1' → is a proprietary ID	N	Y
→	9486	ULDisposeCode	Indicates the disposition of the order ID; supports the ability to add or remove orders that underlie the e-Quote  'C' → current ID 'R' → remove the ID 'X' → delete the ID  If an e-Quote is rejected by the NYSE Host Systems the link message must be resent with a dispose code of X for each underlying order.	N	Y

Note 1: Each layer of a layered e-Quote carries the same Layer Link ID.

Note 2: The contents of Tag 9450 must contain a valid NYSE Member Firm Mnemonic followed by one space, followed by the Underlying Order Id.

### 7.1.4 Link Message Reject Conditions

All link messages received by FESC are validated to insure that the required fields are present. In addition, content validation is performed where appropriate. Messages that fail the validations are rejected back to the submitter. All reject messages and the associated original message text are captured in an Error Log maintained by FESC.

Each rejection carries a code that specifies the condition that caused the reject. For FIX 4.1 users, the reject code is incorporated into the Text [58] field of the reject message. For FIX 4.2 users, the reject code is carried in Tag 380 of the Business Message Reject message.

Rejection conditions and the associated reject code are listed in Table 23.

**Table 23. Link Message Reject Conditions**

Condition	Reject Reason Code Tag 380	Applies To	Description
ParentOrdXrefID exception	131	Link	Firm Symbol in Tag 9450 is not a valid NYSE mnemonic
ParentOrdXrefID exception	132	Link	Order ID in Tag 9450 contains invalid data or field length is invalid (0 or greater than 22 characters)
ULProprietaryCode exception	133	Link	Tag 9485 contains an invalid value (must be = '0' or '1')
ULDisposeCode exception	134	Link	Tag 9486 contains an invalid value (must be = 'C' or 'R')
LayerLinkID exception	135	Link	Tag 9482 is missing, contains an invalid value, or exceeds the maximum length of 10-characters
eQuoteID exception	136	Link	Tag 9481 is missing, contains an invalid value, or exceeds the maximum length of 10-characters
BrokerBadgeNo exception	137	Link	Tag 9448 is missing or contains an invalid value (not numeric)
NumULID	138	Link	Tag 9484 is missing, is not numeric, or is negative

## 7.2 Reports Against Underlying Orders

When an e-Quote is executed at the Post, the execution report transmitted by Display Book to the Order Management System (OMS) that submitted the e-Quote will contain a new field referred to as the DBK Link ID. When the OMS allocates a quantity to one or more of the orders underlying that e-Quote, the DBK Link ID must be included in the allocated reports.

The FIX Execution Report message submitted to FESC Drop Copy is modified to include the DBK Link ID. The DBK Link ID must be included in all reports allocated to orders that underlie an e-Quote. The DBKLinkID is a new FIX user-defined field as specified in Table 24.

**Table 24. FIX User-Defined Field for Reports against Orders Underlying an e-Quote**

Tag	Field/Msg	Field/Msg Description	Contact
9483	DBKLinkId	Unique identifier assigned by Display Book - enables reports against underlying orders to be linked to the e-Quote execution report	Jeanne Bueuer SIAC

### 7.2.1 Report Message Reject Conditions

The reject condition for Report messages that carry the DBKLinkID is itemized in Table 25.

**Table 25. DBKLinkID Reject Condition**

Condition	Reject Reason Code Tag 380	Applies To	Description
DBKLinkID	139	Report	Tag 9483 is not numeric or is negative

## 8. Rule 108 and Miscellaneous Data Submission

This section of the Member Firm FESC Drop Copy Interface Specification addresses the data submission requirements associated with the modifications to NYSE Rule 108 and the capture of the Sponsoring/Witnessing Broker Badge. These requirements are specified as additional to the data submissions for NYSE Rule 123f.

### 8.1 Rule 108 Indicator

The Exchange interprets NYSE Rule 108(a) as permitting a specialist to be on parity with orders in the Crowd when the specialist is establishing or increasing his or her position, provided that the brokers representing orders in the Crowd permit the specialist to trade along with them by not objecting to such participation. In accordance with Information Memo 05-81 published on October 26th 2005, the Floor Broker must document his or her objection/agreement at the time a report execution is issued for an order and must keep appropriate records of their objection/agreement pursuant to Securities Exchange Act Rule 17a-3 and NYSE Rule 440. This objection/agreement designation is termed the Rule108Indicator and is required on all Rule 123f report and report correction messages.

