

# **OATS Reporting Technical Specifications**

May 3, 2011

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Enclosed is the latest edition of the *OATS Reporting Technical Specifications*, dated May 3, 2011. All updates to this and other documentation regarding OATS are posted to the OATS Web Pages available via the FINRA Web Site at <a href="https://www.finra.org/oats">www.finra.org/oats</a>.

The changes described in this version of the *OATS Reporting Technical Specifications* include all required changes related to FINRA's rule changes expanding the OATS Rules to all NMS stocks (SR-FINRA-2010-44), along with other technical enhancements. This version of the *OATS Reporting Technical Specifications* supersedes versions published on January 11, 2011, February 16, 2011 and March 17, 2011 also related to the expansion of the OATS Rules to all NMS stocks. All code changes required by this version of the *OATS Reporting Technical Specifications* should use the November 8, 2010 version of the *OATS Reporting Technical Specifications* as the base code to which changes should be applied.

The following is an overview of the changes:

- Expanded the OATS Rules to include all NMS stocks including securities listed on the New York Stock Exchange, NYSE Amex and NYSE Arca. The expansion of the OATS Rules will be accomplished in three phases based on the symbol of the security. The phases will be implemented on October 17, 2011, November 7, 2011 and November 28, 2011. FINRA will announce at a later date the details of which symbols will be subject to OATS reporting during each phase.
  - o For exchange listed securities, the symbol format of the **Issue Symbol ID** reported to OATS must follow the format published by the primary listing market.
- Added the **Order Origination Code** as a mandatory field to New Order, Combined Order/Route, Combined Order/Execution and Cancel/Replace Reports to identify whether the order was received from a customer of the firm, originated by the firm or whether the order was received from another Broker/Dealer. Refer to Appendix A for the list of allowable values.
- Re-purposed the **Account Type Code** field to represent the type of beneficial owner of the account for which an order was received or originated; and modified allowable values to more closely align with NYSE Account Type Indicators where appropriate. Refer to Appendix A for the list of allowable values.

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- Added the **Exchange Participant ID** as a conditional field to Route and Combined Order/Route Reports to capture the firm identifier assigned by the exchange.
  - The Exchange Participant ID is required for all orders routed to a national securities exchange.
  - o The Exchange Participant ID will be included as match criteria in the Exchange Route Matching process. Refer to Chapter 6.
  - o The Exchange Participant ID has also been added to the Unmatched Exchange Route Reports feedback which is provided back to firms. Refer to Appendix C.
- Added the **Connection ID** as a conditional field to the Route and Combined Order/Route Reports to capture the unique identifier representing the name of the connection used when routing to another firm or national securities exchange.
  - The Connection ID may be populated to guarantee uniqueness for a Routed Order ID / Sent to Routed Order ID.
  - o If populated, the Connection ID will be included in the validation for unique Routed Order ID.
  - o If populated, the Connection ID will be included as match criteria in the Exchange Route Matching process. Refer to Chapter 6.
  - The Connection ID was added to the Unmatched Exchange Route and Unmatched Interfirm Route Reports feedback which is provided back to firms. Refer to Appendix
- Added the **Information Barrier ID** as a conditional field to the New Order, Desk Report, Cancel/Replace, Combined Order/Route, and Combined Order/Execution to capture the identifier of the information barrier in place for a trading unit that will meet the criteria of the "no-knowledge" exception in FINRA Rule 5320.02.
  - Information Barrier ID will be placed in the field position previously defined for the Received by Desk ID in the New Order, Desk Report, Combined Order/Route and Combined Order/Execution.
  - o Information Barrier ID will be added as a new field for the Cancel/Replace Report.
- ➤ Renamed the Bunched Order Indicator field to **Special Routing Condition.** This field name change applies to Route and Combined Order/Route reports; added new allowable value and new validation. Refer to Appendix A.
- ➤ Created standard allowable values for **Receiving Department ID** and **Originating Department ID**. Refer to Appendix A.
- ➤ Modified allowable values for **Destination Code**, **Member Type Code**, **Reporting Exception Code**, and **Special Handling Codes**. Refer to Appendix A for the list of allowable values.
- ➤ For executions reported to a FINRA transaction reporting system, the **Branch Sequence**Number must be unique within the firm within the day except in instances involving an agency cross where one side of the cross is comprised of multiple orders. Refer to the OATS

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Report titled: FINRA Guidance on OATS Order Trade Matching Obligations for Orders Matched as Agent by a Member, including an ECN or ATS.

- For orders routed electronically, the **Routed Order ID** field on the Route Report and **Sent to Routed Order ID** field on the Combined Order/Route report must be unique, except in instances when the route has a Special Routing Condition, as per the following:
  - o For orders routed to another member, the Routed Order ID must be unique for the MPID, Order Sent Date, Sent to MPID, and Connection ID.
  - For orders routed to a national securities exchange, the Routed Order ID must be unique for the MPID, Order Sent Date, Destination Code, Exchange Participant ID and Connection ID.
  - All Route and Combined Order/Routes containing a duplicated Routed Order ID / Sent to Routed Order ID will be rejected.

Refer to Chapter 4, Section 4.2.3 for the definition of a bunched order.

- Modified the match criteria and unmatched reason codes associated with Exchange Route Matching and Interfirm Route Matching. Refer to Chapter 6.
- ➤ All timestamps captured by the firm in milliseconds shall be reported to OATS in milliseconds. If a firm does not capture time in milliseconds, the milliseconds portion of the timestamp may be reported as 000.
  - o The data type for the following Timestamp fields has been increased to Numeric(17) and must be in the format YYYYMMDDHHMMSSCCC:
    - Correction/Deletion Timestamp
    - Order Receiving Firm Order Received Date
    - Replaced Order Received Date
    - Order Received Timestamp
    - Order Sent Timestamp
    - Order Cancel Timestamp
    - Desk Received Timestamp
    - Execution Timestamp
    - TMO Trigger Timestamp
  - o The data type for the **Expiration Time** field has been increased to Numeric (9) and must be in the format HHMMSSCCC.
- The data type for the following fields has been increased to Alphanumeric (40):
  - o Order Receiving Firm Order ID
  - o Replaced Firm Order ID
  - o Routed Order ID
  - o Sent to Routed Order ID
- All computer system clocks and mechanical time stamping devices must be synchronized to within **one** second of the National Institute of Standards and Technology (NIST) atomic clock. Refer to Chapter 2.

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- ➤ The reporting deadline to submit OATS data has been extended to 8:00 a.m. Eastern Time. Refer to Chapter 8.
- Firms may submit compressed files to OATS using the GNU gzip compression protocol. Refer to Chapter 3.
- > The FORE file size limit has been increased to a maximum uncompressed file size of 25MB.
- Firms may transmit OATS data using SFTP, which enables firms to transmit encrypted secure files via the OATS/SAVVIS network or the public Internet.
  - OSOs submitting via SFTP over the Internet are required to maintain a static IP address and must contact FINRA Technical Support to associate the static IP address with FINRA's firewall. OSOs must allow for a ninety day period for the firewall and network setup to be put in place.
  - o The following addresses must be used to access OATS via SFTP:(Refer to Chapter 3)
    - Production Environment: oats-sftp.finra.org
    - Test Environment: oatstest-sftp.finra.org
- ➤ Made the following enhancements to the ROE Rejection process:
  - o Syntax and Semantics rejections will be available within 4 hours of submission.
  - Context Rejections will continue to be available within 2 business days of the processing date.
  - o Firms will have 5 business days from the date when Context Rejections are available to repair and resubmit all rejections that require repair.
  - o Context Rejections that do not require repair will not be automatically provided back to firms. Firms may contact the OATS Business Support Helpdesk to obtain this data.
- Added the following validations: (Refer to Appendix B for the full definition)
  - o 2032 Issue Symbol does not match listing market format
  - o 2039 Invalid Information Barrier ID
  - o 2040 Invalid Connection ID
  - o 2138 Missing or invalid Order Origination Code
  - o 2139 Missing or invalid Exchange Participant ID
  - o 2166 Combination of Order Origination Code and Member Type Code is not valid
  - o 2167 Combination of Order Origination Code and Account Type Code is not valid
  - o 2168 Receiving Department ID or Originating Department ID must be populated
  - 2607 Order Received Date must be equal to the Date Portion of the Order Received Timestamp
  - o 3512 Duplicate Routed Order ID or Sent to Routed Order ID reported on same day
  - 3513 Duplicate Routed Order ID or Sent to Routed Order ID reported on previous day
- Modified the following validations: (Refer to Appendix B for the full definition)
  - o 1030 FORE file exceeds the supported size limit
  - o 2023 Sent To Firm MPID must be a non–FINRA member when the Destination Code is 'N' or 'A'
  - o 2029 Issue is not reportable to OATS

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- o 2107 Missing or invalid Routed Order ID
- o 2108 Invalid Sent To Routed Order ID
- o 2129 Invalid Program Trading Code
- o 2130 Invalid Arbitrage Code
- o 2144 Missing or invalid Customer Instruction Flag
- 2153 Routing Firm MPID must be a non–FINRA member when the Order Origination Code is 'W' and the Member Type Code is 'N' or 'A'
- o 2154 Routing Firm MPID must be blank when the Order Origination Code is 'F'
- o 2163 Combination of Member Type Code and Account Type Code is not valid
- o 2169 Missing Receiving Department ID
- o 2170 Missing Originating Department ID
- o 2201 Missing or invalid Branch Sequence Number
- o 2407 Invalid Special Routing Condition Indicator
- o 2411 Routed Order ID is required for electronically routed orders
- o 2750 Sent to Routed Order ID is required for electronically routed orders
- o 2752 Missing Routing Firm MPID
- Modified the following validations impacted by changes to allowable values: (Refer to Appendix B for the full definition)
  - o 2125 Missing or invalid Account Type Code
  - o 2128 Invalid Receiving Department ID
  - o 2145 Invalid Originating Department ID
  - o 2147, 2148, 2149, 2150, 2151, 2509, 2510, 2511, 2513, 2514 Invalid Special Handling Code
  - o 2159 Missing or invalid Member Type Code
  - o 2161 Missing or invalid Destination Code
  - o 2207 Invalid Reporting Exception Code
  - o 2508 Missing or invalid Desk Type Code
- Removed the following validations:
  - 2155 Routed Order ID must be blank for this Member Type Code and Account Type Code
  - o 2502 Missing or invalid Desk Received Identifier
- ➤ Modified the following **Unmatched Reason Codes**:
  - o 4013 Exchange Participant ID did not match
  - o 4023 Sent to Market Participant ID did not match
- > Removed the following **Unmatched Reason Codes**:
  - o 4013 Sent to Timestamp reported on the Route event is not equal to the Exchange Order
  - o 4014 Unmatched due to secondary Exchange Route match data error
  - 4023 Sent to Timestamp reported on the Route report is not within allowable timestamp difference of Order Received Timestamp on the Order receipt
  - 5 4024 Unmatched due to secondary Interfirm Route match data error
- ➤ Updated all OATS Reporting Scenarios in Chapter 4 to recognize the inclusion of the additional NYSE market centers, and to reflect the changes to OATS fields and field values.

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- Added the following OATS Reporting Scenarios: (Refer to Chapter 4)
  - o Execution of Orders Matched as Agent by a Member (Including ATS or ECN)
  - o Manual Order Routing to a National Securities Exchange
  - o Electronic Order Routing to a National Securities Exchange
  - o Order Routing to an Options Exchange
  - o Order received by a Member and subsequently entered into an Order Management System (OMS) or trading system for further handling and execution
- ➤ Added Event Listings to all Capacity Reporting Scenarios. Refer to Chapter 4.
- Removed the following OATS Reporting Scenarios:
  - o Agency Customer Cross Execution
  - o Order Execution via an ECN
  - o Bunched Desk Transmittal
- > Added OATS Reportable Security Daily List information to FINRA.org. Refer to: http://www.finra.org/Industry/Compliance/MarketTransparency/OATS/P123526
- Alternatively, firms may also obtain reportable securities at the following links:
  - o Nasdaq-listed equity securities
    - Web: www.nasdagtrader.com/trader/symboldirectory/symbol.stm
    - Download: <a href="https://www.nasdaqtrader.com/dynamic/SymDir/nasdaqlisted.txt">www.nasdaqtrader.com/dynamic/SymDir/nasdaqlisted.txt</a>
  - o OTC and OTCBB equity securities
    - Web: www.otcbb.com/static/symbol.stm
    - Download: <u>www.otcbb.com/dynamic/tradingdata/download/allotcbb\_otherotc.txt</u>

       OR <u>ftp://ftp.otcbb.com/symboldirectory/allotcbb\_otherotc.txt</u>
  - o The New York Stock Exchange, NYSE Amex, and NYSE Area equity securities
    - Download: <a href="mailto:ftp://ftp.nysedata.com/NYSEGroupSymbols">ftp://ftp.nysedata.com/NYSEGroupSymbols</a>
- ➤ The following OATS Reports, available on FINRA.org, provide additional guidance related to changes associated with this release:
  - o FINRA Guidance on OATS Order Trade Matching Obligations for Orders Matched as Agent by a Member, including an ECN or ATS provides guidance for OATS Order Trade Matching when a member, including an ECN or ATS, matches orders as agent. This guidance will be effective upon implementation of the OATS expansion to all NMS stocks.
  - Validation of Order Origination Code and Account Type Code provides guidance related to the use of the Order Origination Code, Account Type Code, Member Type Code, Routing Firm MPID and Routed Order ID fields on all New, Combined Order/Route, Combined Order/Execution, and Cancel/Replace Reports.
  - o *ROE Rejection Feedback* provides additional guidance related to the ROE Rejections process.

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Chapter	Change	
Chapter 1	Updates related to the expansion of OATS Rules to all NMS stocks.	
Chapter 2	Updates related to Clock Synchronization to within one second of the NIST.	
Chapter 3	Updates related to SFTP access method and file compression.	
Chapter 4	Updates to OATS Reporting Scenarios.	
Chapter 5	Updates related to Timestamp fields and compression.	
Chapter 6	Updates related to Rejections timing and availability.	
	Updates related to Match Criteria enhancements for Exchange Route Matching and Interfirm Route Matching.	
Chapter 7	None	
Chapter 8	Updates related to deadline extension for OATS Reporting and ROE Rejection Repair.	
Appendix A	Updated definitions and allowable values related to newly added and modified fields.	
Appendix B	Updates to Rejection Codes and Unmatched Reason Codes.	
Appendix C	Updates related to data type changes, newly added and modified fields, and removed fields for all Order Reports.	
	Updates to Unmatched Events Feedback related to data type changes.	
Appendix D	Updates to Glossary Terms.	

To obtain the latest information or answers to questions about OATS and the *OATS Reporting Technical Specifications*, contact FINRA Business and Technology Support Services. Support Services provides firms and third parties with necessary information to comply with the Rules and to develop, test, and implement their order—reporting applications. FINRA Business Support is available Monday through Friday from 8:00 a.m. until 6:00 p.m., Eastern Time. FINRA Technical Support is available from Monday at 8:00 a.m. through Saturday at 8:00 a.m., Eastern Time. Please provide your Broker/Dealer Number (if appropriate), name, title, firm's name, and a phone number when contacting Support Services via phone, fax, or e—mail. General information is maintained on the OATS Web Pages at <a href="https://www.finra.org/oats">www.finra.org/oats</a>.

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#### **OATS TECHNICAL SPECIFICATIONS**

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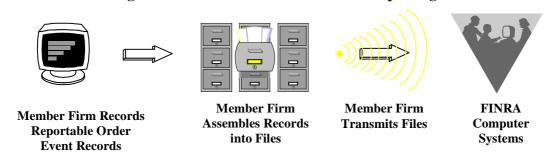
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#### 1. Introduction

The Order Audit Trail System (OATS) is part of an integrated audit trail of order, quote, and trade information for all NMS stocks and OTC equity securities ("OATS reportable securities"). This audit trail system, developed by NASD in response to the August 1996 settlement with the Securities and Exchange Commission (SEC), is used in FINRA's surveillance activities.

FINRA Rules 7400 through 7470 (OATS Rules), require member firms to develop a means for electronically capturing and reporting to OATS order data on specified events in the life cycle of each order for OATS reportable securities, including convertible bonds, and to record the times of these events to the second. Figure 1-1 provides an overview of the Order Audit Trail System reporting process. In addition, OATS Rules require member firms to synchronize all business clocks used to record the time and date of market events to a time source designated by FINRA. (For a summary of rule requirements, see Section 1.1.)

Figure 1-1. An Overview of the OATS Reporting Process



The *OATS Reporting Technical Specifications* provide member firms with a resource for understanding their responsibilities to comply with FINRA Rules 7400 through 7470 and describe the requirements for reporting order data to OATS, including detailed information about system access and the required data elements. The *OATS Reporting Technical Specifications* also inform member firms about the procedures for implementing OATS, including registering with FINRA and testing the interface between their systems and the systems at FINRA.

This document is not intended to provide information about how to develop an electronic system that reports order information or how to program OATS reporting software; it is only intended to describe what such a system must deliver to FINRA. Table 1-1. describes the contents and purpose of the *OATS Reporting Technical Specifications*.

Table 1-1. Contents and Purpose of OATS Reporting Technical Specifications

Section	Description	
1. Introduction	Describes the purpose of the system and provides an overview of FINRA rules and the technical requirements.	
2. Clock Synchronization	Describes the purpose and requirements of the clock synchronization portion of the rules.	
3. System Access	Describes the ways FINRA member firms must supply OATS information to FINRA.	
4. Order Reporting Scenarios	Describes, from a business perspective, responsibilities for reporting to OATS. Explicitly defines events and provides representative scenarios.	
5. Data Reporting Formats	Provides detailed specifications for the layout of OATS files.	
6. Feedback and Corrections	Describes the procedures for obtaining feedback and submitting corrections to OATS.	
7. Testing	Describes the procedures required for testing the interface between member firm systems and OATS.	
8. Additional Information	Describes OATS reporting hours and late criteria, data retention requirements, and how to get answers to questions about OATS.	
Appendix A—Data Dictionary	Describes each data element, including permitted values, in any type of OATS report.	
Appendix B—Error Messages	Defines all error messages generated by OATS.	
Appendix C—Report Formats	Describes the detailed specifications for the layout of Firm Order Report files.	
Appendix D—Glossary	Defines the words and phrases with meanings unique to FINRA Rules 7400 through 7470 and the OATS Reporting Technical Specifications.	

#### 1.1 Rule Overview

#### FINRA Rule 7400 - Order Audit Trail System

Rule 7400 is simply a place marker for the Order Audit Trail System Rules.

#### **FINRA Rule 7410 - Definitions**

Rule 7410 lays out specific definitions of terms used for the purposes of Rules 7400 - 7470. Terms not specifically defined shall have the same meaning as those defined in the By-Laws and Rules of the Association.

#### FINRA Rule 7420 - Applicability

Rule 7420 applies the OATS Rules to all FINRA members. Further, the rule requirements apply to all orders for OATS reportable securities whether they are executed or not.

#### FINRA Rule 7430 - Synchronization of Member Business Clocks

Rule 7430 requires any FINRA member firm that records order, transaction or related data to synchronize all business clocks used to record the date and time of any market event. Clocks, including computer system clocks and manual time stamp machines, must record time in hours, minutes and seconds with to-the-second granularity and must be synchronized to a source that is synchronized to within one second of the National Institute of Standards' (NIST) atomic clock. Clocks must be synchronized once a day prior to the opening of the market, and remain in synch throughout the day. In addition, firms are to maintain a copy of their clock synchronization procedures on-site. Clocks not used to record the date and time of market events need not be synchronized.

#### FINRA Rule 7440 - Recording of Order Information

Rule 7440 requires each reporting member to record the following types of order events: receipt or origination of an order (New Order Report); transmission of the order within a firm (Desk Report); transmission of the order outside the firm (Route Report, Combined Order/Route Report); cancellation or modification of the order (Cancel, Cancel/Replace Reports); execution of the order (Execution Report, Combined Order/Execution Report). Each required record of time shall be recorded in hours, minutes, and seconds and each order report is required to include specific pieces of detailed information as outlined in the rule.

#### FINRA Rule 7450 - Order Data Transmission Requirements

All required order data must be transmitted to FINRA in electronic format. Data may be transmitted electronically via FTP, SFTP, IFT, OATS Web Interface, or through a third party such as a service bureau or clearing firm. Any member that uses a third party to transmit order data on their behalf must have a written agreement with the third party outlining the respective functions and responsibilities of each party. The member firm retains ultimate responsibility to ensure full compliance with the FINRA OATS Rules.

#### FINRA Rule 7460- Violation of Order Audit Trail System Rules

Failure to comply with the OATS Rules may be considered conduct that is inconsistent with high standards of commercial honor and just and equitable principles of trade, in violation of Rule 2010.

# FINRA Rule 7470- Exemption to the Order Recording and Data Transmission Requirements

Rule 7470 authorizes staff to grant limited exemptive relief from the OATS reporting and recording requirements for manual orders, if such exemption is consistent with the protection of investors and the public interest, and the member meets the following criteria:

1. The member and current control affiliates and associated persons of the member have not been subject within the last five years to any final disciplinary action, and within the last ten years to any disciplinary action involving fraud;

- 2. The member has annual revenues of less than \$2 million;
- 3. The member does not conduct any market making activities in NMS stocks or OTC equity securities;
- 4. The member does not execute principal transactions with its customers (with limited exception for principal transactions executed pursuant to error corrections); and
- 5. The member does not conduct clearing or carrying activities for other firms.