### 8.2 Badge Capture

Today, new members upon election to membership, and after successfully completing the New Member Orientation Program may make bids, offers and execute orders on the Trading Floor only with the direct supervision of another member who meets white badge requirements and is not a party to the transaction. The NYSE has been asked to track the sponsoring/witnessing broker for all new members beginning to transact on the Trading Floor. This indication is optional and is to be entered during report entry.

### 8.3 Data Submission Requirements

Proprietary firms will submit the Rule108Indicator and Sponsoring Badge in FIX Tag 9436[MemoAB]. This will be a required tag on all Rule 123f report and report modification submissions. The MemoAB field is a FIX user-defined field as specified in Table 26.

**Table 26 FIX User-Defined MemoAB Field for Reports**

Tag	Field/Msg	Field/Msg Description	Contact
9436	MemoAB	FCS Report - Line 4B, Field 56; 1-10 alphanumeric characters; 4 characters for Memo A and 6 for Memo B; a period will be returned by CMS for any character not entered.  FIX.4.1 Format: Char FIX.4.2 Format: String	G. Liu SIAC

The MemoAB field was defined for the NYSE FIX interface with CMS and will be used for the new Rule 108/Badge capture requirement. For the Rule 123f submission, the MemoAB field is defined as a six-byte string with the positions and values as itemized in Table 27.

**Table 27 MemoAB Byte Positions and Values**

1	2	3	4	5	6
<b>Sponsoring Badge</b>				<b>Rule108Indicator</b>	
Badge is a one to four byte numeric field, right justified and zero filled (i.e., 0099, 0155). These positions should be set to blanks when there is no badge to be reported.				Rule108Indicator is a two byte alpha field. Valid values: 'NP' → No Parity 'P ' or ' P' → Parity (See note) ' ' (blanks) → when not applicable (i.e., for reports against the parent of an order that had been CAP'd or reports against orders underlying an eQuote)	

Note:

Attention Proprietary OMS Vendors that route orders to the NYSE e-Broker: The OMS (Order Management System) specification has defined a bit flag to indicate No Parity (On) or Parity (Off). It is the responsibility of the receiving OMS to interpret this bit setting and convert its value to either 'NP' (No Parity) or 'P\_' (Parity) prior to submission to FESC.

## 8.4 Data Validation

Content validation will be performed by the FESC Drop Copy application. Only alphanumeric characters and blanks are valid. Also, the application will validate the contents of the Rule108Indicator positions. Tag 9436 should be set to six-blanks when no badge is to be reported and the Rule108Indicator does not apply.

### 8.4.1 MemoAB Reject Conditions

The reject conditions for the MemoAB field are itemized in Table 28.

**Table 28 MemoAB Reject Conditions**

Condition	Reject Reason Code Tag 380	Applies To	Description
MemoAB[9436]	140	Report	Reason text: Tag 9436 contains invalid data (not alphanumeric characters or blanks)
Substr(MemoAB,5,2)	141	Report	Reason text:



			Bytes 5 and 6 of Tag 9436 do not contain the Rule108Indicator specified values ('NP', 'P', 'P', or ' ' (blanks)
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## 9. Other Considerations

### 9.1 Message Flow Control

If message flow control is used, it is implemented between the engine in the NYSE CAP network and the MFDC application interface, as illustrated in Figure 1. It is transparent to the Member Firms.

### 9.2 Acknowledgement of Drop Copy Message

The MFDC application of FESC does not acknowledge messages received from the Member Firms (no application-level acknowledgements). FESC relies on the FIX-defined session protocol for gap detection. The following paraphrases the FIX specification.

The FIX protocol operates under an optimistic' model, i.e., normal delivery of data is assumed (no acknowledgement of individual messages) with errors in delivery identified by message sequence number gaps.

Gap detection resides with the communicating FIX engines (see Figure 1).