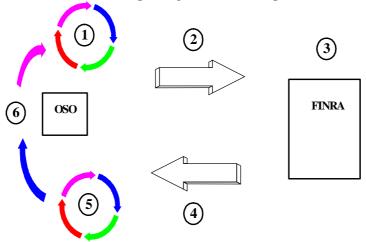
#### OATS Rules became effective as follows:

- o March 1, 1999 for electronic orders in Nasdaq-listed equity securities received at the trading desk of market makers and for all electronic orders received by ECNs
- o August 1, 1999 for all electronic orders in Nasdaq–listed equity securities
- o July 10, 2006 for all orders in Nasdaq-listed equity securities
- o February 4, 2008 for all orders in OTC equity securities
- October 17, 2011 for all orders in NMS stocks

#### 1.2 Technical Requirements

The OATS Reporting Technical Specifications has been created specifically to describe the technical requirements for reporting order data to OATS. It provides detailed information about the required data elements and formats, transmission methods, and OATS feedback. Figure 1-2. provides an overview of OATS reporting technical requirements and information flow.

Figure 1-2. Overview of OATS Reporting Technical Requirements and Information Flow



- 1. Order Sending Organizations (OSOs) generate Reportable Order Events records (ROEs) and package them in Firm Order Report files (FOREs). They could also enter the ROEs directly into the OATS Web Interface.
- 2. The OSO transmits the FOREs to OATS using FTP, SFTP, IFT, or the Web.
- 3. OATS validates the FOREs and ROEs.

- 4. OATS generates FORE status within one hour. It is available via the original method of transmission or the Web. (NOTE: For files submitted via FTP, SFTP, or IFT, firms must "pull" status from OATS. OATS will not "push" information to OSOs via FTP, SFTP, or IFT.) Firms may obtain additional feedback, including ROE rejections and reporting statistics, via the Web, FTP, SFTP, and IFT.
- 5. OSOs correct any rejected FOREs or ROEs.
- 6. OSOs generate new ROEs, repackage them in FOREs, and submit the new files to OATS. Alternatively, OSOs can use the Web interface to repair ROE rejections and correct erroneous ROEs already accepted by OATS.

For additional information about OATS, compliance issues, and OATS reporting technical requirements, contact FINRA Business and Technology Support Services. Technology support is available from 8:00 a.m. Monday to 8:00 a.m. Saturday, Eastern Time. Business support is available Monday through Friday, 8:00 a.m. to 6:00 p.m., Eastern Time. FINRA Business and Technology Support Services can be reached via fax, e-mail, or the Web 24 hours per day, 7 days a week. Please provide your name, title, firm's name, Broker/Dealer Number (if appropriate), and a phone number when contacting Support Services via phone, fax or e-mail.

Technical Support Business Support

Telephone: 800-321-6273 800-321-6273 Fax: 240-386-6499 240-386-4841

E-mail: supportservices@finra.org supportservices@finra.org
WWW: http://www.finra.org http://www.finra.org

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

INTRODUCTION

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# 2. Clock Synchronization

FINRA Rule 7430 requires member firms that record order, transaction, or related data required by the By-Laws or other rules of FINRA to synchronize all business clocks, including both computer system clocks and mechanical time stamping devices, that are used to record the date and time of any market event. In addition, the rule requires that member firms maintain the synchronization of such business clocks. These requirements were effective according to the following schedule:

- By August 7, 1998, for all computer system clocks, and
- By July 1, 1999, for all mechanical clocks.

The rules also require that the granularity of all order event timestamps for OATS reportable events, generated by both computer systems and mechanical time stamping devices, be in seconds. **This time must be reported to OATS in Eastern Military (24 hour clock) Time.** All computer system clocks and mechanical time stamping devices must be synchronized to within one second of the National Institute of Standards and Technology (NIST) atomic clock. Any time provider may be used for synchronization, however, all clocks and time stamping devices must remain accurate within a one-second tolerance of the NIST clock. This tolerance includes all of the following:

- The difference between the NIST standard and a time provider's clock
- Transmission delay from the source
- The amount of drift of the member firm's clock

NOTE: The tolerance for clock synchronization does not affect the amount of time allowed for reporting OATS reportable events. For example, the OATS rules **do not** require firms to report order information within one second of receiving an order from a customer.

Computer system and mechanical clocks must be synchronized every business day before market open in order to ensure that recorded order event timestamps are accurate. To maintain clock synchronization, clocks should be checked against the standard clock and re-synchronized, if necessary, at pre-determined intervals throughout the day.

Compliance examinations include a review for the existence of adequate procedures and checks to fulfill this obligation, as well as a test of the degree of accuracy of clocks that are used for providing audit trail information against the NIST standard. In order to facilitate examinations, member firms must document and maintain their clock synchronization procedures. In addition, member firms should keep a log of the times when they synchronize their clocks and the results of the synchronization process. This log should include notice of any time the clock drifts more than 1 second. This log should be maintained for the period of time and accessibility specified in SEC Rule 17a-4(b), and it should be maintained and preserved for the required time period in paper format or in a format permitted under SEC Rule 17a-4(f).

Additional information about clock synchronization is available from NIST and other sources. The U.S. Department of Commerce's National Technical Information Service (NTIS) at (703) 605-6000 offers the *NIST Time and Frequency Users Manual* (item number PB91-107532).

Some useful sources on the Internet include:

http://tf.nist.gov/service/acts.htm

http://tycho.usno.navy.mil

http://tf.nist.gov

http://tf.nist.gov/service/its.htm

http://tf.nist.gov/general/receiverlist.htm http://tf.nist.gov/general/softwarelist.htm

http:/www.time.gov

This list of information about clock synchronization is not exclusive. Further information about clock synchronization is available from government agencies, commercial software providers, commercial mechanical time stamping device manufacturers, and through the Internet.

FINRA has no affiliation with any of the organizations listed above or the creator of any of the Web Pages listed above. Furthermore, FINRA makes no representations regarding the accuracy of the information listed.

For additional information about clock synchronization and the requirements of Rule 7430, see the OATS Frequently Asked Questions (FAQs) available on the FINRA Web Site (http://www.finra.org/oats).

# 3. System Access

This section provides the specifications that an Order Sending Organization (OSO) requires to develop systems to supply information to OATS. NOTE: Not all OSOs are required to develop systems to supply information to OATS; OSOs may contract with other member firms or non-member entities to transmit information to OATS.

The goal of FINRA in developing these specifications is to provide simple and reliable information flow mechanisms that allow OSOs to minimize development and operational complexity by using off-the-shelf products and industry standards while providing hardware and operating system software independence. This section discusses transport options, security considerations, network options, and registration requirements designed to achieve this goal.

#### 3.1 Network Options

FINRA supports two network interfaces: a private circuit based network and an Internet gateway. These two networks are discussed below. Figure 3-1. shows the very high-level details of these network options.

Dedicated line oso Dialup oso ISP Internet Gatewa OSO 56Kbps or 128Kbps OATS/SAVVI INTERNET Network INRA Compute INRA Compute Systems Systems

Figure 3-1. Network Options

SFTP, IFT and Web FTP, SFTP and Web

#### 3.1.1 OATS/SAVVIS Network

FINRA has contracted with SAVVIS to create a private dedicated network to connect any OSO to FINRA facilities. This network uses the TCP/IP suite and provides 56K-bps or 128K-bps access from each OSO. OSOs can use the OATS/SAVVIS network for File Transfer Protocol (FTP) or Secure File Transfer Protocol (SFTP) file submission and file status retrieval. Each OSO requesting OATS/SAVVIS network connectivity or connectivity between its existing networks and the OATS/SAVVIS network will be expected to execute a contract for service with SAVVIS. Firms may contact the Sales

Department at SAVVIS directly via phone (800-728-8471, Option 2) for details of this contractual arrangement.

#### 3.1.2 Internet

Users access OATS via the Internet using Internet File Transfer (IFT), SFTP or the Web. Internet users are expected to maintain their own contracts with the ISP of their choice. Users may obtain dedicated facilities or use dial-up facilities for Internet connection to their ISP.

#### 3.2 Transport Options

FINRA provides four mechanisms for OSOs to submit files to OATS: FTP, SFTP, IFT and the OATS Web interface. Files sent via FTP must be transferred via the OATS/SAVVIS network. If the submission is via SFTP, the file may be transferred via the Internet or the OATS/SAVVIS network. Files transferred via IFT may be transmitted using the SecureTransport TM software or may be manually uploaded. If the submission is via the OATS Web interface, it is sent by typing the ROE data directly into the Web page. Information submitted to OATS via the Web interface may be downloaded prior to submission by the firm via the Web interface for data retention purposes.

Figure 3-2 illustrates the three basic types of OATS information: submissions (i.e., files of order events, including original ROEs, resubmitted ROEs that were previously rejected, and corrections or deletions to previously accepted ROEs), feedback (i.e., FORE status, ROE rejections, and reporting statistics), and administrative information.

Figure 3-2. Information Flows and Allowable Access Methods

FTP/ SFTP/ IFT: FORE submission

Web: Original ROE entry, ROE corrections and repairs, administrative information

Order Sending Organization

FINRA Computer Systems

FTP/ SFTP/ IFT: FORE Status, ROE rejections, Announcements, Unmatched Execution Reports, Unmatched Exchange Route Reports, Unmatched Interfirm Reports

Web: FORE Status, ROE rejections, Statistics, Announcements, Unmatched Execution Reports, Unmatched Exchange Route Reports, Unmatched Interfirm Reports

#### 3.2.1 Access Methods

Table 3-1. summarizes the transport methods and information items that are pertinent to each transport method.

Access Method **SFTP** IFT Web OATS/ SAVVIS Network OATS/ SAVVIS Internet OATS or Internet or Internet File & Resubmitted Rejections Submission File Status Interactive ROE entry Report Statistics Web Announcements FTP/SFTP/IFT Announcements Account Maintenance **Unmatched Events** 

Table 3-1. Summary of Information Items Pertinent to Each Access Method

#### 3.2.1.1 FTP

FTP is available via the OATS/SAVVIS network; it is not available via the Internet. OSOs must use a version of FTP software that is compatible with RFC 959. OSOs should use US ASCII mode and binary mode for transmission.

Organizations must contact the Sales Department at SAVVIS directly via phone (800-728-8471, Option 2) to obtain an OATS circuit. Circuit orders require approximately 120 days for processing. Organizations that order their circuits late may not have adequate time for testing before their implementation date.

#### 3.2.1.2 SFTP

SFTP can be used to transmit encrypted secure files via the OATS/SAVVIS network or the public Internet. OSOs must use a version of SFTP software that is compatible with RFC 4253.

OSOs submitting via SFTP over the Internet are required to maintain a static IP address and must contact FINRA Technical Support to associate the static IP address with FINRA's firewall. OSOs must allow for a 90 day period for the firewall and network setup to be put in place.

#### 3.2.1.3 IFT

IFT is available directly through the Internet or through the Internet using the Tumbleweed SecureTransport <sup>TM</sup> software from Axway. Firms may purchase the SecureTransport <sup>TM</sup> Windows client, SecureTransport <sup>TM</sup> UNIX client version, or upload files manually via the Internet. Information on how to obtain the Tumbleweed SecureTransport <sup>TM</sup> software is available using the following URL: <a href="https://portal1.tumbleweed.com/frstore/TMWDStore">https://portal1.tumbleweed.com/frstore/TMWDStore</a>

#### 3.2.1.4 Web

Web access to the OATS system is available via the Internet. The OATS Web interface will be optimized for Microsoft Internet Explorer 6.x - 8.0, or Firefox 2.x - 3.5. NOTE: A non-export version of the supported Web browsers will be required in order to meet the

security requirements (security is described in more detail below). In order to obtain access to the OATS Web interface, users must have their browsers configured to accept and maintain cookies.

Table 3-2. summarizes the specifications for each access method.

**Table 3-2. Summary of Transport Specifications** 

FTP	SFTP	IFT	Web
25MB uncompressed file size limit     RFC 959     No encryption     Binary mode     US ASCII mode     Must use     OATS/SAVVIS private circuit	25MB uncompressed file size limit     RFC 4253     Encryption     Binary mode     May use     OATS/SAVVIS or Internet. If Internet is used, a static IP address must be used and registered with FINRA	25MB uncompressed file size limit     Internet     SecureTransport TM client software from Axway or manual upload     No encryption	<ul> <li>Microsoft Internet Explorer 6.x – 8.0 or Firefox 2.x – 3.5</li> <li>SSL encryption</li> <li>Server-side certificates</li> <li>HTML 3.2 or higher</li> <li>Cookies</li> <li>Internet or private network</li> </ul>

#### 3.2.2 Compression

Files transmitted via FTP, SFTP or IFT may be compressed or uncompressed. If compressed, the following rules apply:

- 1. OSOs must use the GNU gzip compression protocol.
- 2. Compressed files must have a .gz file extension.
- 3. OSOs must transmit compressed files in binary mode.
- 4. A compressed file can only contain a single file (i.e. grouping of multiple files is not supported).
- 5. The root of the file name must be the same as the original uncompressed file.
- 6. The uncompressed files size must not exceed 25MB; however, there is no specific limit on the number of ROEs that can be in a single file.

#### 3.2.3 OATS Addresses

Table 3-3. displays the addresses to use to access the OATS test and production environments via each access method.

Table 3-3. OATS Addresses

Access Type	Test	Production
Web via Internet	https://firmstest.finra.org	https://firms.finra.org
FTP – SAVVIS	oatstest-ftp.finra.org	oats-ftp.finra.org
IFT	iftcert.finra.org	ift.finra.org
SFTP	oatstest-sftp.finra.org	oats-sftp.finra.org

When communicating with OATS via FTP or SFTP, OSOs should use the DNS names listed in Table 3-3. OATS Addresses, rather than physical IP addresses, because OATS will be using multiple servers and round-robin DNS to perform load balancing.

#### 3.3 Accessing OATS Information

#### 3.3.1 OATS Feedback

Feedback items include information conveyed from OATS to the OSOs. OATS provides feedback by multiple mechanisms; however, some feedback items are only available via a single mechanism. The paragraphs below discuss each of the feedback items and the access mechanisms available for each item. (See Section 6—Feedback and Corrections.) NOTE: All information obtained via FTP, SFTP, or IFT must be "pulled" from OATS. OATS will not "push" any information to member firms via FTP, SFTP or IFT. Information related to obtaining feedback from the *OATS Web Interface User Guide* is available at <a href="https://www.finra.org/oats/webuserguide">www.finra.org/oats/webuserguide</a>.

- **FORE Status**—FORE Status can be obtained via the same mechanism that was used to submit the FORE, and is also displayed on the Web interface. If the FORE were submitted via FTP, SFTP or IFT, FORE Status can be retrieved from the OATS FTP and IFT servers. In all cases, FORE Status can be viewed on the Web interface.
- ROE Rejections— Reportable Order Event records (ROEs) that failed validation checks. ROE rejections can be viewed and interactively repaired via the Web interface. Repaired ROE rejections can also be submitted by regenerating the ROEs and submitting them in a new FORE. (Repaired ROE rejections can be commingled with new ROEs.) A daily file or files of rejections is available for download via the FTP, SFTP, IFT, and the Web interface.
  - NOTE: To meet the requirements of data retention, firms that correct ROEs via the Web interface must also maintain the repaired version of all ROEs.
- **Reporting Statistics**—Available via the OATS Web interface, Reporting Statistics include daily summary statistics of reporting activity. Reporting Statistics are available on a daily basis, and are posted when processing for all files has completed.
- Out of Sequence Events— Subsequent events reported to OATS with an event timestamp prior to the Order Received timestamp of the originating event. Out of Sequence Events may be viewed or downloaded via the Web Interface.
- Unmatched Execution Reports— Match eligible Execution Reports that do not link with trades reported to a FINRA transaction reporting system. A daily file or files of unmatched execution reports is available via FTP, SFTP, IFT, and the Web interface. More information about the conditions causing order data to be considered unmatched is in Chapter 6.
- Unmatched Exchange Route Reports— Match eligible Route Reports that do not link with orders submitted to a national securities exchange. A daily file or files of unmatched Exchange route reports is available via FTP, SFTP, IFT, and the Web interface. Unmatched Route and Combined Order/Route Reports may be viewed or downloaded via the Web Interface.

• Unmatched Interfirm Route Report - Orders Routed and Order Received—Match eligible Route Reports that do not link to a corresponding New, Cancel/Replace, Combined Order/Execution or Combined Order/Route Report. A daily file or files of unmatched interfirm route reports is available via FTP, SFTP, IFT, and the Web Interface.

#### 3.3.2 OATS Administrative Information

Administrative information items include all miscellaneous items, such as announcements and account maintenance.

- Web Announcements—this information is available only via the Web interface. The user will be notified of the last time the announcements have been modified and offered an option to view the contents. These announcements are used to post information related to the operation of OATS, including the current versions of Web browser and encryption software that are compatible with OATS.
- FTP/SFTP/IFT Announcements—this information is available via FTP, SFTP and IFT. FTP/SFTP/IFT users will receive OATS Announcements in a text file located in a folder titled "message". Refer to Figure 3-3. Figure and 3-5. for Information Flow.
- Account Management—this information is available only via the OATS Web Interface. OSOs will perform their own account management. An OATS Account Administrator is able to update contact information and request that users or passwords be changed, added, or deleted. Additional details about Account Management are available in the OATS Registration and User Entitlement Guide and the OATS Web Interface User Guide, both available at <a href="https://www.finra.org/oats">www.finra.org/oats</a>.

#### 3.4 Security

Submissions to FINRA require a valid user ID and password. OSOs must obtain a master user ID and password combination during registration via an OATS Administrator (see Section 3.6). OSO Administrators may request additional user IDs and passwords, as necessary, for their firms. Firms are also required to designate OSO's who will transmit on their behalf.

#### 3.4.1 FTP

The following security rules apply for the FTP access method:

- 1. OSOs are required to log on to FINRA's secure file transfer gateway using a supplied user ID and password that corresponds with the User account type.
- 2. An OSO is only required to log on a single time per session, even if FOREs for several firms will be transmitted during that session.
- 3. Files sent via FTP are NOT encrypted and can only be sent via the OATS/SAVVIS network.
- 4. Since the user ID and password are provided at log on, they are not required to be part of the FORE header when transmitting files.

- 5. An OSO that transmits files for several MPIDs must submit a separate FORE for each MPID.
- 6. Each FORE file must have a unique name so that all firms may access their respective files and record status information. OATS will not test for unique external file names on submission.
- 7. FORE files sent to OATS may not have filename extensions of .status, .reject, or .umtch and may not contain colons or spaces.
- 8. When multiple FOREs are sent in a single file, OATS treats each header/trailer combination as a separate submission. NOTE: Multiple order event types may be represented in a single FORE. A separate FORE must be submitted for each firm that is subject to OATS reporting; multiple FOREs can be combined in a single file.

#### 3.4.2 **SFTP**

The following security rules apply for the SFTP access method:

- 1. OSOs are required to log on to FINRA's secure file transfer gateway using a supplied user ID and password that corresponds with the User account type.
- 2. An OSO is only required to log on a single time per session, even if FOREs for several firms will be transmitted during that session.
- 3. Files sent via SFTP are encrypted and can be sent via the OATS/SAVVIS network or the Internet.
- 4. To utilize SFTP via the public internet, OSOs must contact FINRA Technical Support to associate the OSO's static IP address with FINRA's firewall. NOTE. OSOs must allow for a ninety day period for the firewall and network setup to be put in place.
- 5. Since the user ID and password are provided at log on, they are not required to be part of the FORE header when transmitting files.
- 6. An OSO that transmits files for several MPIDs must submit a separate FORE for each MPID.
- 7. Each FORE file must have a unique name so that all firms may access their respective files and record status information. OATS will not test for unique external file names on submission.
- 8. FORE files sent to OATS may not have filename extensions of .*status*, .*reject*, or .*umtch* and may not contain colons or spaces.
- 9. When multiple FOREs are sent in a single file, OATS treats each header/trailer combination as a separate submission. NOTE: Multiple order event types may be represented in a single FORE. A separate FORE must be submitted for each firm that is subject to OATS reporting; multiple FOREs can be combined in a single file.

#### 3.4.3 IFT

The following security rules apply the IFT access method:

- 1. OSOs transmitting via the internet must login using the OATS user ID and password that corresponds with the User account type.
- 2. OSO transmitting using the SecureTransport™ client must set up the software profile to use the OATS user ID and password that corresponds with the IFT User.
- 3. Files sent via IFT are NOT encrypted and can be sent via the SecureTransport<sup>TM</sup> client software or uploaded manually via the Internet.
- 4. An OSO is required to select the files that will be transmitted during that session.
- 5. Since the user ID and password are provided at log on, they are not required to be part of the FORE header when transmitting files.
- 6. An OSO that transmits files for several MPIDs must submit a separate FORE for each MPID.
- 7. Each FORE file must have a unique name so that all firms may access their respective files and record status information. OATS will not test for unique external file names on submission.
- 8. FORE files sent to OATS may not have filename extensions of .status, .reject, or .umtch and may not contain colons or spaces.
- 9. When multiple FOREs are sent in a single file, OATS treats each header/trailer combination as a separate submission. NOTE: Multiple order event types may be represented in a single FORE. A separate FORE must be submitted for each firm that is subject to OATS reporting; multiple FOREs can be combined in a single file.

#### 3.4.4 Web Interface

The OATS Web interface uses SSL encryption with server-side certificates obtained from Verisign, Inc. The formats and Web page designs are described in the *OATS Web Interface User Guide*. These pages allow OSOs to view announcements and file status information, submit new and corrected ROEs, view and repair ROE rejections, access OSO or firm statistics, request changes in user passwords, and perform self-administration.

The following security rules apply for the Web Interface:

- 1. An OSO that transmits files for several other firms is allowed to view all information that it has submitted.
- 2. Member firms utilizing another firm for submission are only allowed to view information pertaining to their own firm.
- 3. Firms submitting their own information have access to all their own information.

#### 3.5 Data Flow Examples

The below diagrams present typical exchanges of OATS information between an OSO and FINRA using the FTP, SFTP and IFT transmission methods. In each example, files contain one or more FOREs (header/trailer pairs), and ROE rejections are repaired using the Web interface.

In the examples, Step 1 depicts an OSO preparing and submitting a FORE file (which may include multiple FOREs); Step 2 shows FINRA receipt and processing of each FORE's envelope (header and trailer) and generation of a file status message; Step 3 involves examination of the file status message and possible retransmission by the OSO; Step 4 illustrates additional processing of each ROE in the submission, with the possible generation of ROE rejections; and Step 5 demonstrates the OSO retrieving, repairing, and resubmitting the rejected ROEs. (Details regarding the preparation of the files is contained in Section 5 and Appendix C of this document.)

OSO **FINRA** At end of day or at time At time chosen by FINRA chosen by OSO (Before 8AM) а Connect information on Order Events Generate announcement Package into FORE file Post YYYYMMDDHH24MISS.message Connect to Secure File Transfer Gateway (SFTG) Logon with <userid>/<password> bin put <filename> **^2** If rejected, Receive file correct error(s) Examine the submission Generate status for each FORE in the file and resubmit Post as filename.status-n Connect to SFTG server **3** Logon with <userid>/<password> bin cd status For single FORE submissions: get filename.status (Within 1 hour) For multiple FORE submissions: get filename.status-n or mget \* Connect to SFTG server 〔5〕 Logon with <userid>/<password> Process ROEs in the file for Syntax and bin 4 cd rejects Semantics (Syntax/Semantics Rejections Generate ROE rejections (if any) available within 4 hours of receipt Syntax\_<FirmFOREID>\_<FOREGene of an accepted FORE status rationDate>\_YYYYMMDD-n.reject or mget 7 Connect to SFTG server Logon with <userid>/<password> Process ROEs in the file for Context and ໌6` bin **Duplicates** cd rejects Generate ROE rejections (if any) (Context/Duplicate Rejections get Context\_YYYYMMDD-n.reject or Generate Unmatched data (if any) available within 24 hours after the mget \* OATS Reporting deadline) Connect to SFTG server Logon with <userid>/<password> cd unmatched get Execution\_YYYYMMDD-n.umtch or get Route\_YYYYMMDD-n.umtch or (Unmatched data available within 3 get Interfirm\_YYYYMMDD-n.umtch or business days of processing date) Connect to SFTG server (b) Logon with <userid>/<password> bin cd messge mget YYYYMMDD\*

Figure 3-3. Typical OATS Information Flow Via FTP or SFTP

**FINRA** OSO At end of day or at time At time chosen by chosen by OSO FINRA (Before 8AM) a Generate announcement 1` Post YYYYMMDDHH24MISS.message Collect information on order events Package into FORE file Connect to FINRA via Secure Transport client software Transmit files using client software 2 Receive file If rejected, Examine the submission correct error(s) Generate status for each FORE in the file and resubmit Post as filename.status-n 3 Connect to FINRA via Secure Transport client software Download status from status folder (Within 1 hour) Process ROEs in the file for Syntax and 5 Semantics Connect to FINRA via Secure Generate ROE rejections (if any) Transport client software Download rejections from rejects folder (Syntax/Semantics Rejections Post as 4 Syntax\_<FirmFOREID>\_<FOREGenerati available within 4 hours of receipt of an accepted FORE status onDate>\_YYYYMMDD-n.reject Process ROEs in the file for Context and (6)**Duplicates** Generate ROE rejections (if any) 7 Connect to FINRA via Secure Transport Generate Unmatched data (if any) Post as the following client software Download rejections from rejects folder Context\_YYYYMMDD-n.reject or (Context/Duplicate Rejections available within 24 hours after the Execution\_YYYYMMDD-n.umtch or OATS Reporting deadline) Route YYYYMMDD-n.umtch or Interfirm\_YYYYMMDD-n.umtch 8 Connect to FINRA via Secure Transport client software Download unmatced data from (Unmatched data available within 3 unmatched folder business days of processing date) b Connect to FINRA via Secure Transport client software Download messages from Message folder

Figure 3-4. Typical OATS Information Flow Via IFT

#### 3.6 Registration Process

All FINRA, The NASDAQ Stock Market, NASDAQ OMX BX, and NASDAQ OMX PHLX members that meet the definition of a Reporting Member pursuant to FINRA or NASDAQ OATS Rules and receive and/or handle orders for OATS reportable securities must register for OATS. Non-member entities acting as a third party to transmit OATS order information on behalf of a member firm must also register for OATS.

On September 28, 2005 the SEC approved amendments to the OATS Rules (see Notice to Members 05-78). These amendments contain a provision that permits FINRA to grant exemptive relief from the OATS reporting requirements for manual orders in certain circumstances. To learn more about the requirements for exemptive relief and to apply for exemption, contact Business Support.

For additional information about Registration and OATS reporting, refer to FINRA Rules 7400 through 7470 and Notice to Members 98-33, 98-73, and 99-4. Information about OATS is also available via the FINRA Web Site at http://www.finra.org/oats.

The OATS Registration and User Entitlement Guide, <a href="www.finra.org/oats/registration">www.finra.org/oats/registration</a> provides all of necessary information to:

- o Register with OATS
- o Create OATS Users
- Manage User Accounts

Member Firms with an OATS reporting requirement that fail to perform all required registration activities will not be able to report OATS data; failure to report order information may be a violation of FINRA or NASDAQ OATS Rules.

# 4. Order Reporting

The objective of this section is to describe the OATS reporting responsibilities of member firms. It provides an overview of order reporting, describes each order report, and provides a representative sample of order reporting scenarios.

#### 4.1 Overview

Orders subject to OATS reporting are defined as any oral, written, or electronic instruction to effect a transaction in an NMS stock or an OTC equity security that is received by a member from another person for handling or execution, or that is originated by a department or a member for execution by the same or another member, other than any such instruction to effect a proprietary transaction originated by a Trading Desk in the ordinary course of a member's market making activities.

As the definition suggests, members are not required to report orders originated by the Trading Desk in the normal course of market making activity. However, all other proprietary orders originated by a member are reportable. Additionally, OATS rules require members to report every order received for an OATS reportable security, even if the order is received from a market maker in the security.

Orders in foreign equity securities are required to be reported only in those instances where the resulting execution is subject to the transaction reporting requirements in FINRA Rule 6622. The requirements of FINRA Rule 6622 do not apply to transactions in foreign equity securities provided that: 1) the transaction is executed on and reported to a foreign securities exchange; or 2) the transaction is executed over the counter in a foreign country and is reported to the regulator of securities markets of that country.

#### 4.2 Event Types

The mission of OATS is to establish and maintain the complete life cycle of an order. To achieve this, OATS must be able to uniquely identify an order, track any modifications or cancellations to the order, track its movement from firm to firm or to a national securities exchange, and link the order to a trade if reported to a FINRA transaction reporting system. To achieve this, firms must record and report each event in the life cycle of an order.

#### 4.2.1 Order Receipt or Origination

When a FINRA member originates or receives an order in an OATS reportable security, the member is required to record and report certain information to OATS regarding that order including:

- **Firm Order Identifier** an order identifier that uniquely identifies the order for the firm within the order received date.
- **Time of Receipt** the date and time the firm originates or receives the order from the customer. The time that the member records as the time of receipt for

purposes of satisfying SEC Rule 17a-3(a)(6) is the time the firm should record as the OATS order receipt time. The order receipt time required to be recorded pursuant to SEC Rule 17a-3(a)(6) will always be the time of receipt for OATS reporting purposes.

- Order Origination Code identifies whether the order was received from a customer of the firm, originated by the firm, or whether the order was received from another broker/dealer.
- **Account Type** identifies the type of beneficial owner of the account for which the order was received or originated.
- **Receiving or Originating Department** the identification of the department where the order was received or originated.
- **Special Handling** special handling instructions associated with the receipt of the order.

Additionally, if an order is received from another FINRA member, the following must also be recorded and reported to OATS:

- **Routed Order ID** For orders received electronically, the Routed Order ID received from the routing firm must be provided.
- **Routing Firm MPID** For orders received electronically or manually from another broker/dealer, the Routing Firm's MPID must be provided.

#### 4.2.2 Transmittal to a Desk or Department within a Firm

When a FINRA member originates or receives an order and then subsequently transmits that order to another desk or department within the firm, the member is required to record and report certain information to OATS regarding the intra-firm transmittal including:

- **Time of Receipt by the Desk or Department** the date and time the order was received by the desk or department to which the order was transmitted.
- **Desk Type Code** the identification of the desk or department to which the order was transmitted. Types of desks include the agency desk, the sales desk, and the arbitrage desk. A Trading Desk is interpreted as a place or system within the firm where an order can be executed, either automatically or with the assistance of traders.
- Special Handling special handling instructions that are communicated by the receiving department to a desk or other department, such as "Not Held." It may be that the special handling codes associated with the original receipt of the order are different than the special handling codes associated with the intra-firm transmittal, if the receiving department attaches additional instructions on the order after receipt or origination.

Desk transmittal information is required for all subsequent stops of an order within a firm, including its transfer to a Trading Desk for execution.

# 4.2.3 Order Transmittal/Route to Member, Non-FINRA Member or National Securities Exchange

When a FINRA member receives and transmits an order to another broker/dealer, or national securities exchange for further handling or execution; then, for OATS purposes, the order has been routed. An order that is transferred between two valid MPIDs within the same firm is also considered routed. For all routed orders, the member is required to record and report certain information to OATS regarding the route including:

- Order Sent Timestamp the date and time the order was routed.
- **Destination Code** indicates if the order was routed to a member firm, non-member firm, ECN or national securities exchange.
- Routing Method Code the method by which the order was routed.

Routing information is required for all orders that are routed to another FINRA member, a non-FINRA member, or national securities exchange for further handling or execution. The information required depends on the destination of the order and the method by which the order was routed as per the following:

- Exchange Participant ID for orders routed to a national securities exchange, the firm identifier assigned by the exchange must be provided.
- **Routed Order ID** for orders routed electronically to another FINRA member, ECN, or national securities exchange, the Routed Order ID must be reported. The Routed Order ID must be unique, except in instances when the route has a special routing condition, as per the following:
  - For orders routed to another broker/dealer, the Routed Order ID must be unique for the MPID, Order Sent Date, Connection ID, and Sent to MPID. OATS will attempt to match orders routed to another FINRA member or ECN using the Routed Order ID.
  - o For orders routed to a national securities exchange, the Routed Order ID must be unique for the MPID, Order Sent Date, Connection ID, Destination Code, and Exchange Participant ID. OATS will attempt to match orders routed to a national securities exchange using the Routed Order ID, Exchange Participant ID, and Connection ID, if populated.

For orders routed manually, the Routed Order ID is not required.

- **Special Routing Condition** indicates if the order has a special routing condition that requires the duplication of the Routed Order ID:
  - Bunched if the firm combines orders for further routing, such that the total shares quantity routed represents more than one order, the routing firm must indicate that the routed order was bunched. Each participating order of the bunch must be reported on a separate route report with the same Routed Order ID. For example, if two orders were bunched and routed to another firm, two route reports must be sent to OATS with the same Routed Order ID, each identifying the order as bunched. The Routed Shares Quantity must equal the total number of shares routed in the

bunched order. NOTE: The Routed Order ID reported on the bunched routes may not be reused for any other orders for the MPID, the trading day, and Sent to MPID (if routed to another member) or Destination Code and Exchange Participant ID (if routed to a national securities exchange).

- Modification of an Exchange Order If the identified order has an exchange routing condition that requires the use of the original Order ID, then the routing firm must indicate that the route represents a modification to an order routed to a national securities exchange that includes a duplicated Routed Order ID.
- **Sent to MPID** for orders routed to a FINRA member, the Sent to MPID must be provided; For orders routed to a non-FINRA member, the Sent to MPID may be provided, but it is not required.

Firms that transmit orders through non-member routing and trading systems are not considered, for OATS purposes, to be routing the orders to the non-member trading system; instead firms are considered to be routing the orders to the member or market center that is the order's destination. OATS does not require any new reports to be generated as orders are transmitted via or through non-member routing or trading systems. For example, if a non-market maker received an order from a customer for 1,000 shares of ORCL and transmitted that order through a non-member trading system to an ORCL market maker, only reports regarding the receipt and route by the non-market maker and the receipt and execution by the market maker should be submitted to OATS. If however, either firm received the order and has to transfer such order within the firm to a place or system where it could be executed, a Desk Report may also be required.

## 4.2.4 Order Modification

When a FINRA member receives a customer-initiated modification to an order, the member is required to record and report certain information to OATS regarding the modification, including:

- **Replaced Firm Order Identifier** the order identifier of the order that is being modified.
- **Time of Modification** the date and time the firm received the modification of the order from the customer. NOTE: this is not the time of any system acknowledgement or acceptance.
- **Firm Order Identifier** an order identifier that uniquely identifies the modified order for the firm within the order received date.

Order modification information is required for all customer modifications to an order, including changes to limit or stop prices, time in force, special handling codes, or an increase in quantity.

Order modification information should **not** be reported to OATS in the following circumstances:

- Changes to Side or Issue Symbol changes to the Buy/Sell code or Issue Symbol should result in the cancellation of an order and the origination of a new order.
- Modification of a Route—if a trader or trading software modifies a previously routed order, and not the customer, then the routing firm is not required to report a modification provided the destination to which the order was routed reports the modification. NOTE: if the order was modified by a trader or trading software after being routed to a non-member that has no OATS reporting obligations or a national securities exchange for which there is no electronic linkage in OATS, then the modification must be reported.
- Correcting an Error—firms that erroneously submit a report to OATS should
  correct the error by using a Correction Report which shows that the order remains
  live, but was corrected for OATS reporting purposes. In this instance, submitting
  modification information would be inappropriate since the customer has not
  modified the order.
- Reduction in Quantity Reductions in quantity should be reported as a partial cancellation.

#### 4.2.5 Order Execution

When a FINRA member originates or receives an order, and the firm subsequently executes the order, the member is required to record and report certain information to OATS regarding the execution including:

- **Time of Execution** the date and time of execution.
- **Execution Type** indicates if the execution is a full execution (entire share quantity is executed) or partial execution (a portion of the order that is less than the full share quantity is executed). For partial executions, the remaining leaves quantity must also be reported.
- **Market Center** identifies the facility operated by a registered securities association where the trade was reported.
- Capacity indicates the capacity the member acted in when executing the order (agency, principal, or riskless principal).

Execution information is required for all orders that are executed partially or in full. The information required depends on the market center to which the order was trade reported as per the following:

- **Branch Sequence Number** for trades reported to a FINRA transaction reporting system, OATS requires the member to report a Branch Sequence Number. OATS will attempt to match execution information to trades reported to a FINRA transaction reporting system using the Branch Sequence Number.
- **Reporting Exception Code** in instances where no trade report is required pursuant to FINRA transaction reporting rules, firms may use a Reporting Exception Code to indicate there is no trade report related to the OATS Execution Report.

#### 4.2.6 Order Cancellation

When a FINRA member originates or receives an order and the firm or customer subsequently cancels the order, the member is required to record and report certain information to OATS regarding the cancellation, including:

- **Time of Cancellation** the date and time the customer instruction was originated or received by the firm. NOTE: This is not the time of any system acknowledgement or acceptance.
- Cancel Type indicates if the cancellation is a full cancel (entire share quantity is cancelled) or partial cancel (a portion of the order that is less than the full share quantity is cancelled). For partial cancellations, the remaining leaves quantity must also be reported.
- Cancelled By identifies if the order was cancelled by the customer or the firm. When a customer cancels an order that was routed externally, the firm that originally received the order must send a report of cancellation to OATS and communicate the cancellation to the firm to which the order was routed. Additionally, the receiving firm must also send a report of cancellation to OATS.

Cancel information is required for all orders that are modified during the course of the day and subsequently cancelled, or cancelled in full after the date of receipt. If a request for modification cannot be honored because the order has been executed, a report of cancellation may be submitted to reflect the customer's instructions, but is not required.

Cancel information should not be reported to OATS in the following circumstances:

- **Expired Limit Orders**—when a limit order expires, the cancellation of the order is not necessary. FINRA is able to determine that the order has expired based on the time in force as reported by the firm.
- Cancellation of a Route—firms should not submit cancel information to OATS that reflects the cancellation of a route to another firm.
  - o If a firm cancels the routing of an order to another firm, then the routing firm should notify the receiving firm of the cancellation. Only the receiving firm should submit cancel information to OATS. The routing firm should not submit cancel information to OATS.
  - If a firm cancels the routing of an order to a national securities exchange, the firm should not submit cancel information to OATS since the cancel would be reflected by the exchange.
- Correcting an Error—Firms that erroneously submit a report to OATS should
  correct the error by using a Correction Report which shows that the order remains
  live, but was corrected for OATS reporting purposes. In this instance, submitting
  cancel information would be inappropriate since the customer has not cancelled
  the order.

# 4.3 Order Report Types

To facilitate the reporting of order events, OATS has defined Order Reports that include various combinations of order event information. OATS uses the event information contained on each report to build the lifecycle of every order.

Table 4-1 lists the Order Reports defined in OATS and the event types that may be reported using each report.

Table 4-1. Summary of OATS Order Reports

Order Report Type	Event Type	Report Description	OATS Rule
New Order Report <sup>1</sup>	Order Receipt or Origination	Records the receipt of an order from a customer, another member or non-member, or orders originated within a member firm.	7440(b)
	Transmittal to a Desk or Department Within a Firm	Records the full transmittal of an order to a desk or department within a member firm on the same day.	7440(c)
	Order Cancellation	Records the cancellation of the order when the order is received and fully cancelled on the same day.	7440(d)
Route Report	Order Transmittal/Route to Another Member/ECN, Non- Member or National Securities Exchange	Records the routing of an order to another member, ECN, non-member or national securities exchange.	7440(c)
Desk Report	Transmittal to a Desk or Department Within a Firm	Records the receipt of a full or partial transmittal to a desk or department within a member firm.	7440(c)
Execution Report	Order Execution	Records the full or partial execution of an order.	7440(d)
Cancel Report	Order Cancellation	Records the full or partial cancellation of an order.	7440(d)
Cancel/Replace Report	Order Modification	Records the modification of an order.	7440(d)
Combined Order/Execution Report <sup>2</sup>	Order Receipt or Origination and Order Execution	Records the receipt of an order from a customer, another member or non-member, or orders originated within a member firm and full execution on the same day.	7440(b), 7440(d)
	Transmittal to a Desk or Department Within a Firm	Records the full transmittal of an order to a desk or department within a member firm on the same day.	7440(c)
Combined Order/Route Report <sup>3</sup>	Order Receipt or Origination and Order Transmittal/Route to Another Member/ECN, Non- Member or National Securities Exchange	Records the receipt of an order from a customer, another member or non-member, or an order originated within a member firm and full route of the order on the same day to another member, ECN, non-member or national securities exchange.	7440(b), 7440(c)

 $<sup>\</sup>ensuremath{^{1}}$  The New Order Report includes fields for cancellation and desk information.

<sup>&</sup>lt;sup>2</sup>The Combined Order/Execution Report includes fields for desk information.

 $<sup>^3</sup>$ The Combined Order/Route Report includes fields for cancellation and desk information.

	ransmittal to a Desk or repartment Within a Firm	Records the full transmittal of an order to a desk or department within a member firm on the same day.	7440(c)
Oi	rder Cancellation	Records the cancellation of the order when the order is received and fully	7440(d)
		cancelled on the same day.	

During processing, OATS uses the **Order Identifier** to uniquely identify orders. The Order Identifier is comprised of the following fields:

- Firm Order Identifier an order identifier assigned by the firm
- Order Received Date a timestamp that represents the date and time of receipt.
- Market Participant Identifier (MPID)

The Order Identifier is used to link order events within a firm, and is the first step to creating the lifecycle of an order.

## 4.3.1 New Order Report

The New Order Report is used to record the receipt of an order from a customer, another broker/dealer, or orders originated within the firm. The New Order Report may also be used to record and report the following additional information:

- The transmittal of an order in full to a desk or department within a firm on the same day as the order originated.
- The full cancellation of an order that was received and fully cancelled on the same day.

## 4.3.2 Route Report

The Route Report is used to record full, partial or bunched routing of an order to another FINRA member firm, non-FINRA member or national securities exchange. In order to link Route Reports to the originating event reported to OATS, the unique order identifier of the originating order must be included.

## 4.3.3 Desk Report

The Desk Report is used to record the transmittal of an order to a desk or department within a firm. In order to link Desk Reports to the originating event reported to OATS, the unique order identifier of the originating order must be included.

## 4.3.4 Cancel Report

The Cancel Report is used to record the full or partial cancellation of an order. In order to link Cancel Reports to the originating event reported to OATS, the unique order identifier of the originating order must be included.

# 4.3.5 Cancel/Replace Report

The Cancel/Replace Report is used to record the modification of an order. In order to link Cancel/Replace Reports to the originating event reported to OATS, the unique order identifier of the order being replaced must be included.

## 4.3.6 Combined Order/Execution Report

The Combined Order/Execution Report is used to record the receipt of an order from a customer, another member or non-member, or orders originated within a member firm, and full execution on the same day. The Combined Order/Execution Report may also be used to record and report the following additional information:

• The transmittal of an order in full to a desk or department within a firm on the same day the order originated.