## Appendix A. FIX Templates - Format and Content

**Table 29. Message Header (Sorted Numerically by Tag)**

<b>Message Header</b>			
NOTE: Sorted numerically by tag			
<b>Tag</b>	<b>Field Name</b>	<b>Req'd</b>	<b>Comments</b>
8	BeginString	Y	<i>(Always unencrypted, must be first field in message)</i>
9	BodyLength	Y	<i>(Always unencrypted, must be second field in message)</i>
34	MsgSeqNum	Y	<i>(Can be embedded within encrypted data section)</i>
35	MsgType	Y	<i>(Always unencrypted, must be third field in message)</i>
43	PossDupFlag	N	Always required for retransmitted messages, whether prompted by the sending system or as the result of a resend request <i>(can be embedded within encrypted data section)</i>
49	SenderCompID	Y	<i>(Always unencrypted)</i>
50	SenderSubID	N	<i>(Can be embedded within encrypted data section)</i>
52	SendingTime	Y	<i>(Can be embedded within encrypted data section)</i>
56	TargetCompID	Y	<i>(Always unencrypted)</i>
57	TargetSubID	N	'ADMIN' reserved for administrative messages not intended for a specific user <i>(can be embedded within encrypted data section)</i>
90	SecureDataLen	N	Required to identify length of encrypted section of message <i>(always unencrypted)</i>
91	SecureData	N	Required when message body is encrypted. Always immediately follows SecureDataLen field.
97	PossResend	N	Required when message may be duplicate of another message sent under a different sequence number <i>(can be embedded within encrypted data section)</i>
115	OnBehalfOfCompID	N	Trading partner company ID used when sending messages via a third party <i>(can be embedded within encrypted data section)</i>
116	OnBehalfOfSubID	N	Trading partner SubID used when delivering messages via a third party <i>(can be embedded within encrypted data section)</i>
122	OrigSendingTime	N	Required for message resends. If data is not available set to same value as SendingTime <i>(can be embedded within encrypted data section)</i>
128	DeliverToCompID	N	Trading partner company ID used when sending messages via a third party <i>(Can be embedded within encrypted data section)</i>
129	DeliverToSubID	N	Trading partner SubID used when delivering messages via a third party <i>(can be embedded within encrypted data section)</i>
142	SenderLocationID	N	Trading partner LocationID (i.e. geographic location and/or desk) <i>(Can be embedded within encrypted data section)</i>

<b>Message Header</b>			
NOTE: Sorted numerically by tag			
Tag	Field Name	Req'd	Comments
143	TargetLocationID	N	Trading partner LocationID (i.e., geographic location and/or desk) <i>(can be embedded within encrypted data section)</i>
144	OnBehalfOfLocationID	N	Trading partner LocationID (i.e. geographic location and/or desk) used when delivering messages via a third party <i>(can be embedded within encrypted data section)</i>
145	DeliverToLocationID	N	Trading partner LocationID (i.e. geographic location and/or desk) used when delivering messages via a third party <i>(can be embedded within encrypted data section)</i>

**Table 30. Message Header (FIX-Required and FESC-Required Fields)**

<b>Message Header</b>			
NOTE: FIX required fields			
Tag	Field Name	Req'd	Comments
8	BeginString	Y	<i>(Always unencrypted, must be first field in message)</i>
9	BodyLength	Y	<i>(Always unencrypted, must be second field in message)</i>
34	MsgSeqNum	Y	<i>(Can be embedded within encrypted data section.)</i>
35	MsgType	Y	<i>(Always unencrypted, must be third field in message)</i>
49	SenderCompID	Y	<i>(Always unencrypted)</i>
52	SendingTime	Y	<i>(Can be embedded within encrypted data section.)</i>
56	TargetCompID	Y	<i>(Always unencrypted)</i>
115	OnBehalfofCompID	Y	<i>(Can be embedded within encrypted data section)</i>

**Table 31. Message Trailer (Sorted Numerically by Tag)**

<b>Message Trailer</b>			
NOTE: Sorted numerically by tag			
Tag	Field Name	Req'd	Comments
10	Checksum	Y	<i>(Always unencrypted, always last field in message)</i>
89	Signature	N	<i>NOTE: Not to be included within SecureDataField</i>
93	SignatureLength	N	Required when trailer contains signature; <i>NOTE: Not to be included within SecureData field</i>

**Table 32. Message Trailer (FIX Required Fields)**

<b>Message Trailer</b>			
------------------------	--	--	--



NOTE: FIX required fields			
Tag	Field Name	Req'd	Comments
10	Checksum	Y	<i>(Always unencrypted, always last field in message)</i>

**Table 33. Execution Report (Sorted Numerically by Tag)**

Note: Tags required by FIX but not required by FESC may be populated in order to satisfy validation performed by the sending FIX engine.