## 4.3.7 Combined Order/Route Report

The Combined Order/Route Report is used to record the receipt of an order from a customer, another broker/dealer, or orders originated within a member firm, and full route of the order on the same day. The Combined Order/Route Report may also be used to record and report the following additional information:

- The transmittal of an order in full to a desk or department within a firm on the same day as the order originated.
- The full cancellation of an order that was received and fully cancelled on the same day.

NOTE: Each Order Report is fully defined in Appendix C, including the data type and size, allowable values, and conditions when the field is mandatory. All fields contained in each Order Report are fully defined in Appendix A.

# 4.4 Order Reporting Scenarios

This section provides a representative sample of order reporting scenarios in the equity trading environment. It defines and illustrates representative scenarios and their reporting requirements. Each reporting scenario includes a description, diagram, key points and assumptions, and example order report types representing the key data elements of each event type that must be recorded and reported to OATS in response to the scenario.

#### **4.4.1** Order Execution

This scenario illustrates the reporting requirements to OATS of a member firm that fills a customer order from its proprietary account. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The execution of the order.

Furthermore, this scenario illustrates the following details:

- 1. The member firm is required to send a Combined Order/Execution Report for the order it receives from the customer.
- 2. When reporting to a FINRA transaction reporting system, firms are required to submit a Branch Sequence Number. The firm must also submit this Branch Sequence Number to OATS on the Combined Order/Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

Customer

1) Submits
Order

Member
Firm

2) Submits
Trade
Report

Transaction Reporting System

OrderExecution
Report

OATS

Figure 4-1. Order Execution

- 1. Time of receipt at firm and transmittal of the order to the Trading Desk is simultaneous or within the same second.
- 2. The member firm received and fully executed the order in one trade on the same day; otherwise, separate New Order and Execution Reports must be used.
- 3. The order is executed on a principal basis.
- 4. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

## **OATS REPORTING TECHNICAL SPECIFICATIONS**

Table 4-2. Order Execution, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Market sell order for 2,000 shares of O	RCL.
2	Member Firm fills order internally and reports the trade to the FINRA/NASDAQ Trade Reporting Facility.	Member Firm fills order for 2,000 shares of ORCL and submits a trade report to the FINRA/NASDAQ Trade Reporting Facility which includes the Branch Sequence Number ABC123.	
3	Member Firm submits Combined Order/Execution Report to OATS.	Combined Order/Execution sample da Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Execution Timestamp: Branch Sequence Num: Execution Quantity: Trader Terminal ID: Market Center ID: Execution Price: Capacity Code:	ta includes: FIRM 20101231000000000 ABC123 20101231105436721 E ORCL SL 2000 T  F I N  20101231105812432 ABC123 2000 TERM00392 L 31.00 P

## 4.4.2 Execution of Orders Matched as Agent by a Member (Including ATS or ECN)

This scenario illustrates the reporting requirements to OATS when a member firm, as agent, matches a buy order and sell order at the same price. In this scenario, Member Firm 3 matches an order from Member Firm 1 with an order from Member Firm 2 for execution. In this scenario, Member Firm 1 is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to Member Firm 3.

Member Firm 2 is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to Member Firm 3.

Member Firm 3 is required to report the following events to OATS:

- 1. The receipt of the orders from the member firms.
- 2. The execution of each order received.

Furthermore, this scenario illustrates the following details:

- 1. Member Firm 3 is required to capture the Firm MPID and the Routed Order ID of both member firms and report this information on each New Order Report to OATS.
- 2. The execution reports for each order must contain a Branch Sequence Number. The Branch Sequence Number must also be included in the transaction report(s) submitted to a FINRA transaction reporting system. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

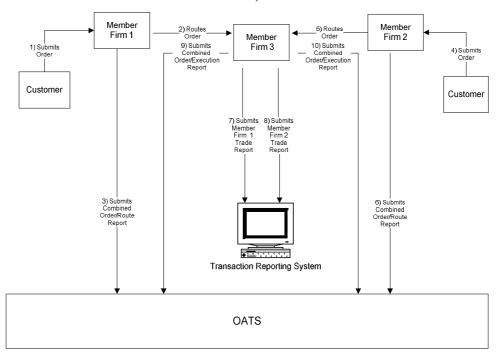


Figure 4-2. Execution of Orders Matched as Agent by a Member (Including ATS or ECN)

- 1. The order was not transmitted to another desk or department within the firm more than one second after receipt.
- 2. Member Firm 1 and Member Firm 2 both received and fully routed the order to Member Firm 3 on the same day; otherwise, separate New Order and Route Reports must be used.
- 3. Member Firm 3 received and fully executed the order in one trade on the same day; otherwise, separate New Order and Execution Reports must be used.
- 4. Member Firm 1 and Member Firm 2's customer orders were routed on an agency basis.
- 5. The trades are reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-3. Execution of Orders Matched as Agent by a Member (Including ATS or ECN), Event Listing

Ref	Event	Event Details	
1	Member Firm 1 receives order from customer.	Market sell order for 2,000 shares of ORCL.	
2	Member Firm 1 routes order to Member Firm 3.	Market sell order for 2,000 shares of	ORCL.
3	Member Firm 1 submits Combined Order/Route	Combined Order/Route Report samp	le data includes:
	Report to OATS.	Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Order Received Timestamp:	FRM1 20100103105855999 FRM1ABC123 20100103105855999
		Received Method Code:	Е
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID: Originating Department ID:	A
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code: ECN Flag:	N
		Desk Timestamp:	
		Desk Type Code:	
		Sent to Firm MPID:	FRM3
		Sent to Routed Order ID:	FRM1ABC123 20100103110014356
		Order Sent Timestamp: Routed Shares Quantity:	20100103110014330
		Routing Method Code:	E
		Special Routing Condition:	L
		Destination Code:	Е
4	Member Firm 2 receives order from customer.	Market buy order for 2,000 shares of	ORCL.
5	Member Firm 2 routes order to Member Firm 3.	Market buy order for 2,000 shares of	ORCL.
6	Member Firm 2 submits Combined Order/Route	Combined Order/Route Report samp	le data includes:
	Report to OATS.	Order Receiving Firm MPID:	FRM2
		Order Received Date:	20100103110015324
		Order Receiving Firm Order ID:	FRM2ABC123
		Order Received Timestamp: Received Method Code:	20100103110015324 E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	B
		Shares Quantity:	2000
		Receiving Department ID:	A
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp: Desk Type Code:	
		Sent to Firm MPID:	FRM3
		Sent to Routed Order ID:	FRM2ABC123
		Order Sent Timestamp:	20100103110021457
		Routed Shares Quantity:	2000
		Routing Method Code:	E
		Special Routing Condition:	
		Destination Code:	E
7	Member Firm 3 executes the sell order and	Trade report includes Branch Sequen	ce Number
	submits a trade report to the FINRA/NASDAQ	DEF456.	

## **ORDER REPORTING**

Ref	Event	Event Details	
	Trade Reporting Facility.		
8	Member Firm 3 executes the buy order and submits a trade report to the FINRA/NASDAQ Trade Reporting Facility.	Report includes Branch Sequence Number JKL123.	
9	Member Firm 3 submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Routing Firm MPID: Routed Order ID: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Execution Timestamp: Branch Sequence Number: Execution Quantity: Trader Terminal ID:	sample data includes: FRM3 20100103110015324 DEF456 FRM1 FRM1ABC123 20100103110015324 E ORCL SL 2000 ATS  W I M  20100103110302115 DEF456 2000 TERM1
		Market Center ID: Execution Price:	L 31.00
		Capacity Code:	A
10	Member Firm 3 submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Routing Firm MPID: Routed Order ID: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Execution Timestamp: Branch Sequence Number: Execution Quantity: Trader Terminal ID: Market Center ID: Execution Price: Capacity Code:	sample data includes: FRM3 20100103110021457 JKL123 FRM2 FRM2ABC123 20100103110021457 E ORCL B 2000 ATS  W I M  20100103110303224 JKL123 2000 TERM01 L 31.00 A

# 4.4.3 Negotiated Execution between two FINRA Member Firms

This scenario illustrates the OATS reporting requirements when a FINRA member firm executes a customer order as a result of negotiating a trade with another FINRA member firm. In this scenario, Member Firm 1 (initiator) is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The execution of the order.

Member Firm 2 (respondent) is required to report the following to OATS:

 The second member (respondent) is required to send a Combined Order/Execution Report for the negotiated transaction with a Negotiated Trade Flag of 'Y' and an Execution Timestamp with the time the negotiation was completed.

When reporting to a FINRA transaction reporting system, firms are required to submit a Branch Sequence Number. Both firms must submit a Branch Sequence Number to OATS on the Combined Order/Execution Report or Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

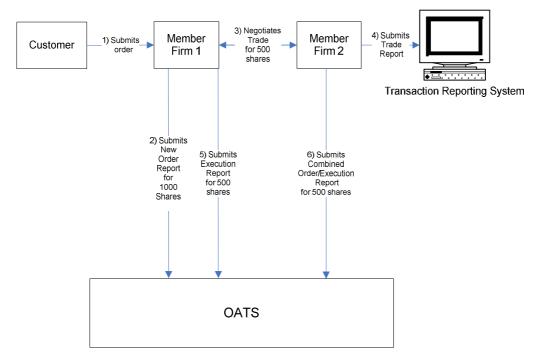


Figure 4-3. Negotiated Execution between two FINRA Member Firms

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The first member is acting as agent on behalf of its customer. The second member executes the trade as principal.
- 3. The trade is reported to the OTC Reporting Facility.

Table 4-4. Negotiated Execution between two FINRA Member Firms, Event Listing

Ref	Event	Event Details	
1	Member Firm 1 receives order from customer.	Market buy order for 1,000 shares of AIMM.	
2	Member Firm 1 submits a New Order Report to OATS.	New Order Report sample data inclu	udes:
		Order Receiving Firm MPID:	FRM1
		Order Received Date:	20080102000000000
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20080102102355999
		Received Method Code:	E
		Issue Symbol ID:	AIMM
		Buy/Sell Code:	В
		Shares Quantity:	1000
		Receiving Department ID:	T
		Originating Department ID:	T.
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code: Routed Order ID:	ABCD5678
3	Using Pink Link operated by OTC Pink	Member Firm 1 and Member Firm 2	
3	Markets, Member Firm 1 negotiates a	trade of AIMM. Member Firm 1 and	
	trade of 500 shares with Member Firm 2.	a Pink Link Execution Message bac	
	trade of 500 shares with Member 1 mil 2.	of ABC123.	k with an Execution iD
4	Member Firm 2 submits a trade to the	Member Firm 2 submits a trade to the OTC Reporting	
	OTC Reporting Facility Report.	Facility and populates the Branch Sequence Number (or both	
	o To Hoporanig Paramity Hopora	the Branch Sequence Number and Contra Branch Sequence	
		Number if submitting via QSR or AGU) with ABC123.	
5	Member Firm 1 submits an Execution	Execution sample data includes:	
	Report to OATS.	Order Receiving Firm MPID:	FRM1
		Order Received Date:	20080102000000000
		Order Receiving Firm Order ID:	ABC123
		Issue Symbol ID:	AIMM
		Execution Timestamp:	20080102102800999
		Branch Sequence Num:	ABC123
		Execution Quantity:	500
		Trader Terminal ID:	TERM00392
		Market Center ID:	0
		Execution Price:	31.00
6	Member Firm 2 submits a Combined	Capacity Code: Combined Order/Execution sample da	A sta includes:
0	Order/Execution Report to OATS.	Order Receiving Firm MPID:	FRM2
	Order/Execution Report to OATS.	Order Received Date:	20080102000000000
		Order Receiving Firm Order ID:	JKL123
		Order Received Timestamp:	20080102102800999
		Received Method Code:	M
		Issue Symbol ID:	AIMM
		Buy/Sell Code:	SL
		Shares Quantity:	500
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	U
		Member Type Code:	M

## **OATS REPORTING TECHNICAL SPECIFICATIONS**

## **ORDER REPORTING**

Routed Order ID:	
ECN Flag:	
Desk Timestamp:	
Desk Type Code:	
Execution Timestamp:	20080102102800999
Branch Sequence Num:	ABC123
Execution Quantity:	500
Trader Terminal ID:	TERM00392
Market Center ID:	O
Execution Price:	31.00
Capacity Code:	P
Negotiated Trade Flag:	Y

## 4.4.4 Desk Transmittal and Subsequent Execution

This scenario illustrates the reporting requirements to OATS when a branch office of a member firm receives a customer order and subsequently transmits the order to its Trading Desk where it is executed. In this scenario, the member firm would be required to report the following:

- 1. The receipt of the order from the customer.
- 2. Transmittal of the order to the Trading Desk.
- 3. The execution of the order by the member firm.

The order receipt time would be the time the branch office received the order from the customer.

Furthermore, in this scenario, when reporting to a FINRA transaction reporting system, the member firm is required to submit a Branch Sequence Number. The member firm will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the OATS Execution Report.

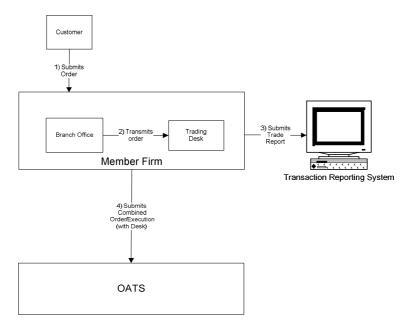


Figure 4-4. Desk Transmittal and Subsequent Execution

- 1. The order was received, transmitted to the Trading Desk and fully executed in one trade on the same day; otherwise, separate New Order, Desk, and Execution Reports must be used.
- 2. The order is executed on a principal basis.
- 3. The transmission time between the Branch Office and the Trading Desk is not within the same second.
- 4. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

## **OATS REPORTING TECHNICAL SPECIFICATIONS**

Table 4-5. Desk Transmittal and Subsequent Execution, Event Listing

Ref	Event	Event Details	
1	Branch Office receives order from customer.	Market sell order for 2,000 shares of ORCL.	
2	Trading Desk receives order from the Branch	Trading Desk receives order and order is filled from the	
	Office.	proprietary account.	
3	Member Firm reports the trade to the	Trade report includes Branch Sequence Number	
	FINRA/NASDAQ Trade Reporting Facility.	ABCD1234.	
4	Member Firm submits a Combined	Combined Order/Execution (with Desk) Report sample	
	Order/Execution (with Desk) Report to OATS.	data includes:	
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	ABCD1234
		Order Received Timestamp:	20101231101436721
		Received Method Code:	N
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Terminal ID:	TERM01
		Receiving Department ID:	0
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Received Timestamp:	20101231102356346
		Desk Type Code:	T
		Execution Timestamp:	20101231103359987
		Branch Sequence Number:	ABCD1234
		Execution Quantity:	2000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P

## 4.4.5 Partial Desk Transmittal and Subsequent Execution

This scenario illustrates the reporting requirements to OATS when a customer order is received by one desk/department (i.e. Sales) and is transmitted in pieces to another desk/department (i.e. Trading) within the same firm. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the customer order by the Sales Desk.
- 2. The transmittal of each piece of the order to the Trading Desk.
- 3. The execution of the order by the Member Firm.

Furthermore, this scenario illustrates the following details:

1. When reporting to a FINRA transaction reporting system, the member firm is required to submit a Branch Sequence Number. The member firm will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

Customer

1) Submits
2000 share
Order

1500 shares
Trading
7) Transmits
500 shares
Trading
7) Transmits
500 shares
Trading
7) Transmits
500 shares
Trading
7) Transmits
10) Submits
Report
Report
Transaction Reporting System

Member Firm

2) Submits
New Order
Report
Report
Frequency
Transaction Report Desk Report
Frequency
Transaction Report
Frequency
Transaction Report
Frequency
Transaction Report
Frequency
Transaction Report
Frequency
Trading
9) Submits
Report
Frequency
Trading
9) Submits
Report
Frequency
Trading
9) Submits
Frequency
Trading
9) Submits
Frequency
Trading
9) Submits
Report
Frequency
Trading
9) Submits
Frequency
Fr

Figure 4-5. Partial Desk Transmittal and Subsequent Execution

- 1. The transmission time between the Branch Office and the Trading Desk is not within the same second.
- 2. The order is executed on a principal basis.
- 3. The trades are reported to the FINRA/NYSE Trade Reporting Facility.

Table 4-6. Partial Desk Transmittal and Subsequent Execution, Event Listing

Ref	Event	Event Details	
1	Branch Office receives order from customer.	Market sell order for 2,000 shares o	
2	Member Firm submits a New Order Report to	New Order Report sample data inclu	
	OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231102355721
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20101231102355721
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	O
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	A
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
3	Branch Office transmits order to Trading Desk.	Branch Office transmits 1,500 share	es to the Trading
		Desk.	
4	Member Firm submits Desk Report to OATS.	Desk Report sample data includes:	
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231102355721
		Order Receiving Firm Order ID:	ABC123
		Desk Shares Quantity:	1500
		Issue Symbol ID:	ORCL
		Desk Type Code:	T
		Desk Received Timestamp:	20101231102356999
5	Member Firm executes order and reports the	Trade report includes Branch Seque	nce Number
	trade to the FINRA/NYSE Trade Reporting	ABC123.	
	Facility.		
6	Member Firm submits Execution Report to	Execution Report sample data inclu-	des:
	OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231102355721
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20101231102757999
		Branch Sequence Number:	ABC123
		Execution Type Indicator:	P
		Execution Quantity:	1500
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	ORCL
		Market Center ID:	DN
		Execution Price:	31.00
		Capacity Code:	P
7	Branch Office transmits order to Trading Desk.	Branch Office transmits 500 shares	to the Trading Desk.
8	Member Firm submits Desk Report to OATS.	Desk Report sample data includes:	
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231102355721
		Order Receiving Firm Order ID:	ABC123
		Desk Shares Quantity:	500
		Issue Symbol ID:	ORCL
		Desk Type Code:	T
		Desk Received Timestamp:	20101231102358987
9	Member Firm executes order and submits a	Trade report includes Branch Seque	nce Number
	trade to the FINRA/NYSE Trade Reporting	ABC456.	

## **OATS REPORTING TECHNICAL SPECIFICATIONS**

## ORDER REPORTING

	Facility.		
10	Member Firm submits Execution Report to	Execution Report sample data includes:	
	OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231102355721
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20101231102759999
		Branch Sequence Number:	ABC456
		Execution Type Indicator:	P
		Execution Quantity:	500
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	ORCL
		Market Center ID:	DN
		Execution Price:	31.00
		Capacity Code:	P

# 4.4.6 Desk Transmittal to another Desk or Department and Subsequent Execution and Routing

This scenario illustrates the reporting requirements to OATS when an order transmitted to another desk where it is then partially executed with the leaves quantity routed to another market center for execution. In this scenario, an order was received by the firm on a Not Held basis and transmitted to the Trading Desk on a Held basis. The Trading Desk executed a portion of the order as principal and then routed the remaining quantity to another market center for execution. This scenario illustrates that Member Firm 1 would be required to report the following when the order is received:

- 1. The receipt of the order from the customer.
- 2. The transmittal of the order to the Trading Desk.
- 3. The partial execution of the order.
- 4. The route of the remaining shares of the order.

The order receipt time is the time the firm received the order from the customer.

In this scenario, the order is routed electronically to another member (Member Firm 2). Member Firm 2 would be required to report the following:

- 1. The receipt of the order.
- 2. The execution of the order.

This scenario illustrates the following additional details:

- 1. Since the order was received as Not Held, Member Firm 1 must use a Special Handling Code of 'Not Held' (NH) to indicate the order was received as Not Held. In addition, since the order was transferred to the Trading Desk as Held, no Desk Special Handling Codes would be reported on the Desk Report.
- 2. Since the order was routed electronically, Member Firm 2 must capture the Routed Order ID and Firm MPID of Member Firm 1 and report this information on its New Order Report to OATS.
- 3. When reporting to a FINRA transaction reporting system, both Member Firm 1 and Member Firm 2 are required to submit a Branch Sequence Number. The firms will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

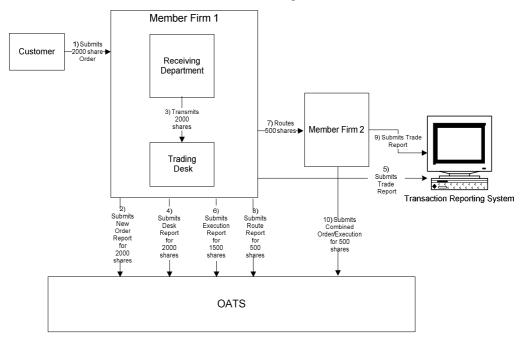


Figure 4-6. Desk Transmittal to another Desk or Department and Subsequent Execution and Routing

- 1. The transmission time between the Receiving Department and the Trading Desk is not within the same second.
- 2. Member Firm 2 received and executed the order in a single trade within the same day; otherwise, separate New and Execution Reports must be used.
- 3. The Route to Member Firm 2 is routed on an agency basis.
- 4. The partial execution by Member Firm 1 is on a principal basis.
- 5. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-7. Desk Transmittal to another Desk or Department and Subsequent Execution and Routing, Event Listing

Ref	Event	Event Details	
1	Receiving Department receives order from	Market sell order for 2,000 shares of	
	customer.		
2	Member Firm 1 submits a New Order Report to OATS.	New Order Report sample data inclu Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Terminal: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code:	des: FIRM 20101231000000000 ABCD1234 20101231102236721 E ORCL SL 2000 TERM01 O
		Special Handling Code 1:	NH
3	Receiving Department transmits the order to the Trading Desk.	The Receiving Department transmits ORCL to the Trading Desk.	
4	Member Firm 1 submits Desk Report to OATS.	Desk Report sample data includes: Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Issue Symbol ID: Shares Quantity: Desk Received Timestamp: Desk Type Code: Desk Special Handling Code 1:	FIRM 20101231000000000 ABCD1234 ORCL 2000 20101231102400999 T
5	Member Firm 1 executes 1500 shares of the order as principal and reports the trade to the FINRA/NASDAQ Trade Reporting Facility.	Trade report includes Branch Sequer	nce ID of ABCD1224.
6	Member Firm 1 submits Execution Report to OATS.	Execution Report sample data includ Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Execution Timestamp: Branch Sequence Number: Execution Quantity: Trader Terminal ID: Issue Symbol ID: Market Center ID: Execution Type Indicator: Execution Price: Capacity Code:	les: FIRM 20101231000000000 ABCD1234 20101231102501434 ABCD1224 1500 TERM00300 ORCL L P 31.00 P
7	Member Firm 1 routes the partial shares quantity to Member Firm 2.	Member Firm 1 electronically routes to Member Firm 2.	500 shares of ORCL
8	Member Firm 1 submits a Route Report to OATS.	Route Report sample data includes: Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID:	FIRM 20101231000000000 ABCD1234

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Ref	Event	Event Details	3
		Sent to Firm MPID:	MF02
		Routed Order ID:	ABCD1234
		Issue Symbol ID:	ORCL
		Order Sent Timestamp:	20101231102535786
		Routed Shares Quantity:	500
		Routing Method Code:	E
		Special Routing Condition:	
		Destination Code:	M
9	Member Firm 2 executes the order from Member	The FINRA transaction reporting sy	stem report includes
	Firm 1 and reports the trade to the	Branch Sequence ID of DEFG4568.	_
	FINRA/NASDAQ Trade Reporting Facility.		
10	Member Firm 2 submits Combined	Combined Order/Execution Report	sample data includes:
	Order/Execution Report to OATS.	Order Receiving Firm MPID:	MF02
		Order Received Date:	20101231102535786
		Order Receiving Firm Order ID:	DEFG4568
		Routing Firm MPID:	FIRM
		Routed Order ID:	ABCD1234
		Order Received Timestamp:	20101231102535786
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	500
		Order Origination Code:	W
		Account Type Code:	U
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231102540328
		Branch Sequence Number:	DEFG4568
		Execution Quantity:	500
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	ORCL
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P

## 4.4.7 Order Routing and Subsequent Execution

This scenario illustrates the reporting requirements to OATS when a customer's order is routed to another FINRA member firm on an agency basis and subsequently executed by the receiving member firm. In this scenario, the routing member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to another member firm.

In this scenario, the receiving member firm is required to report the following events to OATS:

- 1. The receipt of the order from the routing member firm.
- 2. The execution of the order.

Furthermore, this scenario illustrates the following details:

- 1. If this order were routed electronically, the receiving member firm would be required to capture the Routed Order ID and Firm MPID of the routing member firm and report this information on its Combined Order/Execution Report to OATS. If this order had been routed via telephone, the receiving member firm would only be required to capture the Firm MPID of the routing member firm.
- 2. Only the receiving member firm is required to report the execution to OATS because it executed the order.
- 3. When reporting to a FINRA transaction reporting system, the receiving member firm is required to submit a Branch Sequence Number. The receiving member firm will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

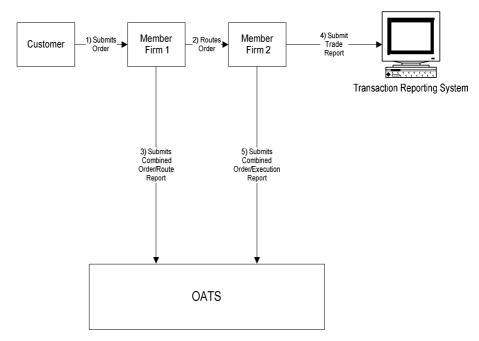


Figure 4-7. Order Routing and Subsequent Execution

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The routing member firm received and fully routed the order on the same business day; otherwise, separate New Order and Route Reports must be used.
- 3. The receiving member firm received and fully executed the order in one trade on the same day; otherwise, separate New Order and Execution Reports must be used.
- 4. The customer order is routed electronically on an agency basis.
- 5. The order is executed by the receiving member firm on a principal basis.
- 6. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-7. Order Routing and Subsequent Execution, Event Listing

Ref	Event	Event Details	
1	Member Firm 1 receives order from the	Market sell order for 2,000 shares of ORCL.	
	customer.		
2	Member Firm 1 electronically routes order to Member Firm 2.	Routed sell order for 2,000 shares of ORCL.	
3	Member Firm 1 submits Combined	Combined Order/Route Report sample data includes:	
	Order/Route Report to OATS.	Order Receiving Firm MPID:	FIRM
	_	Order Received Date:	20101231105755345
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20101231105755345
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	A
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Received Method Code:	E
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	) (FO)
		Sent to Firm MPID:	MF02
		Sent to Routed Order ID:	JKL123
		Order Sent Timestamp:	20101231105756552
		Routed Shares Quantity:	2000
		Routing Method Code:	E
		Special Routing Condition: Destination Code:	M
4	Member Firm 2 executes order from Member	Trade report includes Branch Seque	
7	Firm 1 and reports the trade to the	Trade Topole Metades Branen Sequence Transcer BBI 430.	
	FINRA/NASDAQ Trade Reporting Facility.		
5	Member Firm 2 submits Combined	Combined Order/Execution Report sample data includes:	
	Order/Execution Report to OATS.	Order Receiving Firm MPID:	MF02
	•	Order Received Date:	20101231105756884
		Order Receiving Firm Order ID:	DEF456
		Routing Firm MPID:	FIRM
		Routed Order ID:	JKL123
		Order Received Timestamp:	
		20101231105756884	
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	T
		Order Origination Code:	W
		Order Origination Code: Account Type Code:	W I
		Member Type Code:	M
		ECN Flag:	141
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231105758002
		Branch Sequence Number:	DEF456
		Execution Quantity:	2000
Ь		Zaresumon Quantity.	_000

## **OATS REPORTING TECHNICAL SPECIFICATIONS**

## ORDER REPORTING

Ref	Event	Event Details	
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P

## 4.4.8 Split Order Routing and Subsequent Execution

This scenario illustrates the reporting requirements to OATS when a member firm routes the order to two different receiving FINRA member firms. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to each receiving member firm.

Each receiving member firms are required to report the following events to OATS:

- 1. The receipt of the order from the routing member firm.
- 2. The execution of the order.

Furthermore, this scenario illustrates the following details:

- Each receiving member firm will be required to send a Combined Order/Execution Report for the order it receives from the member. Because all routing in this scenario is electronic, each receiving member firm is required to include the Routed Order ID and Firm MPID of the member (routing firm) on its New Order Report.
- 2. When reporting to a FINRA transaction reporting system, each executing firm will be required to submit a Branch Sequence Number. Each executing member firm will also submit this Branch Sequence Number to OATS on its Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

5) Routes rder for 5000 shares 1) Submits Order for 10000 Member Customer Member Firm 3 7) Submits Member Trade Report Transaction Reporting System Firm 2 4) Submits Route Report for 5000 6) Submits 10) Submits Combined Order/Execution New Order Route Report 5000 shares Report for 10000 shares 8) Submits Combined Order/Execution OATS

Figure 4-8. Split Order Routing and Subsequent Execution

- 1. Time of receipt at each firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. Both receiving member firms received and fully executed the order in one trade on the same day; otherwise, separate New Order and Execution Reports must be used.
- 3. The customer order is routed electronically on an agency basis.
- 4. The order is executed by both receiving member firms on a principal basis.
- 5. The trades are reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-8. Split Order Routing and Subsequent Execution, Event Listing

Ref	Event	<b>Event Details</b>	
1	Member Firm 1 receives order from customer.	Limit sell order for 10,000 shares of	
2	Member Firm 1 submits New Order Report to	New Order Report sample data inclu	
	OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231101436721
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20101231101436721
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Receiving Department ID:	A
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Shares Quantity:	10000
		Limit Price:	31.00
		Time in Force Code:	GTC
		First Special Handling Code:	NH
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
3	Member Firm routes order to Member Firm 2.	Limit sell order for 5,000 shares of 0	ORCL routed to
		Member Firm 2.	
4	Member Firm submits Route Report to OATS.	Route Report sample data includes:	TTD ) (
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231101436721
		Order Receiving Firm Order ID:	ABC123
		Sent to Firm MPID:	MF02
		Routed Order ID:	ABC123
		Issue Symbol ID:	ORCL
		Order Sent Timestamp:	20101231101500123 5000
		Routed Shares Quantity: Routing Method Code:	E
		Special Routing Condition:	L
		Destination Code:	M
5	Member Firm routes balance of order to	Limit sell order for 5,000 shares of 0	
	Member Firm 3.	Member Firm 3.	OKCL Touted to
6	Member Firm submits Route Report to OATS.	Route Report sample data includes:	
	Member 1 mm suchmes reduce respect to 0.1115.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231101436721
		Order Receiving Firm Order ID:	ABC123
		Sent to Firm MPID:	MF03
		Routed Order ID:	DEF456
		Issue Symbol ID:	ORCL
		Order Sent Timestamp:	20101231101545999
		Routed Shares Quantity:	5000
		Routing Method Code:	E
		Special Routing Condition:	
		Destination Code:	M
7	Member Firm 2 executes the order from	Trade report includes Branch Seque	nce Number LMN123.
	Member Firm 1 and reports the trade to the		
	FINRA/NASDAQ Trade Reporting Facility.		
8	Member Firm 2 submits Combined	Combined Order/Execution Report s	
	Order/Execution Report to OATS.	Order Receiving Firm MPID:	MF02
		Order Received Date:	20101231102500123

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Ref	Event	Event Details	
		Order Receiving Firm Order ID:	ORD789
		Routing Firm MPID:	FIRM
		Routed Order ID:	ABC123
		Order Received Timestamp:	20101231101500123
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Limit Price:	31.00
		Receiving Department ID:	T
		Originating Department ID:	1
		Order Origination Code:	W
			I
		Account Type Code:	
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	20101221102200000
		Execution Timestamp:	20101231102300999
		Branch Sequence Number:	LMN123
		Execution Quantity:	5000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.03
		Capacity Code:	P
9	Member Firm 3 executes the order from	Trade report includes Branch Seque	nce Number JKL789.
	Member Firm 1 and reports the trade to the		
	FINRA/NASDAQ Trade Reporting Facility.		
10	Member Firm 3 submits Combined	Combined Order/Execution Report	sample data includes:
	Order/Execution Report to OATS.	Order Receiving Firm MPID:	MF03
		Order Received Date:	20101231101545999
		Order Receiving Firm Order ID:	JKL789
		Routing Firm MPID:	FIRM
		Routed Order ID:	DEF456
		Order Received Timestamp:	20101231101545999
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Limit Price:	31.00
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	I
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231101715324
		Branch Sequence Number:	JKL789
		Execution Quantity:	5000
		Trader Terminal ID:	TERMA100
		Market Center ID:	L
		Execution Price:	31.01
		Capacity Code:	P 1.01
		Capacity Code.	1

# 4.4.9 Bunched Order Routing

This scenario illustrates the reporting requirements to OATS when a member firm bunches customer orders and routes the bunched order to a market maker for execution. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of each customer order.
- 2. The route of the orders to the market maker.

The market maker is required to report the following events to OATS:

- 1. The receipt of the bunched order from the member firm.
- 2. The execution of the order.

Furthermore, this scenario illustrates the following details:

- 1. The member firm is required to submit two Combined Order/Route Reports (one for each customer order) to OATS. On each Combined Order/Route Report, the member firm must indicate that the order will be routed as part of a bunched order. In addition, the member firm must indicate the total quantity of the bunched order routed on each Combined Order/Route Report.
- 2. The market maker is required to capture the Firm MPID of the member firm and report this information on its New Order Report to OATS.
- 3. If the orders are electronically routed, the same Routed Order ID must be provided on each Combined Order/Route Report. If the orders are routed manually, a Routed Order ID is not required.
- 4. The market maker is not required to have knowledge that the order was bunched by the member firm and, therefore, submits one New Order Report to OATS.
- 5. When reporting to a FINRA transaction reporting system, the market maker is required to submit a Branch Sequence Number. The market maker will also submit this Branch Sequence Number to OATS via the Execution Report. The Branch Sequence Number is used to match the trade report to the OATS Execution Report.

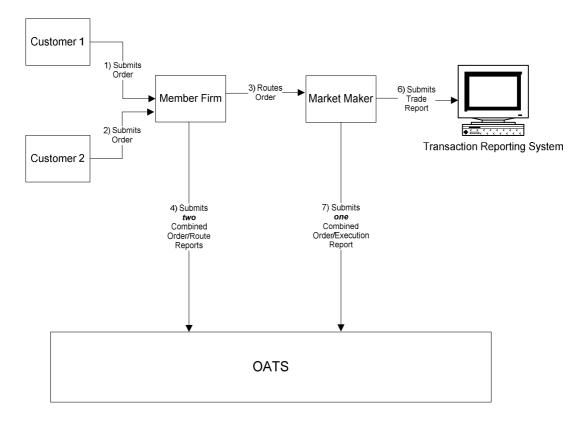


Figure 4-9. Bunched Order Routing

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The member firm received and fully routed each order on the same day; otherwise, separate New Order and Route Reports must be used.
- 3. The market maker received and fully executed the order on the same day; otherwise, separate New Order and Execution Reports must be used.
- 4. The customer order is routed on an agency basis.
- 5. The order is executed on a principal basis.
- 6. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-9. Bunched Routing, Event Listing (Manual Method), Event Listing

Ref	Event	Event Detai	ils
1	Member Firm receives order from	Market sell order for 2,000 shares o	
	Customer 1.		
2	Member Firm receives order from	Market sell order for 3,000 shares o	f ORCL.
	Customer 2.	,	
3	Member Firm routes customers' orders to	Market sell order for 5,000 shares o	f ORCL.
	Market Maker.		
4	Member Firm submits two Combined	Combined Order/Route Report samp	ple data includes:
	Order/Route Reports to OATS.	Order Receiving Firm MPID: FIRM	
		Order Received Date:	20101231105355111
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20101231105355111
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	S
		Shares Quantity:	2000
		Receiving Department ID:	A
		Originating Department ID:	Б
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp: Desk Type Code:	
		Sent to Firm MPID:	MM01
		Sent to Firm MFID: Sent to Routed Order ID:	IVIIVIOI
		Order Sent Timestamp:	20101231110015999
		Routed Shares Quantity:	5000
		Routing Method Code:	N
		Special Routing Condition:	Y
		Destination Code:	M
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231105359100
		Order Receiving Firm Order ID:	DEF456
		Order Received Timestamp:	20101231105359100
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	3000
		Receiving Department ID:	A
		Originating Department ID:	_
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	MM01
		Sent to Firm MPID: Sent to Routed Order ID:	MM01
		Order Sent Timestamp:	20101231110015999
		Routed Shares Quantity:	5000
		Routing Method Code:	3000 N
		Special Routing Condition:	Y
		Destination Code:	M
5	Market Maker executes order from	Trade report includes Branch Seque	
J	ivialnet ivianci executes ofuel from	Trade report includes branch Seque	THE INUITION UNITARY.

#### **ORDER REPORTING**

	Member Firm and reports the trade to the		
	FINRA/NASDAQ Trade Reporting		
	Facility.	G 1: 10.1 /F : P	1 1 1 1 1 1
6	Market Maker submits Combined	Combined Order/Execution Report sample data includes	
	Order/Execution Report to OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231110016225
		Order Receiving Firm Order ID:	GHI789
		Routing Firm MPID:	FIRM
		Routed Order ID:	
		Order Received Timestamp:	20101231110016225
		Received Method Code:	N
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	I
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231110355999
		Branch Sequence Number:	GHI789
		Execution Quantity:	5000
		Trader Terminal ID:	7851125
		Issue Symbol ID:	ORCL
		Execution Type Indicator:	F
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P

Table 4-10. Bunched Routing, Event Listing (Electronic Method), Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from Customer	Market sell order for 2,000 shares of	ORCL.
	1.		
2	Member Firm receives order from Customer	Market sell order for 3,000 shares of	FORCL.
	2.		
3	Member Firm routes customers' orders to	Market sell order for 5,000 shares of	f ORCL.
	Market Maker.		
4	Member Firm submits two Combined	Combined Order/Route Report samp	
	Order/Route Reports to OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231105355654
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp: Received Method Code:	20101231105355654 E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	S
		Shares Quantity:	2000
		Receiving Department ID:	A
		Originating Department ID:	71
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Sent to Firm MPID:	MM01
		Sent to Routed Order ID:	ZYX987
		Order Sent Timestamp:	20101231110015321
		Routed Shares Quantity:	5000
		Routing Method Code:	E
		Special Routing Condition:	Y
		Destination Code:	M
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231105355767
		Order Receiving Firm Order ID:	DEF456
		Order Received Timestamp:	20101231105455767
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	3000
		Receiving Department ID:	A
		Originating Department ID:	_
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp: Desk Type Code:	
		Sent to Firm MPID:	MM01
		Sent to Print Mr 113.  Sent to Routed Order ID:	ZYX987
		Order Sent Timestamp:	20101231110015321
		Routed Shares Quantity:	5000
		Routing Method Code:	E
		Special Routing Condition:	Y
		Destination Code:	M
5	Market Maker executes the order from	Trade report includes Branch Seque	nce Number

#### ORDER REPORTING

	Member Firm and reports the trade to the	GHI789.	
	FINRA/NASDAQ Trade Reporting Facility.		
6	Market Maker submits Combined	Combined Order/Execution Report	sample data includes:
	Order/Execution Report to OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231110016321
		Order Receiving Firm Order ID:	GHI789
		Routing Firm MPID:	FIRM
		Routed Order ID:	ZYX987
		Order Received Timestamp:	20101231110016321
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	I
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231110355877
		Branch Sequence Number:	GHI789
		Execution Quantity:	5000
		Trader Terminal ID:	7851125
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P

# 4.4.10 Manual Order Routing to a National Securities Exchange

This scenario illustrates the reporting requirements to OATS when a member firm manually routes an order to a national securities exchange. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to the national securities exchange.

Furthermore, this scenario illustrates the following details:

- 1. On the Route Report, the member firm enters a Destination Code to identify the national securities exchange where the order is routed, the Routing Method Code and Exchange Participant ID.
- 2. A Routed Order ID is not required when an order is routed manually.

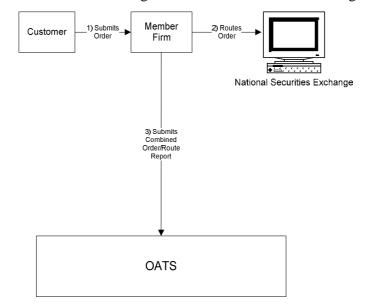


Figure 4-10. Manual Order Routing to a National Securities Exchange

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The member received and fully routed the order on the same day; otherwise, separate New Order and Route Reports must be used.
- 3. The member manually routed the order to The NASDAQ Stock Market.
- 4. The customer order is routed on an agency basis.
- 5. The order was routed manually; therefore, a Routed Order ID would not be required.

Table 4-11. Manual Order Routing to a National Securities Exchange, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Market sell order for 2,000 shares of ORCL.	
2	Member Firm enters order into The NASDAQ	Member Firm includes Order ID Number ABCD1234	
	Stock Market.	on the order.	
3	Member Firm submits Combined Order/Route	Combined Order/Route Report samp	ole data includes:
	Report to OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20100103105855321
		Order Receiving Firm Order ID:	ABCD1234
		Order Received Timestamp:	20100103105855321
		Received Method Code:	N
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	A
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		Sent to Firm MPID:	
		Sent to Routed Order ID:	
		Order Sent Timestamp:	20100103105915765
		Routed Shares Quantity:	2000
		Routing Method Code:	N
		Special Routing Condition:	
		Exchange Participant ID:	FIRM
		Destination Code:	XQ

# 4.4.11 Electronic Order Routing to a National Securities Exchange

This scenario illustrates the reporting requirements to OATS when a member firm electronically routes an order to a national securities exchange. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to a national securities exchange.

Furthermore, this scenario illustrates the following details:

1. On the Route Report, the member firm enters a Destination Code to identify the exchange to which the order was routed, a Routed Order ID, the Routing Method Code and Exchange Participant ID.

NOTE: When routing an order electronically to a national securities exchange, the routing firm must include the Routed Order ID on the exchange order in the manner as required by the exchange to which the order is being routed.

Customer

1) Submits
Order

National Securities Exchange

3) Submits
Combined
OrderRoute
Report

OATS

Figure 4-11. Electronic Order Routing to a National Securities Exchange

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The member received and fully routed the order on the same day; otherwise, separate New Order and Route Reports must be used.
- 3. The member electronically routed the order to the New York Stock Exchange.
- 4. The customer order is routed on an agency basis.
- 5. The order was routed electronically; therefore, a Routed Order ID is required.