Conversely, some tags not required by FIX are required by FESC.

<b>Execution Report</b>			
NOTE 1: Sorted numerically by tag			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
	<i>Standard Header</i>	Y	MsgType = 8
1	Account	N	Required for executions against electronically submitted orders which were assigned an account by the institution
6	AvgPx	Y	
11	ClOrdID	N	Required for executions against electronically submitted orders that were assigned an ID by the institution; not required for orders manually entered by the broker
12	Commission	N	
13	CommType	N	
14	CumQty	Y	Currently executed shares for chain of orders
15	Currency	N	
17	ExecID	Y	
18	ExecInst	N	Can contain multiple instructions, space delimited
19	ExecRefID	N	Required for Cancel and Correct ExecTransType messages
20	ExecTransType	Y	
21	HandlInst	Y	Required in New Order – is considered a special instruction; Rule 123 states that special instructions in a drop copy are optional; the expectation is that special instructions will be included in the drop copy Tag 9407 in FIX 4.1
22	IDSource	N	
29	LastCapacity	N	
30	LastMkt	N	
31	LastPx	Y	Price of this (last) fill. Not required for ExecTransType = 3 (Status), Should represent the “all-in” (LastSpotRate + LastForwardPoints) rate for F/X orders.
32	LastShares	Y	Quantity of shares bought/sold on this (last) fill. Not required ExecTransType = 3 (Status).



<b>Execution Report</b>			
NOTE 1: Sorted numerically by tag			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
37	OrderID	Y	OrderID is required to be unique for each chain of orders.
38	OrderQty	Y	
39	OrdStatus	Y	Describes the current state of a CHAIN of orders, same scope as OrderQty, CumQty, LeavesQty, and AvgPx
40	OrdType	N	
41	OrigCOrdID	N	Conditionally required for PendingCancel, Replaced, and Canceled ExecType values. COrdID of the previous order (NOT the initial order of the day) when canceling or replacing an order.
44	Price	N	Required if specified on the order
47	Rule80A (aka OrderCapacity)	N	
48	SecurityID	N	
54	Side	Y	
55	Symbol	Y	
58	Text	N	
59	TimeInForce	N	Absence of this field indicates Day Order
60	TransActTime	N	The time an order or order modification is first displayed on or entered into a floor device.  <i>This is the same as the FloorAvailableTime required by the FESC.</i>  <i>There are no specific timestamp requirements for reports and report modifications. However, Tag 60, TransactTime, is proposed to be a required field to indicate the time of the trade for fills.</i>  <i>Tag 60 is now an optional field in the report template.</i>
63	SettlmntTyp	N	Absence of this field is interpreted as Regular.
64	FutSettDate	N	Required when SettlmntTyp = 6 (Future) or SettlmntTyp = 8 (Sellers Option)
65	SymbolSfx	N	
66	ListID	N	Required for executions against orders that were submitted as part of a list.
75	TradeDate	N	Used when reporting other than current day trades.
76	ExecBroker	N	Used for Firm identification in third-party transactions.
99	StopPx	N	Required if specified on the order
103	OrdRejReason	N	For optional use with ExecType = 8 (Rejected)
106	Issuer	N	