Table 4-12. Electronic Order Routing to a National Securities Exchange Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Market sell order for 2,000 shares of	IBM.
2	Member Firm enters order into the New York	Member Firm includes Order ID Number ABCD1234	
	Stock Exchange.	on the order.	
3	Member Firm submits Combined Order/Route	Combined Order/Route Report samp	ole data includes:
	Report to OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20100103105855321
		Order Receiving Firm Order ID:	ABCD1234
		Order Received Timestamp:	20100103105855321
		Received Method Code:	E
		Issue Symbol ID:	IBM
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	A
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Sent to Firm MPID:	
		Sent to Routed Order ID:	ABCD1234
		Order Sent Timestamp:	20100103105915765
		Routed Shares Quantity:	2000
		Routing Method Code:	E
		Special Routing Condition:	
		Exchange Participant ID:	FRM
		Destination Code:	XN

# 4.4.12 Order Routing to a Non-FINRA Member Firm

When a firm routes an order to a non-FINRA member firm, the non-FINRA member is not required to report the order to OATS. The FINRA member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to a non-FINRA member firm.

Furthermore, this scenario illustrates the following details:

1. On the Combined Order/Route Report, the FINRA member firm enters a Destination Code of Non-FINRA Member Firm and the MPID of the non-FINRA member, if available, as the Sent to Firm MPID.

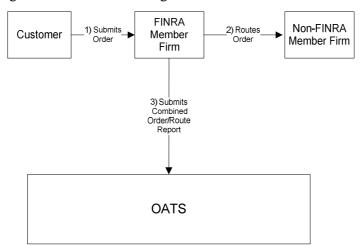


Figure 4-12. Order Routing to a Non-FINRA Member Firm

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The FINRA member firm received and fully routed the order on the same day; otherwise, separate New Order and Route Reports must be used.
- 3. The customer order is routed on an agency basis.

Table 4-13. Order Routing to a Non-FINRA Member Firm, Event Listing

Ref	Event	Event Deta	ils
1	FINRA Member Firm receives order from customer.	Market sell order for 2,000 shares	of ORCL.
2	FINRA Member Firm routes order to Non-FINRA Member Firm.	FINRA Member Firm electronically routes 2000 shares of ORCL to the non-member firm.	
3	FINRA Member Firm submits Combined Order/Route Report to OATS.	Combined Order/Route Report sat Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Sent to Firm MPID: Sent to Routed Order ID: Order Sent Timestamp: Routed Shares Quantity: Routing Method Code: Special Routing Condition: Destination Code:	mple data includes:     FIRM     20101231110015999     ABC123     20101231110015999     E     ORCL     SL     2000     A      F     I     N      NON1     ABCD1234     20101231110023677     2000     E     N

# 4.4.13 Order Routing Between MPIDs within a Firm and Subsequent Execution

This scenario illustrates the reporting requirements to OATS when a customer order is routed between two valid MPIDs within the same firm and subsequently executed. In this scenario, MPID1 is required to report the following events to OATS:

- 1. The receipt of the customer order.
- 2. The route of the order to MPID2.

In this scenario, MPID2 is required to report the following events to OATS:

- 1. The receipt of the routed order by MPID1.
- 2. The execution of the order.

Furthermore, this scenario illustrates the following details:

- 1. The order is electronically routed, therefore; MPID2 is required to capture the Routed Order ID and Firm MPID of MPID1 and report this information on its New Order Report to OATS.
- 2. Only MPID2 is required to report the execution to OATS because it executed the order.
- 3. When reporting to a FINRA transaction reporting system, MPID2 is required to submit a Branch Sequence Number. MPID2 will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

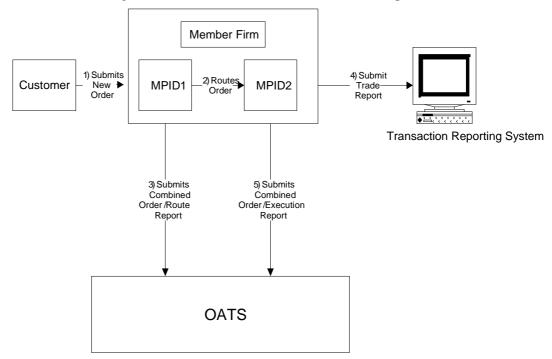


Figure 4-13. Order Routing Between MPIDs within a Firm and Subsequent Execution

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. MPID1 received and electronically routed, in full, the order to MPID2 on the same business day; otherwise, MPID1 must use separate New Order and Route Reports.
- 3. MPID2 received and fully executed the order in one trade on the same day; otherwise, separate New Order and Execution Reports must be used.
- 4. The order is executed on a principal basis.
- 5. The order was routed electronically; therefore, a Routed Order ID is required. If the order was routed manually, a Routed Order ID would not be required.
- 6. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-14. Order Routing Between MPIDs within a Firm and Subsequent Execution, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Market sell order for 2,000 shares of	ORCL.
2	MPID1 electronically routes order to MPID2.	Routed sell order for 2,000 shares of	
3	MPID1 submits a Combined Order/Route Report to OATS.	Combined Order/Route Report samp Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Order Origination Code: Account Type Code: Received Method Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Sent to Firm MPID: Sent to Routed Order ID: Order Sent Timestamp: Routed Shares Quantity:	Die data includes: MPID1 20101231105755656 ABC123 20101231105755656 ORCL SL 2000 A  F I E N  MPID2 ABC123 20101231110015999 2000
		Routing Method Code: Special Routing Condition: Destination Code:	E M
4	MPID2 executes the order from MPID1 and reports the trade to the FINRA/NASDAQ Trade Reporting Facility.	Trade report includes Branch Seque	nce Number DEF456.
5	MPID2 submits Combined Order/Execution Report to OATS.	Combined Order/Execution Reports Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Routing Firm MPID: Routed Order ID: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Execution Timestamp: Branch Sequence Number: Execution Quantity: Trader Terminal ID: Market Center ID: Execution Price: Capacity Code:	sample data includes: MPID2 20101231110015999 DEF456 MPID1 ABC123 20101231110015999 E ORCL SL 2000 T W I M  20101231110300999 DEF456 2000 TERM00392 L 31.00 P

#### 4.4.14 Order Routing to an Options Exchange

This scenario illustrates the reporting requirements to OATS when a member (Member Firm 1) routes an order with two components, an options component and cash component, to an options exchange, where the cash component is matched against an offsetting order from another member (Member Firm 2) and then sent by the options exchange to a FINRA member (Member Firm 3) for execution and reporting to a FINRA transaction reporting system. In this scenario, Member Firm 1 is required to report the following events to OATS:

- 1. The receipt of the buy order from the customer.
- 2. The route of the order to the options exchange.

Member Firm 2 is required to report the following events to OATS:

- 1. The receipt of the sell order from the customer.
- 2. The route of the order to the options exchange.

Member Firm 3 receives the offsetting buy and sell orders from the options exchange and executes an agency cross which is reported to a FINRA transaction reporting system. Member Firm 3 is required to report the following events to OATS:

- 1. The receipt of the sell order from the options exchange.
- 2. The receipt of the buy order from the options exchange.
- 3. The execution report for the buy order.
- 4. The execution report for the sell order.

Furthermore, this scenario illustrates the following details:

- 1. When reporting the agency cross to a FINRA transaction reporting system, Member Firm 3 is required to submit a Branch Sequence Number. Member Firm 3 will also submit this Branch Sequence Number to OATS on each Execution Report. The Branch Sequence Number enables the matching of a trade reported to a FINRA transaction reporting system to a related OATS Execution Report.
- 2. Member Firm 1 and Member Firm 2 must include a Special Handling Code of 'OPT' on their New Order events to identify that the terms and conditions of the order were derived from a related options transaction.

1) Submits an Order 5) Matches Cash Options Member Firm 3 8) Submits with 2 components a. Options component Member Firm 1 Exchange Trade Report (Executing Firm) and Firm 2 b. Ċash Transaction 6) Submits New Order 2) Submits Reporting Combined System Order/Route for sell order Report for 7) Submits New Order Cash component 3) Submits Report an Order with 2 components for buy order Member Firm 2 a. Options 9) Submits b. Cash Execution Report for buy order 4) Submits 10) Submits Combined Execution Order/Route Reports for Report for Cash component OATS

Figure 4-14. Order Routing to an Options Exchange

- 1. This represents an order where the terms and conditions of the order are derived from a related options transaction.
- 2. The member received and fully routed the order on the same day; otherwise, separate New Order and Route Reports must be used.
- 3. The member electronically routed the order to NASDAQ OMX PHLX.

Table 4-15. Order Routing to an Options Exchange

Ref	Event	Event Details		
1	Member Firm 1 receives order from customer	Sell order for 2,000 shares of ORC	L where the terms and	
	with two components:	conditions are derived from a relate	ed options transaction.	
	a. Options			
	b. Cash			
2	Member Firm 1 submits Combined	Combined Order/Doute Beneat com	unla data inaludası	
2		Combined Order/Route Report sam Order Receiving Firm MPID:	FRM1	
	Order/Route Report to OATS.	Order Received Date:	20100103105155212	
		Order Receiving Firm Order ID:	AFRM11234	
		Order Received Timestamp:	20100103105155212	
		Received Method Code:	E	
		Issue Symbol ID:	ORCL	
		Buy/Sell Code:	SL	
		Shares Quantity:	2000	
		Receiving Department ID:	A	
		Originating Department ID:		
		Order Origination Code:	F	
Ì		Account Type Code:	I	
		Member Type Code:	N	
		ECN Flag:		
		Desk Timestamp:		
		Desk Type Code: Sent to Firm MPID:		
		Sent to Fifth MPID: Sent to Routed Order ID:	JKL789	
		Order Sent Timestamp:	20100103105255345	
		Routed Shares Quantity:	2000	
		Routing Method Code:	E	
		Special Routing Condition:	_	
		Exchange Participant ID:	FRM1	
		Destination Code:	OX	
		Special Handling Code:	OPT	
3	Member Firm 2 receives order from customer	Buy order for 2,000 shares of ORC		
	with two components:	conditions are derived from a relate	ed options transaction.	
	a. Options			
	b. Cash			
4	Member Firm 2 submits Combined	Combined Order/Route Report sam	ple data includes:	
	Order/Route Report to OATS.	Order Receiving Firm MPID:	FRM2	
	Gradin Route Report to Grand	Order Received Date:	20100103105359111	
		Order Receiving Firm Order ID:	AFRM25678	
		Order Received Timestamp:	20100103105359111	
		Received Method Code:	E	
		Issue Symbol ID:	ORCL	
		Buy/Sell Code:	B 2000	
		Shares Quantity:	2000 A	
		Receiving Department ID: Originating Department ID:	А	
		Order Origination Code:	F	
		Account Type Code:	I	
		Member Type Code:	N	
		ECN Flag:	= -	
		Desk Timestamp:		
		Desk Type Code:		
		Sent to Firm MPID:		
		Sent to Routed Order ID:	GHI789	
		Order Sent Timestamp:	20100103105459977	

#### **ORDER REPORTING**

Ref	Event	<b>Event Details</b>	
		Routed Shares Quantity:	2000
		Routing Method Code:	E
		Special Routing Condition:	
		Exchange Participant ID:	FRM2
		Destination Code:	OX
		Special Handling Code:	OPT
5	The Buy Order from Member Firm 1 and Sell		
	Order from Member Firm 2 is matched by the		
	exchange and sent to a FINRA member for		
	_		
	execution and trade reporting.		
6	Member Firm 3 submits a New Order Report	New Order Report sample data incl	
	to OATS for the buy order.	Action Type Code:	N EDM2
		Order Receiving Firm MPID:	FRM3
		Order Received Date:	20100103105500325
		Order Receiving Firm Order ID:	FRM3ABC123
		Order Received Timestamp:	20100103105500325
		Received Method Code:	E
		Issue Symbol ID: Buy/Sell Code:	ORCL B
		Shares Quantity:	2000
		Limit Price:	31.00
		Time in Force Code:	31.00
		Receiving Department ID:	T
		Originating Department ID:	1
		Order Origination Code:	W
		Account Type Code:	U
		Member Type Code:	N
		ECN Flag:	14
		Desk Timestamp:	
		Desk Type Code:	
7	Member Firm 3 submits a New Order Report	New Order Report sample data incl	udes:
•	to OATS for the sell order.	Action Type Code:	N
	to OATS for the sen order.	Order Receiving Firm MPID:	FRM3
		Order Received Date:	20100103105500325
		Order Receiving Firm Order ID:	FRM3JKL123
		Order Received Timestamp:	20100103105500325
		Received Method Code:	Е
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Limit Price:	31.00
		Time in Force Code:	
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	U
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
8	Member Firm 3 executes the cross and	Trade report includes Branch Sequence Number	
	submits a trade report to the	JKLFRM3123 for the sell order and	
	FINRA/NASDAQ Trade Reporting Facility.	Number ABCFRM3123 for the buy	
9	Member Firm 3 submits Execution Report to	Execution Report sample data inclu	
	OATS for the buy order.	Order Receiving Firm MPID:	FRM3
1		Order Received Date:	20100103105500325

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

#### ORDER REPORTING

Ref	Event	Event Details	
		Order Receiving Firm Order ID:	FRM3ABC123
		Execution Timestamp:	20100103105500388
		Branch Sequence Number:	ABCFRM3123
		Execution Quantity:	2000
		Trader Terminal ID:	TERM01
		Issue Symbol ID:	ORCL
		Execution Type Indicator:	F
		Market Center ID:	L
		Execution Price:	31.00
10	Member Firm 3 submits Execution Report to	Execution Report sample data includes:	
	OATS for the sell order.	Order Receiving Firm MPID:	FRM3
		Order Received Date:	20100103105500325
		Order Receiving Firm Order ID:	FRM3JKL123
		Execution Timestamp:	20100103105500388
		Branch Sequence Number:	JKLFRM3123
		Execution Quantity:	2000
		Trader Terminal ID:	TERM01
		Issue Symbol ID:	ORCL
		Execution Type Indicator:	F
		Market Center ID:	L
		Execution Price:	31.00

# 4.4.15 Single Desk Usage of Multiple Order Handling Systems

This scenario illustrates the reporting requirements to OATS when member firms use multiple routing or trading systems within the same desk or department. OATS reporting applies only to transmittals between departments within member firms and not to electronic messages between systems. Order routing between proprietary and/or third party order-entry, routing, or trading systems is not reportable to OATS.

In this scenario, the member firm receives the order via its proprietary order-entry system, but routes the order to another market center or desk using an outside vendor's order routing system. The member firm would report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to the market maker.

No OATS events should be generated or reported for the transfer of the order between the proprietary order-entry system and the third party order routing system.

Furthermore, this scenario illustrates the following additional details:

- 1. The order receipt time for the New Order is the time the order is received by the member firm from the customer.
- 2. A new unique order identifier is assigned when the order is initially received by the member firm. Another unique order identifier would not be assigned until the order reached another member firm, such as the market maker. In order to enable a routing system or trading system to report on behalf of a member firm, unique identifiers and other pertinent information must be passed between the systems.

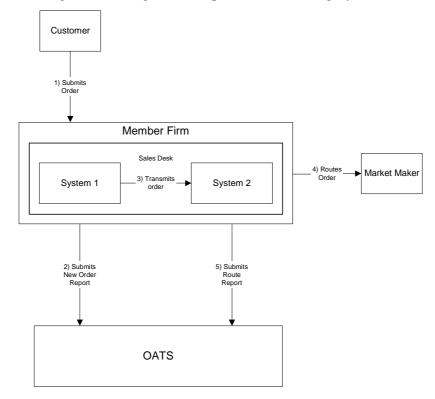


Figure 4-15. Single Desk Usage of Multiple Order Handling Systems

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The member firm's New Order and Route Orders are captured by separate entities; otherwise, a Combined Order/Route Report must be used.

Table 4-16. Single Desk Usage of Multiple Order Handling Systems, Event Listing

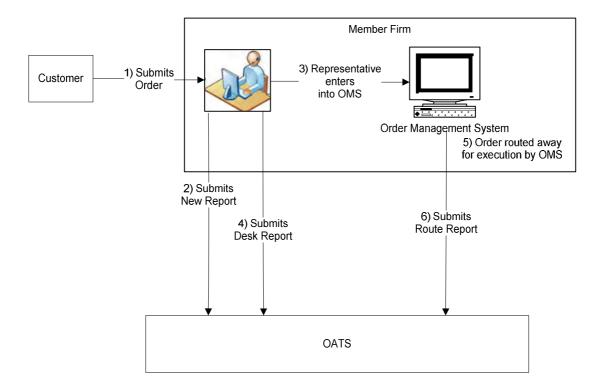
Ref	Event	Event Details		
1	Member Firm receives order from customer	Market sell order for 2,000 shares of ORCL.		
	and enters the order into System 1.			
2	Member Firm submits a New Order Report to	New Order Report sample data includes:		
	OATS.	Order Receiving Firm MPID:	FIRM	
		Order Received Date:	20101231105755999	
		Order Receiving Firm Order ID:	ABCD1234	
		Order Received Timestamp:	20101231105755999	
		Issue Symbol ID:	ORCL	
		Buy/Sell Code:	SL	
		Shares Quantity:	2000	
		Receiving Department ID:	A	
		Originating Department ID:	_	
		Order Origination Code:	F	
		Account Type Code:	I	
		Received Method Code:	E	
		Member Type Code:	N	
		ECN Flag:		
		Desk Timestamp:		
		Desk Type Code:		
3	Order routing system electronically transmits	Transmits sell order for 2,000 shares of ORCL.		
	Member Firm order to System 2.	D 11 1 6 2000 1		
4	System 2 electronically routes Member Firm's	Routes sell order for 2,000 shares of ORCL to Market		
	order to Market Maker.	Maker.		
5	Member Firm submits Route Report to OATS.	Route Report sample data includes:		
		Order Receiving Firm MPID:	FIRM	
		Order Received Date:	20101231105755999	
		Order Receiving Firm Order ID:	ABCD1234	
		Issue Symbol ID:	ORCL	
		Sent to Firm MPID:	MM01	
		Routed Order ID:	ABCD1234	
		Order Sent Timestamp:	20101231105815999	
		Routed Shares Quantity:	2000	
		Routing Method Code:	E	
		Special Routing Condition:		
		Destination Code:	M	

# 4.4.16 Order received by a Member and subsequently entered into an Order Management System (OMS) or trading system for further handling and execution

This scenario illustrates the reporting requirements to OATS when an order is received by a member firm at a branch or other location that must be entered into an order management system (OMS) or other trading system before it can be further handled or executed. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The transmission of the order to the Desk (i.e., place at the firm where the order can be executed either by a computer system or with the assistance of traders).
- 3. The route of the order to a national securities exchange.

Figure 4-16. Order received by a Member and subsequently entered into an Order Management System (OMS) or trading system for further handling and execution



- 1. The order is received at the branch and must be entered in the member firm's OMS or trading system before it can be further handled or executed.
- 2. It takes more than one second for the order to be entered into the firm's OMS or trading system.
- 3. The order is routed by the firm's OMS to The NASDAQ Stock Market for execution.

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Table 4-17. Order received by a Member and subsequently entered into an Order Management System (OMS) or trading system for further handling and execution, Event Listing

Ref	Event	<b>Event Details</b>	
1	Member Firm receives order from customer.	Market buy order for 2,000 shares of AAII.	
2	Member Firm submits New Order Report to OATS.	New Order Report sample data inclu Action Type Code: Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Limit Price: Time in Force Code: Receiving Department ID:	des: N FIRM 20100103102033112 ABC123 20100103102033112 N AAII B 2000
		Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code:	F I N
3	Representative enters the order into the		
	Member Firm's OMS/Trading system.		
4	Member Firm submits Desk Report to OATS.	Desk Report sample data includes: Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Desk Shares Quantity: Issue Symbol ID: Desk Type Code: Desk Received Timestamp:	FIRM 20100103102033112 ABC123 2000 AAII T 20100103102135321
5	Customer order is routed by OMS to The NASDAQ Stock Market.	Member Firm includes Order ID DE	FABC123 on the order.
6	Member Firm submits Route Report to OATS.	Route Report sample data includes: Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Sent to Firm MPID: Routed Order ID: Issue Symbol ID: Order Sent Timestamp: Routed Shares Quantity: Routing Method Code: Special Routing Condition:	FIRM 20100103102033112 ABC123  DEFABC123  AAII 20100103102212789 2000  E
		Exchange Participant ID: Destination Code:	FIRM XQ

#### **4.4.17** Multiple Desk Usage of Multiple Order Handling Systems

This scenario illustrates the reporting requirements to OATS when member firms use multiple Order Handling Systems on different desks. OATS reporting applies to transmittals between departments within member firms; therefore, a transmittal to another desk or department within a firm is a reportable event. For example, the department where the order was initially received may use a proprietary order entry system while the firm's Trading Desk uses an outside vendor's trading platform. In this scenario, the member firm would report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. Transmittal of the order to the Trading Desk.
- 3. The route of the order to the market maker.

Furthermore, this scenario illustrates the following additional details:

- 1. The order receipt time for the New Order is the time the order is received by the member firm from the customer.
- 2. A new unique order identifier is assigned when the order is initially received by the member firm. Another unique order identifier would not be assigned until the order reached another member firm, such as the market maker. In order to enable a routing system or trading system to report on behalf of a member firm, unique identifiers and other pertinent information must be passed between the systems.

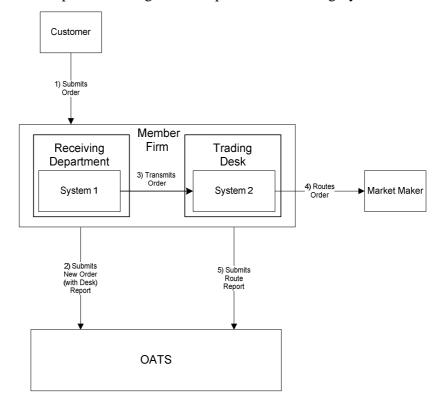


Figure 4-17. Multiple Desk Usage of Multiple Order Handling Systems

- 1. The transmission time between the Receiving Department and the Trading Desk is not within the same second.
- 2. The member firm's New Order and Route Orders are captured by separate entities; otherwise, a Combined Order/Route Report must be used.
- 3. The customer order is routed on an agency basis.

Table 4-18. Multiple Desk Usage of Multiple Order Handling Systems, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer	Market sell order for 2,000 shares of ORCL.	
	enters the order into System 1.		
2	The Institutional Desk transmits the order to	System 1 transmits sell order for 2,000 shares of ORCL to	
	the Trading Desk. The order is captured by the	System 2.	
	Trading Desk in a trading system separate		
	from the trading system used by the		
	Institutional Desk.		
3	Member Firm submits New Order (with Desk)	New Order Report (with Desk) sample data includes:	
	Report to OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231105755111
		Order Receiving Firm Order ID:	ABCD1234
		Order Received Timestamp:	20101231105755111
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	0
		Originating Department ID:	T.
		Order Origination Code:	F
		Account Type Code: Received Method Code:	A E
		Member Type Code:	N N
		ECN Flag:	IN
		Desk Received Timestamp:	20101231105857999
		Desk Type Code:	T
4	Trading Desk using System 2 electronically		•
4	routes Member Firm's order to Market Maker.	Routes sell order for 2,000 shares of ORCL to Market Maker.	
5	Member Firm submits Route Report to OATS.	Route Report sample data includes:	
	Weinber I i'm submits Route Report to 07115.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231105755111
		Order Receiving Firm Order ID:	ABCD1234
		Issue Symbol ID:	ORCL
		Sent to Firm MPID:	MM01
		Routed Order ID:	ABCD1234
		Order Sent Timestamp:	20101231105915999
		Routed Shares Quantity:	20101231103913999
		Routing Method Code:	2000 E
		Special Routing Condition:	Ľ
		Destination Code:	M
		Desuliauoli Code:	1V1

#### 4.4.18 Order Routing and Execution via a Member Clearing Firm

This scenario illustrates the reporting requirements to OATS when an introducing firm meets the definition of OATS reporting member pursuant to FINRA Rule 7410. In this scenario, the introducing firm enters the customer order into the clearing firm's system. The introducing firm, or the clearing firm on the introducing firm's behalf, would be responsible to report:

- 1. The receipt of the order from the customer.
- 2. The route of the order to the clearing firm.

The clearing firm would report the following:

- 1. The receipt of the order by the clearing firm.
- 2. The execution of the order by the clearing firm.

The introducing firm's order receipt time is the time the order is received from the customer. It may be identical to the order routing timestamp and the clearing firm's order receipt time if it is entered into the clearing firm's system upon receipt from the customer.

Furthermore, this scenario illustrates the following additional details:

- 1. Only the clearing firm is required to report the execution to OATS because it executed the order.
- 2. When reporting to a FINRA transaction reporting system, the clearing firm is required to submit a Branch Sequence Number. The clearing firm will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

NOTE: If the clearing firm routed the order to another center for execution, it would have reported a route instead of the execution.

Customer

1)Submits
Order

Introducing Firm

2) Enters order
(acting as a Market Maker)

Transaction Reporting System

Order

Transaction Reporting System

Order/Execution
Report

OATS

Figure 4-18. Order Routing and Execution via a Member Clearing Firm

- 1. The Introducing Firm is responsible for OATS reporting even if some other entity, such as a clearing firm, acts as its reporting agent.
- 2. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 3. The customer order is routed on an agency basis.
- 4. The order is executed on a principal basis.
- 5. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-19. Order Routing and Execution via a Member Clearing Firm, Event Listing

Ref	Event	Event Details	
1	Introducing Firm receives order from	Market sell order for 2,000 shares of	
	customer.		
2	Introducing Firm enters order into Clearing Firm's system.	Market sell order for 2,000 shares of	of ORCL.
3	Introducing Firm submits a Combined Order/Route Report to OATS.	Combined Order/Route Report sam Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Order Receiving Firm Order ID: Order Received Timestamp: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Received Method Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Sent to Firm MPID: Sent to Routed Order ID: Order Sent Timestamp: Routed Shares Quantity: Routing Method Code:	ple data includes: FIRM 20101231105755111 ABCD1234 20101231105755111 ORCL SL 2000 A  F I N N  MM01 ABCD1234 20101231105755999 2000 E
4	Introducing Firm and Clearing Firm execute	Special Routing Condition: Destination Code: Trade fills customer order ABCD12	M 234.
	trade.		
5	Clearing Firm submits a FINRA transaction reporting system report.	Trade report includes Branch Seque DEFG4568.	
6	Clearing Firm submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report includes: Order Receiving Firm MPID: Order Received Date: Order Received Date: Order Receiving Firm Order ID: Routing Firm MPID: Routed Order ID: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Execution Timestamp: Branch Sequence Number: Execution Quantity:	MM01 20101231105755999 DEFG4568 FIRM ABCD1234 20101231105755999 E ORCL SL 2000 T W I M  20101231105858345 DEFG4568 2000

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

#### ORDER REPORTING

Ref	Event	Event Details	
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P

# 4.4.19 Order Received by Non-Reporting Member and Immediately Sent to Clearing Firm

This scenario illustrates the reporting requirements to OATS when an introducing firm, that does **NOT** meet the definition of a reporting member pursuant to FINRA Rule 7410, receives a customer order and immediately enters the customer's order into the clearing firm's system. In this scenario, the clearing firm would report the following:

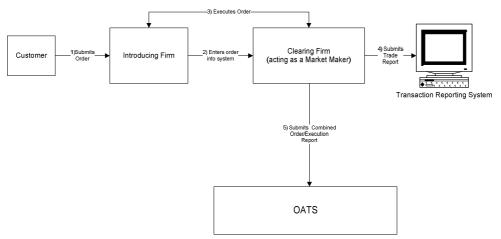
- 1. The receipt of the order by the clearing firm.
- 2. The execution of the order.

The order receipt time would be the time the order was received from the introducing firm.

Furthermore, this scenario illustrates the following additional details:

- 1. The clearing firm must indicate that the order was received from a member firm that does not meet the definition of reporting member. The clearing firm would populate the Member Type Code with 'E', and the Routing Firm MPID would be populated with the introducing firm's MPID.
- 2. When reporting to a FINRA transaction reporting system, the clearing firm is required to submit a Branch Sequence Number. The clearing firm will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

Figure 4-19. Order Received by Non-Reporting Member and Immediately Sent to Clearing Firm



- 1. Introducing Firm immediately sends the order to Clearing Firm.
- 2. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 3. The order is executed on a principal basis.
- 4. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-20. Order Received by Non-Reporting Member and Immediately Sent to Clearing Firm, Event Listing

Ref	Event	<b>Event Details</b>	
1	Introducing Firm receives order from customer.	Market sell order for 2,000 shares of	of ORCL.
2	Introducing Firm enters order into Clearing Firm's system.	Market sell order for 2,000 shares of ORCL.	
3	Introducing Firm and clearing firm execute trade.	Trade fills customer order ABCD1234.	
4	Clearing Firm submits a FINRA transaction reporting system report.	Report includes Branch Sequence Number DEFG4568.	
5	Clearing Firm submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 2010123110585832 Order Receiving Firm Order ID: DEFG4568 Routing Firm MPID: FIRM Routed Order ID: JKL789 Order Received Timestamp: 2010123110585832 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Receiving Department ID: T Originating Department ID: Order Origination Code: W Account Type Code: I Member Type Code: E ECN Flag: Desk Timestamp:	
		Execution Timestamp: Branch Sequence Number: Execution Quantity:	20101231105859999 DEFG4568 2000
		Trader Terminal ID:	TERM00392
		Market Center ID: Execution Price:	L 31.00
		Capacity Code:	P

#### 4.4.20 Direct Order Routing via a Clearing Firm's System

This scenario illustrates the reporting requirements to OATS when an introducing firm, that meets the definition of Reporting Member under FINRA Rule 7410, receives a customer order and enters it into its clearing firm's system. The introducing firm directs the order to a market center, other than the clearing firm, for further handling or execution.

The introducing firm would report the following:

- 1. The receipt of the order from the customer.
- 2. The route of the order to the market center.

The clearing firm would have no reporting responsibility.

The market center would report the following:

- 1. The receipt of the order from the introducing firm.
- 2. The execution of the order.

The introducing firm's order receipt time is the time the order is received from the customer. The market center's time is the time the order is received from the introducing firm.

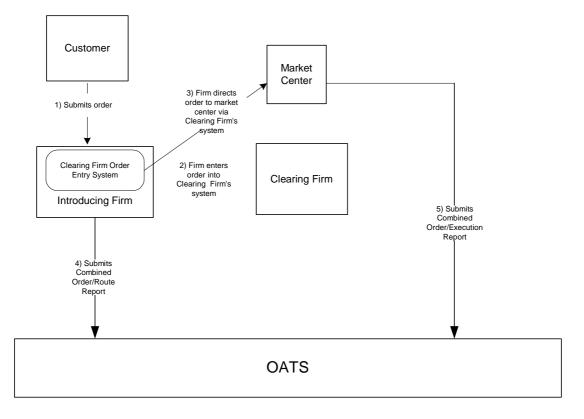


Figure 4-20. Direct Order Routing via a Clearing Firm's System

- 1. The Introducing Firm is responsible for OATS reporting, even if some other entity such as a clearing firm acts as its reporting agent.
- 2. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 3. The customer order is routed on an agency basis.
- 4. The Clearing Firm does not direct the introducing firm's order.

Table 4-21. Direct Order Routing via a Clearing Firm's System, Event Listing

Ref	Event	<b>Event Details</b>	
1	Introducing Firm receives order from customer.	Market sell order for 2,000 shares of ORCL.	
2	Introducing Firm enters order into Clearing Firm's system.	Market sell order for 2,000 shares of	ORCL.
3	Introducing Firm directs order to Market Center via Clearing Firm's system.		
4	Introducing Firm submits a Combined Order/Route Report.	Combined Order/Route Report samp Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Received Method Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Sent to Firm MPID: Sent to Routed Order ID:	Pile data includes: FIRM 20101231105755999 ABCD1234 20101231105755999 ORCL SL 2000 T  F I E N  MM01 ABCD1234
		Order Sent Timestamp: Routed Shares Quantity: Routing Method Code: Special Routing Condition: Destination Code:	20101231105756454 2000 E
5	The Market Center executes the order and submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report so Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Routing Firm MPID: Routed Order ID: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Execution Timestamp: Branch Sequence Number: Execution Quantity: Trader Terminal ID: Market Center ID: Execution Price: Capacity Code:	ample data includes:

#### 4.4.21 Order Routing via an Algorithm Provided by the Clearing Firm

This scenario illustrates the reporting requirements to OATS when an introducing firm, that meets the definition of Reporting Member under FINRA Rule 7410, receives a customer order and enters it into its clearing firm's system. The clearing firm's system then directs the order to a destination market center for execution. The introducing firm does not make a determination as to where the order is routed. Rather, the clearing firm's system automatically determines the routing destination based on pre-established criteria developed by the clearing firm. Further, the clearing firm identifies itself as the routing firm for purposes of SEC Rule 606 (formerly SEC Rule 11Ac1-6).

The introducing firm would report the following:

- 1. The receipt of the order from the customer.
- 2. The route of the order to the clearing firm.

The clearing firm would report the following:

- 1. The receipt of the order from the introducing firm.
- 2. The route of the order to the destination market center.

The destination market center would report the following (assuming it is a Reporting Member):

- 1. The receipt of the order from the clearing firm.
- 2. The execution of the order.

The introducing firm's order receipt time is the time the order is received from the customer. The clearing firm's order receipt time is the time the order is entered into its system.

Customer 1) Submits order 4) Clearing Firm's Clearing Firm Algorithmic Trading Destination 2) Enters order Clearing Firm Orde system determines into Clearing Market Entry System where the order is Firm's system System Center Clearing Firm Introducing Firm 6) Submits 5) Submits Combined Combined Combined Order/Execution Order/Route Order/Route Report Report **OATS** 

Figure 4-21. Order Routing via an Algorithm Provided by the Clearing Firm

- 1. The Introducing Firm is responsible for OATS reporting, even if some other entity such as a clearing firm acts as its reporting agent.
- 2. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 3. The customer order is routed on an agency basis.
- 4. The Destination Market Center is an ECN.

Table 4-22. Order Routing via an Algorithm Provided by the Clearing Firm

Ref	Event	<b>Event Details</b>	
1	Introducing firm receives order from customer.	Market sell order for 2,000 shares of	ORCL.
2	Introducing Firm enters order into Clearing Firm's system.	Market sell order for 2,000 shares of	ORCL.
3	Introducing Firm submits Combined	Combined Order/Route Report sample data includes:	
	Order/Route Report to OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231105755454
		Order Receiving Firm Order ID:	ABCD1234
		Order Received Timestamp:	20101231105755454
		Issue Symbol ID:	ORCL
		Buy/Sell Code: Shares Quantity:	SL 2000
		Receiving Department ID:	T
		Originating Department ID:	1
		Order Origination Code:	F
		Account Type Code:	Ī
		Received Method Code:	E
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Sent to Firm MPID:	MM01
		Sent to Routed Order ID:	ABCD1234
		Order Sent Timestamp:	20101231105755999
		Routed Shares Quantity:	2000
		Routing Method Code:	E
		Special Routing Condition:	3.6
4	Classica Finns's assets and determines subsure the	Destination Code:	M
4	Clearing Firm's system determines where the order is routed.	Clearing Firm routes 2,000 shares of	
5	Clearing Firm submits Combined Order/Route	Combined Order/Route Report samp	
	Report to OATS.	Order Receiving Firm MPID: Order Received Date:	MM01 20101231105755999
		Order Received Date.  Order Receiving Firm Order ID:	DEF456
		Order Received Timestamp:	20101231105755999
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	A
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	I
		Received Method Code:	E
		Member Type Code:	M ABCD1224
		Routed Order ID:	ABCD1234
		Routing Firm MPID: ECN Flag:	FIRM
		Desk Timestamp:	
		Desk Type Code:	
		Sent to Firm MPID:	ECN1
		Sent to Routed Order ID:	DEF456
		Order Sent Timestamp:	20101231105756233
		Routed Shares Quantity:	2000
		Routing Method Code:	E
		Special Routing Condition:	
		Destination Code:	E

#### ORDER REPORTING

Ref	Event	Event Details	
6	Destination Market Center executes order and	Combined Order/Execution sample	data includes:
	submits Combined Order/Execution Report to	Order Receiving Firm MPID:	ECN1
	OATS.	Order Received Date:	20101231105756233
		Order Receiving Firm Order ID:	GHI789
		Order Received Timestamp:	20101231105756233
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	ATS
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	I
		Member Type Code:	M
		ECN Flag:	Y
		Routed Order ID:	DEF456
		Routing Firm MPID:	MM01
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231105757999
		Branch Sequence Num:	GHI789
		Execution Quantity:	2000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	A

#### 4.4.22 Smart-Order Routers and Other Order Routing Services Provided by Members

Members that provide other FINRA members smart order routers and other order routing services generally are required to report OATS information for orders routed through these systems, except under the following circumstances:

- 1. The member providing the order routing system has no discretion over the order once it is entered into the member's order-routing system. The order routing destination ("Destination Market Center") must either be directed by the originating member or be subject to the pre-determined algorithm of the routing system agreed to by the originating member. The member providing the order routing system would have no involvement relating to the routing of the order, other than providing the routing mechanism.
- 2. The originating member must have established a relationship with the Destination Market Center, including meeting any and all applicable requirements to route orders to that destination. The originating member understands that the member providing the order routing system has no involvement with respect to the order in any way, except for providing a routing mechanism. No pre-established relationship between the member providing the order routing system and the Destination Market Center would be necessary for the originating member to access the routing destination.
- 3. The Destination Market Center views the order as coming directly from the originating member, not the member providing the order routing system, for all purposes, including, but not limited to, OATS reporting, trade reporting, applicable fees, etc.
- 4. The originating member, rather than the member providing the order routing system, identifies itself as the routing firm for purposes of SEC Rule 606 (formerly SEC Rule 11Ac1-6).

This scenario illustrates the reporting requirements to OATS when an introducing firm that meets the definition of Reporting Member under FINRA Rule 7410 enters an order into a Smart Router provided by another member firm that meets the conditions noted above. In this scenario, the introducing firm would report the following:

- 1. The receipt or origination of the order.
- 2. The route to the Destination Market Center determined by the Smart Router.

The Destination Market Center, assuming it is a Reporting Member, would report the following:

- 1. The receipt or the order from the introducing firm.
- 2. The execution (or any other action) of the order.

Figure 4-22. Smart-Order Routers and Other Order Routing Services Provided by Members

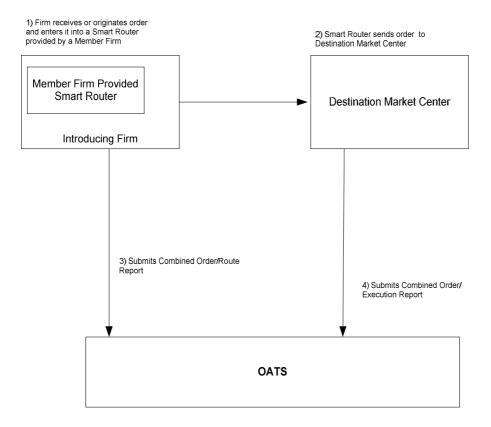


Table 4-23. Smart-Order Routers and Other Order Routing Services Provided by Members

Ref	Event	Event Details	
1	Firm receives or originates an order and enters it into a Smart Router provided by a Member Firm.	Market sell order for 2,000 shares of ORCL.	
2	Smart Router sends order to destination market center.	Market sell order for 2,000 shares of ORCL.	
3	Introducing Firm submits Combined	Combined Order/Route Report sample data includes:	
	Order/Route Report to OATS.	Order Receiving Firm MPID:	MM01
	_	Order Received Date:	20101231105755999
		Order Receiving Firm Order ID:	DEF456
		Order Received Timestamp:	20101231105755999
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	A
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	A
		Received Method Code:	Е
		Member Type Code:	N
		Routed Order ID:	
		Routing Firm MPID:	
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Sent to Firm MPID:	DM01
		Sent to Routed Order ID:	DEF456
		Order Sent Timestamp:	20101231105756454
		Routed Shares Quantity:	2000
		Routing Method Code:	S
		Special Routing Condition:	
		Destination Code:	M

#### ORDER REPORTING

Ref	Event	Event Details	
4	Destination Market Center executes order and	Combined Order/Execution sample	data includes:
	submits Combined Order/Execution Report to	Order Receiving Firm MPID:	DM01
	OATS.	Order Received Date:	20101231105756454
		Order Receiving Firm Order ID:	GHI789
		Order Received Timestamp:	20101231105756454
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Receiving Department ID:	ATS
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	U
		Member Type Code:	M
		ECN Flag:	
		Routed Order ID:	DEF456
		Routing Firm MPID:	MM01
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231105757999
		Branch Sequence Num:	GHI789
		Execution Quantity:	2000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	A

#### 4.4.23 Order Modification and Subsequent Execution

This scenario illustrates the reporting requirements to OATS when a customer modifies an existing order and the modified order is subsequently executed. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The modification of the order by the customer.
- 3. The execution of the order.

Furthermore, this scenario illustrates the following details:

- 1. Modifications to existing orders are reported to OATS on the Cancel/Replace Report.
- 2. The Cancel/Replace Report requires the member firm to submit a new Order ID for the replacement order.
- 3. When reporting to a FINRA transaction reporting system, the member firm is required to submit a Branch Sequence Number. The member firm will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

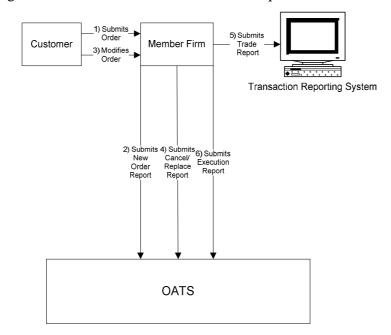


Figure 4-23. Order Modification and Subsequent Execution

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The order is executed on a principal basis.
- 3. The trade is reported to the FINRA/NYSE Trade Reporting Facility.

Table 4-24. Order Modification and Subsequent Execution, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Limit sell order for 2,000 shares of 0	
2	Member Firm submits New Order Report to OATS.	New Order Report sample data inclu Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231102033245
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20101231102033245
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Limit Price:	31.00 CTC
		Time in Force Code:	GTC T
		Receiving Department ID: Originating Department ID:	1
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	14
		Desk Timestamp:	
		Desk Type Code:	
3	Customer modifies order.	Limit sell order for 2,500 shares of 0	ORCL at 31.00.
4	Member Firm submits a Cancel/Replace Report	Cancel/Replace Report sample data	
	to OATS.	Cancel Portion	
		Order Receiving Firm MPID:	MM01
		Replaced Order Received Date:	20101231102033245
		Replaced Firm Order ID:	ABC123
		Cancelled By Flag:	C
		Replace Portion	
		Order Received Date:	20101231103555999
		Order Receiving Firm Order ID:	DEF456
		Order Received Timestamp:	20101231103555999
		Received Method Code:	E ORCL
		Issue Symbol ID: Buy/Sell Code:	SL
		Shares Quantity:	2500
		Limit Price:	31.00
		Time in Force Code:	GTC
		Receiving Department ID:	T
		Originating Department ID:	_
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
5	Member Firm submits a trade to the FINRA/NYSE Trade Reporting Facility.	Trade report includes Branch Sequence Number DEF456.	
6	Member Firm submits Execution Report to	Execution Report sample data include	
	OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231103555999
		Order Receiving Firm Order ID:	DEF456
		Execution Timestamp:	20101231104557002
		Branch Sequence Number:	DEF456
		Execution Quantity:	2500
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	ORCL

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

#### ORDER REPORTING

Ref	Event	Event Details	
		Execution Type Indicator:	F
		Market Center ID:	DN
		Execution Price:	31.00
		Capacity Code:	P

#### 4.4.24 Customer Modification of a Previously Routed Order and Subsequent Execution

This scenario illustrates the reporting requirements to OATS when a customer modifies an existing and previously electronically routed order, and the modified order is subsequently executed. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to the market maker.
- 3. The modification of the order by the customer.
- 4. The route of the modified order to the market maker.