<b>Execution Report</b>			
NOTE 1: Sorted numerically by tag			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
107	SecurityDesc	N	
109	ClientID	N	Used for Firm identification in third-party transactions.
110	MinQty	N	Not required in New Order, but is considered a special instruction; Rule 123 states that special instructions in a Drop Copy are optional; the expectation is that special instructions will be included in the Drop Copy – Tag 9408 in FIX 4.1
111	MaxFloor	N	Not required in New Order, but is considered a special instruction; Rule 123 states that special instructions in a Drop Copy are optional; the expectation is that special instructions will be included in the Drop Copy – Tag 9409 in FIX 4.1
113	ReportToEach	N	
119	SettlCurrAmt	N	Used to report results of foreign exchange accommodation trade
120	SettlCurrency	N	Used to report results of foreign exchange accommodation trade
126	ExpireTime	N	Required if TimeInForce = GTD
150	ExecType	Y	Describes the type of execution report. Same possible values as OrdStatus.
151	LeavesQty	Y	Amount of shares open for further execution. If the OrdStatus is Canceled, DoneForTheDay, Expired, Calculated, or Rejected (in which case the order is no longer active) then LeavesQty could be 0, otherwise LeavesQty = OrderQty - CumQty.
155	SettlCurrFxRate	N	Foreign exchange rate used to compute SettlCurrAmount from Currency to SettlCurrency
156	SettlCurrFxRateCalc	N	Specifies whether the SettlCurrFxRate should be multiplied or divided
167	SecurityType	N	Must be specified if a Future or Option. If a Future: Symbol, SecurityType, and MaturityMonthYear are required. If an Option: Symbol, SecurityType, MaturityMonthYear, PutOrCall, and StrikePrice are required.
194	LastSpotRate	N	Applicable for F/X Orders
195	LastForwardPoints	N	Applicable for F/X Orders
198	SecondaryOrderID	N	Can be used to provide Order id used by exchange or executing system.
200	MaturityMonthYear	N	For Options or Futures to specify the month and year of maturity.
201	PutOnCall	N	For Options.
202	StrikePrice	N	For Options.



<b>Execution Report</b>			
NOTE 1: Sorted numerically by tag			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
205	MaturityDay	N	For Options or Futures and can be used in conjunction with MaturityMonthYear to specify a particular maturity date.
306	OptAttribute	N	For Options.
207	SecurityExchange	N	Can be used to identify the security.
210	MaxShow	N	Not required in New Order, but is considered a special instruction; Rule 123 states that special instructions in a drop copy are optional; the expectation is that special instructions will be included in the drop copy – Tag 9410 in FIX 4.1
211	PegDifference	N	Required if specified on the order
	<i>Standard Trailer</i>	Y	

**Table 34. Execution Report (Sorted Alphabetically by Field Name)**

Note: Tags required by FIX but not required by FESC may be populated in order to satisfy validation performed by the sending FIX engine.

Conversely, some tags not required by FIX are required by FESC.

<b>Execution Report</b>			
NOTE 1: Sorted alphabetically by field name			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
	<i>Standard Header</i>	Y	MsgType = 8
1	Account	N	Required for executions against electronically submitted orders which were assigned an account by the institution
6	AvgPx	Y	
109	ClientID	N	Used for Firm identification in third-party transactions.
11	ClOrdID	N	Required for executions against electronically submitted orders that were assigned an ID by the institution; not required for orders manually entered by the broker
12	Commission	N	
13	CommType	N	
14	CumQty	Y	Currently executed shares for chain of orders
15	Currency	N	
76	ExecBroker	N	Used for Firm identification in third-party transactions.
17	ExecID	Y	
18	ExecInst	N	Can contain multiple instructions, space delimited
19	ExecRefID	N	Required for Cancel and Correct ExecTransType messages
20	ExecTransType	Y	
150	ExecType	Y	Describes the type of execution report. Same possible values as OrdStatus.
126	ExpireTime	N	Required if TimeInForce = GTD
64	FutSettDate	N	Required when SettlmntTyp = 6 (Future) or SettlmntTyp = 8 (Sellers Option)
21	HandlInst	Y	Required in New Order – is considered a special instruction; Rule 123 states that special instructions in a drop copy are optional; the expectation is that special instructions will be included in the drop copy Tag 9407 in FIX 4.1
22	IDSource	N	

<b>Execution Report</b>			
NOTE 1: Sorted alphabetically by field name			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
106	Issuer	N	
29	LastCapacity	N	
195	LastForwardPoints	N	Applicable for F/X Orders
30	LastMkt	N	
31	LastPx	Y	Price of this (last) fill. Not required for ExecTransType = 3 (Status), Should represent the "all-in" (LastSpotRate + LastForwardPoints) rate for F/X Orders.
32	LastShares	Y	Quantity of shares bought/sold on this (last) fill. Not required ExecTransType = 3 (Status).
194	LastSpotRate	N	Applicable for F/X Orders
151	LeavesQty	Y	Amount of shares open for further execution. If the OrdStatus is Canceled, DoneForTheDay, Expired, Calculated, or Rejected (in which case the order is no longer active) then LeavesQty could be 0, otherwise LeavesQty = OrderQty - CumQty.
66	ListID	N	Required for executions against orders that were submitted as part of a list.
205	MaturityDay	N	For Options or Futures and can be used in conjunction with MaturityMonthYear to specify a particular maturity date.
200	MaturityMonthYear	N	For Options or Futures to specify the month and year of maturity.
111	MaxFloor	N	Not required in New Order, but is considered a special instruction; Rule 123 states that special instructions in a Drop Copy are optional; the expectation is that special instructions will be included in the Drop Copy – Tag 9409 in FIX 4.1
210	MaxShow	N	Not required in New Order, but is considered a special instruction; Rule 123 states that special instructions in a drop copy are optional; the expectation is that special instructions will be included in the drop copy – Tag 9410 in FIX 4.1
110	MinQty	N	Not required in New Order, but is considered a special instruction; Rule 123 states that special instructions in a Drop Copy are optional; the expectation is that special instructions will be included in the Drop Copy – Tag 9408 in FIX 4.1
306	OptAttribute	N	For Options.
37	OrderID	Y	OrderID is required to be unique for each chain of orders.
38	OrderQty	Y	

<b>Execution Report</b>			
NOTE 1: Sorted alphabetically by field name			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
103	OrdRejReason	N	For optional use with ExecType = 8 (Rejected)
39	OrdStatus	Y	Describes the current state of a CHAIN of orders, same scope as OrderQty, CumQty, LeavesQty, and AvgPx
40	OrdType	N	
41	OrigClOrdID	N	Conditionally required for PendingCancel, Replaced, and Canceled ExecType values. ClOrdID of the previous order (NOT the initial order of the day) when canceling or replacing an order.
211	PegDifference	N	Required if specified on the order
44	Price	N	Required if specified on the order
201	PutOnCall	N	For Options.
113	ReportToEach	N	
47	Rule80A (aka OrderCapacity)	N	
198	SecondaryOrderID	N	Can be used to provide Order id used by exchange or executing system.
107	SecurityDesc	N	
207	SecurityExchange	N	Can be used to identify the security.
48	SecurityID	N	
167	SecurityType	N	Must be specified if a Future or Option. If a Future: Symbol, SecurityType, and MaturityMonthYear are required. If an Option: Symbol, SecurityType, MaturityMonthYear, PutOrCall, and StrikePrice are required.
119	SettlCurrAmt	N	Used to report results of foreign exchange accommodation trade
120	SettlCurrency	N	Used to report results of foreign exchange accommodation trade
155	SettlCurrFxRate	N	Foreign exchange rate used to compute SettlCurrAmount from Currency to SettlCurrency
156	SettlCurrFxRateCalc	N	Specifies whether the SettlCurrFxRate should be multiplied or divided
63	SettlmntTyp	N	Absence of this field is interpreted as Regular.
54	Side	Y	
99	StopPx	N	Required if specified on the order
202	StrikePrice	N	For Options.
55	Symbol	Y	
65	SymbolSfx	N	
58	Text	N	



<b>Execution Report</b>			
NOTE 1: Sorted alphabetically by field name			
<b>Tag</b>	<b>Field Name</b>	<b>FIX Req'd</b>	<b>Comments</b>
59	TimeInForce	N	Absence of this field indicates Day Order
75	TradeDate	N	Used when reporting other than current day trades.
60	TransActTime	N	<p>The time an order or order modification is first displayed on or entered into a floor device.</p> <p><i>This is the same as the FloorAvailableTime required by the FESC.</i></p> <p><i>There are no specific timestamp requirements for reports and report modifications. However, Tag 60, TransactTime, is proposed to be a required field to indicate the time of the trade for fills.</i></p> <p><i>Tag 60 is now an optional field in the report template.</i></p>
	<i>Standard Trailer</i>	Y	