In this scenario, the market maker is required to report the following events to OATS:

- 1. The receipt of the order.
- 2. The modification of the order.
- 3. The execution of the order.

Furthermore, this scenario illustrates the following details:

- 1. Customer initiated modifications to existing orders are reported to OATS on the Cancel/Replace Report.
- 2. The market maker must capture the Routed Order ID and Firm MPID of the member firm and report this information on its New Order Report to OATS.
- 3. The Cancel/Replace Report requires the member firm and market maker to submit a new Order ID for the modified order.
- 4. The Cancel/Replace Report of the market maker must provide the new Routed Order ID associated with the member firm.
- 5. Only the market maker is required to report the execution to OATS.
- 6. When reporting to a FINRA transaction reporting system, the market maker is required to submit a Branch Sequence Number. The market maker will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number is used to match the trade report to the related OATS Execution or Combined Order/Execution Report.

NOTE: If a trader or trading software modifies the order as opposed to the customer, then the routing firm need not report beyond the initial route as long as the market maker or ECN reports the modification. For additional information, refer to OATS Report article titled: *Firm Responsibilities When Using "Intelligent" Order Routing Systems*, which is available at http://www.finra.org/oatsreport.

7) Route Modified Orde 1) Submits Market Member Firm Customer Maker 5) Modifie 11) Submits Report 3) Submits Combined Order/Route Report Route 6) Submit Cancel/ Replace 4) Submits New Orde 12) Submits Execution Report Transaction Reporting System OATS

Figure 4-24. Customer Modification of a Previously Routed Order and Subsequent Execution

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The order was received and fully routed on the same day; otherwise, separate New Order and Route Reports must be used.
- 3. The customer order is routed on an agency basis.
- 4. The order is executed on a principal basis.
- 5. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-25. Customer Modification of a Previously Routed Order and Subsequent Execution, Event Listing

Ref	Event	Event Details	
1	Member Firm receives limit order from	Limit sell order for 2,000 shares of C	ORCL at 31.00.
	customer.		
2	Member Firm routes order to Market Maker.	Sell order for 2,000 shares of ORCL	is routed.
3	Member Firm submits Combined Order/Route	Combined Order/Route Report sample data includes:	
	Report to OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20101231110203132
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Limit Price:	31.00
		Time in Force Indicator:	GTC
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Sent to Firm MPID:	MM01
		Sent to Routed Order ID:	ABC123
		Order Sent Timestamp:	20101231110203999
		Routed Shares Quantity:	2000
		Routing Method Code:	E
		Special Routing Condition:	
		Destination Code:	M
4	Market Maker submits New Order Report to	New Order Report sample data inclu	
	OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	DEF456
		Routing Firm MPID:	FIRM
		Routed Order ID:	ABC123
		Order Received Timestamp:	20101231110203999
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity: Limit Price:	2000 31.00
		Time in Force Indicator:	GTC
		Receiving Department ID:	T
		Originating Department ID:	1
		Order Origination Code:	W
		Account Type Code:	Ü
		Member Type Code:	M
		ECN Flag:	111
		Desk Timestamp:	
		Desk Timestamp.  Desk Type Code:	
5	Customer modifies the order.	Limit sell order for 2,500 shares of C	DPCI
J	Customer mountes the order.	Limit sen order for 2,300 shares of C	INCL.

#### **ORDER REPORTING**

Ref	Event	Event Details	
6	Member Firm submits a Cancel/Replace	Cancel/Replace Report sample data	includes:
	Report to OATS.	Cancel Portion	
		Order Receiving Firm MPID:	FIRM
		Replaced Order Received Date:	20101231000000000
		Replaced Firm Order ID:	ABC123
		Cancelled By Flag:	C
		Replace Portion	
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	GHI789
		Order Received Timestamp:	20101231110300662
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2500
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
7	Member Firm routes modified order to Market	Limit sell order for 2,500 shares of C	ORCL.
	Maker.		
8	Member Firm submits Route Report.	Route Report sample data includes:	
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	GHI789
		Sent to Firm MPID:	MM01
		Routed Order ID:	GHI789
		Issue Symbol ID:	ORCL
		Order Sent Timestamp:	20101231110300999
		Routed Shares Quantity:	2500
		Routing Method Code:	E
		Special Routing Condition:	
		Destination Code:	M

#### **ORDER REPORTING**

Ref	Event	Event Details	
9	Market Maker submits Cancel/Replace Report	Cancel/Replace Report sample data includes:	
	to OATS.	Cancel Portion	
		Order Receiving Firm MPID:	MM01
		Replaced Order Received Date:	20101231000000000
		Replaced Firm Order ID:	DEF456
		Cancelled By Flag:	С
		Replace Portion	
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	JKL234
		Order Received Timestamp:	20101231110301004
		Routing Firm MPID:	FIRM
		Routed Order ID:	GHI789
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2500
		Limit Price:	31.00
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	W
		Account Type Code:	U
		Member Type Code:	M
		ECN Flag:	
10	Member Firm and Market Maker execute	Trade fills firm order JKL234, therel	by filling customer
	trade.	order GHI789.	
11	Market Maker submits a FINRA transaction reporting system report.	Trade report includes Branch Sequence Number JKL234.	
12	Market Maker submits Execution Report to	Execution Report sample data includes:	
	OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	JKL234
		Execution Timestamp:	20101231110305999
		Branch Sequence Number:	JKL234
		Execution Quantity:	2500
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	ORCL
		Execution Type Indicator:	F
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P

# **4.4.25** Customer Modification of a Previously Routed Order to a National Securities Exchange

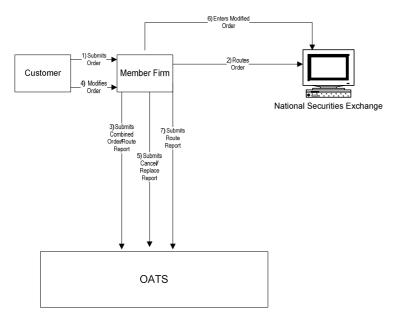
This scenario illustrates the reporting requirements to OATS when a customer modifies an existing and previously electronically routed order to a national securities exchange. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to a national securities exchange.
- 3. The modification of the order by the customer.
- 4. The entry of the modified order to the national securities exchange.

Furthermore, this scenario illustrates the following details:

- 1. Customer initiated modifications to existing orders are reported to OATS on the Cancel/Replace Report.
- 2. The subsequent Route Report contains a new Routed Order ID.

Figure 4-25. Customer Modification of a Previously Routed Order to a National Securities Exchange



- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The member firm initially receives and routes the order in full on the same day; otherwise, separate New Order and Route Reports must be used.
- 3. The customer order is routed on an agency basis.

Table 4-26. Customer Modification of a Previously Routed Order to a National Securities Exchange, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Sell order for 2,000 shares of ORCL.	
2	Member Firm routes order to The NASDAQ Stock Market.	Sell order for 2,000 shares of ORCL is routed.	
3	Member Firm submits Combined Order/ Route Report to OATS.	Combined Order/Route Report samy Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Limit Price: Time in Force Indicator: Receiving Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Sent to Firm MPID: Sent to Routed Order ID: Order Sent Timestamp: Routed Shares Quantity: Routing Method Code: Special Routing Condition:	FIRM 20101231000000000 ABC123 20101231110203999 E ORCL SL 2000 31.00 GTC A  F I N  ABC123 20101231110204545 2000 E
		Exchange Participant ID: Destination Code:	FIRM XQ
4	Customer modifies the order.	Limit sell order for 2,500 shares of	ORCL.
5	Member Firm submits a Cancel/Replace Report to OATS.	Cancel/Replace Report sample data Cancel Portion Order Receiving Firm MPID: Replaced Order Received Date: Replaced Firm Order ID: Cancelled By Flag:	
		Replace Portion Order Received Date: Order Receiving Firm Order ID: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Order Origination Code: Receiving Department ID: Originating Department ID: Account Type Code: Member Type Code: ECN Flag:	20101231000000000 GHI789 20101231110300676 E ORCL SL 2500 F A

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

#### **ORDER REPORTING**

Ref	Event	Event Details	
6	Member Firm uses the NASDAQ Exchange	Sell order for 2,500 shares of ORCL	
	Single Book Cancel/Replace functionality and		
	cancels order ABC123 and replaces it with		
	order DEF456.		
7	Member Firm submits Route Report.	Route Report sample data includes:	
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	GHI789
		Sent to Firm MPID:	
		Routed Order ID:	DEF456
		Issue Symbol ID:	ORCL
		Order Sent Timestamp:	20101231110300974
		Routed Shares Quantity:	2500
		Routing Method Code:	E
		Special Routing Condition:	
		Exchange Participant ID:	FIRM
		Destination Code:	XQ

## 4.4.26 Order Cancellation in Full on Day of Receipt

This scenario illustrates firm reporting requirements to OATS when a customer cancels an order in full on the same OATS Business Day as the order was received. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The cancellation of the order.

Because the order is received and cancelled on the same OATS Business Day, the two events must be reported on a single report to OATS.

Customer

1) Submits
Order
2) Cancels
Order
3) Submits
New
Order Report
(with Cancel)

OATS

Figure 4-26. Order Cancellation in Full on Day of Receipt

1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.

Table 4-27. Order Cancellation in Full on Day of Receipt, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Limit sell order for 2,000 shares of ORCL at 31.00	
2	Customer cancels order.	Customer fully cancels limit sell order for 2,000 shares	
		of ORCL.	
3	Member Firm submits New Order Report with	New Order Report sample data includes:	
	Cancel information to OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20101231102033999
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Limit Price:	31.00
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Order Cancel Timestamp:	20101231104355123
		Cancelled By Flag:	C

## 4.4.27 Order Cancellation in Full After Day of Receipt

This scenario illustrates firm reporting requirements to OATS when a customer cancels an order after the OATS Business Day when the order was received. In this example, the order was received on January 2 at 10:20:33, and cancelled on January 3 at 10:45:55. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The cancellation of the order.

Because the order was cancelled after the day of receipt, a separate Cancel Report is used to report the cancellation.

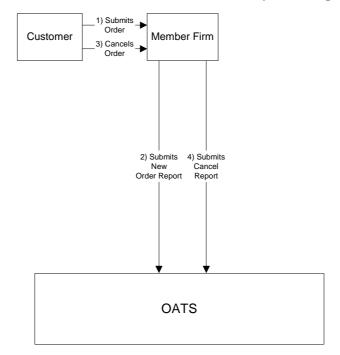


Figure 4-27. Order Cancellation in Full After Day of Receipt

1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Table 4-28. Order Cancellation in Full After Day of Receipt, Event Listing

Ref	Event	<b>Event Details</b>	
1	Member Firm receives order from customer.	Limit sell order for 2,000 shares of ORCL at 31.00.	
2	Member Firm submits New Order Report to	New Order Report sample data includes:	
	OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20100103000000000
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20100103102033999
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Limit Price:	31.00
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
3	Customer cancels order.	Customer fully cancels sell order for 2,000 shares of	
		ORCL.	
4	Member Firm submits Cancel Report to OATS.	. Cancel Report sample data includes:	
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20100103000000000
		Order Receiving Firm Order ID:	ABC123
		Issue Symbol ID:	ORCL
		Order Cancel Timestamp:	20110103104555678
		Cancel Type Flag:	F
		Cancel Quantity:	
		Leaves Quantity:	
		Cancelled By Flag:	C

#### 4.4.28 Partial Cancellation of an Order

This scenario illustrates member firm reporting requirements to OATS when a customer partially cancels an order by reducing the order shares quantity. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The partial cancellation of the order.
- 3. The execution of the remaining shares of the order.

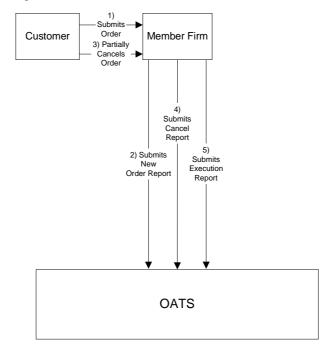


Figure 4-28. Partial Cancellation of an Order

This scenario includes the following assumptions:

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The order is executed on a principal basis.

Table 4-29. Partial Cancellation of an Order, Event Listing

Ref	Event	<b>Event Details</b>	
1	Member Firm receives order from customer.	Limit sell order for 2,000 shares of 0	ORCL at 31.00.
2	Member Firm submits New Order Report to	New Order Report sample data inclu	ides:
	OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20101231102033999
		Received Method Code:	Е
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Limit Price:	31.00
		Receiving Department ID:	T
		Originating Department ID:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
3	Customer partially cancels order.	Sell order reduced to 500 shares of 0	
4	Member Firm submits Cancel Report to OATS.	Cancel Report sample data includes:	
		Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	ABC123
		Issue Symbol ID:	ORCL
		Order Cancel Timestamp:	20101231104355766
		Cancel Type Flag:	P
		Cancel Quantity:	1500
		Cancel Leaves Quantity:	500
		Cancelled By Flag:	С
5	Member Firm submits Execution Report to	Execution Report sample data include	
	OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20101231000000000
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20101231104555974
		Branch Sequence Number:	ABC123
		Execution Quantity:	500 TEDM00303
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	ORCL
		Execution Type Indicator:	F
		Market Center ID:	L 21.00
		Execution Price:	31.00
		Capacity Code:	P

# 4.4.29 Customer Cancellation of a Routed Order on Day of Receipt

This scenario illustrates the reporting requirements to OATS when the customer cancels an order after it has been electronically routed to a market maker. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the order to the market maker.
- 3. The cancellation of the order by the customer.

In this scenario, the market maker is required to report the following events to OATS:

- 1. The receipt of the routed order by the market maker.
- 2. The cancellation of the order.

Furthermore, this scenario illustrates that both member firm and market maker must report the order cancellation to OATS.

Customer

1) Submits
New Order

Member Firm

2) Routes
Order

Market
Maker

6) Submits New Order Report
(with Cancel)

OATS

Figure 4-29. Customer Cancellation of a Routed Order on Day of Receipt

This scenario includes the following assumptions:

1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.

Table 4-30. Customer Cancellation of a Routed Order on Day of Receipt, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Market sell order for 2,000 shares o	
2	Member Firm electronically routes order to Market Maker.	Sell order for 2,000 shares of ORCL is routed.	
3	Customer cancels order.	Customer fully cancels sell order for 2,000 shares of ORCL.	
4	Member Firm communicates cancellation to Market Maker.		
5	Member Firm submits Combined Order/Route Report with cancel information to OATS.	Combined Order/Route Report samp Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Sent to Routed Order ID: Sent to Firm MPID: Order Sent Timestamp: Routed Shares Quantity: Routing Method Code: Special Routing Condition: Member Type Code: Destination Code: ECN Flag: Desk Timestamp:	ple data includes: FIRM 20101231105033999 ABC123 20101231105033999 E ORCL SL 2000 T  F I ABC123 MM01 20101231105034346 2000 E  N M
		Desk Type Code: Order Cancel Timestamp: Cancelled By Flag:	20101231110355971 C
6	Market Maker submits New Order Report with Cancel information to OATS.	New Order Report sample data inche Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Routing Firm MPID: Routed Order ID: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code: Order Cancel Timestamp: Cancelled By Flag:	

# 4.4.30 Desk Transmittal, External Route and Cancellation in Full on Day of Receipt

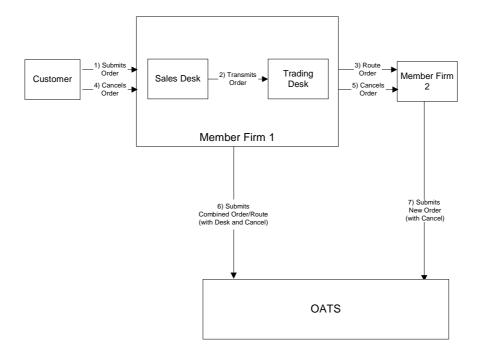
This scenario illustrates member firm reporting requirements to OATS for the cancellation of an order that was transmitted to the desk and then subsequently routed outside the member firm. The cancel was for the entire order and all subsequent events, including the cancel, occurred on the same day the order was received.

- 1. The receipt of the order from the customer.
- 2. Transmittal of the order to the Trading Desk.
- 3. The external route of the order.
- 4. The cancellation of the order by the customer.

Member Firm 2 is required to report the following events:

- 1. The receipt of the order from Member Firm 1.
- 2. The cancellation of the order.

Figure 4-30. Desk Transmittal, External Route, and Cancellation in Full on Day of Receipt



This scenario includes the following assumptions:

1. The transmission time between the Sales Desk and the Trading Desk is not within the same second.

Table 4-31. Desk Transmittal, External Route, and Cancellation in Full on Day of Receipt, Event Listing

Ref	Event	<b>Event Details</b>	
1	Member Firm receives order from customer.	Market sell order for 2,000 shares of	f ORCL at 31.00.
2	Trading Desk receives order from Member Firm 1 Sales Desk.	Member Firm 1 Sales Desk transmit ORCL to the Trading Desk.	s 2,000 shares of
3	Order is Routed to Member Firm 2.	Member Firm 1 electronically routes 2,000 shares of ORCL to Member Firm 2.	
4	Customer cancels entire order.	Customer fully cancels 2,000 shares of ORCL.	
5	Member Firm 1 notifies Member Firm 2 of cancellation.		
6	Member Firm 1 submits Combined Order/Route with Desk and Cancel information to OATS.	Combined Order/Route with Desk a sample data includes: Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Order Received Timestamp: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Received Method Code: Member Type Code: Desk Received Timestamp: Desk Type Code: Sent to Firm MPID: Sent to Routed Order ID: Order Sent Timestamp: Routed Shares Quantity: Routing Method Code: Special Routing Condition: Destination Code:	FIRM 20101231105755432 ABCD1234 20101231105755432 ORCL SL 2000 A F A E N 20101231105756999 T MF02 ABCD1234 20101231105757432 2000 E
		Order Cancel Timestamp: Cancelled by Flag:	20101231105800677 C
7	Member Firm 2 submits New Order with Cancel information to OATS.	New Order with Cancel Report samy Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Limit Price: Order Origination Code: Account Type Code: Member Type Code: Routed Order ID: Routing Firm MPID: Desk Timestamp: Desk Type Code: Order Cancel Timestamp: Cancelled By Flag:	ple data includes: MF02 20101231105757951 ABC123 20101231105757951 E ORCL SL 2000 31.00 W A M ABCD1234 FIRM  20101231105800788 C

# 4.4.31 Post Trade Allocation Reporting

This scenario illustrates the reporting requirements to OATS of a member firm that fills three customer orders via an agency post-trade allocation. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the orders from the customers.
- 2. The allocation back to the customer via an Execution Report.

The market makers (Member Firm 1 and Member Firm 2) are required to report the following events to OATS:

- 1. The receipt of the orders from the customer.
- 2. The execution of the order.

Furthermore, this scenario illustrates the following:

- 1. The Execution Reports submitted by Firm A must reflect the allocation time and must include the Reporting Exception Code of 'T' to reflect post trade allocation.
- 2. Member Firm 1 and Member Firm 2 are required to send a Combined Order/Execution Report for each order.

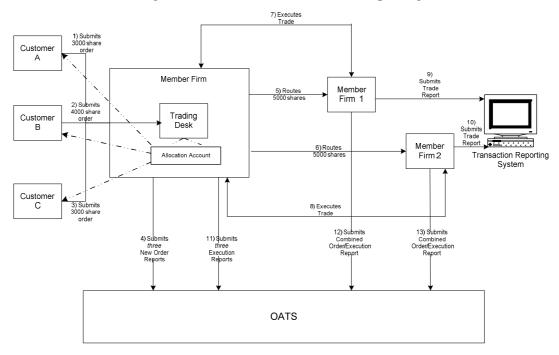


Figure 4-31. Post Trade Allocation Reporting

This scenario includes the following assumptions:

1. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-32. Post Trade Allocation Reporting, Event Listing

Ref	Event	Event Details	
1	Member Firm receives order from Customer A.	Market sell order for 3,000 shares of ORCL.	
2	Member Firm receives order from Customer B.	Market sell order for 4,000 shares of	f ORCL.
3	Member Firm receives order from Customer C.	Market buy order for 3,000 shares of ORCL.	
3 4	Member Firm receives order from Customer C.  Member Firm submits three New Order Reports to OATS.	New Order Report sample data included order Receiving Firm MPID: Order Received Date: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code:	
		Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code:	FIRM 20101231102357222 DEF456 20101231102357222 E ORCL SL 4000 T
		Order Receiving Firm MPID: Order Received Date: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Receiving Department ID: Originating Department ID: Order Origination Code: Account Type Code: Member Type Code: ECN Flag: Desk Timestamp: Desk Type Code:	FIRM 20101231102359333 GHI789 20101231102359333 E ORCL SL 3000 T F I N
5	Member Firm routes order to Member Firm 1.	Firm A electronically routes 5,000 s	hares to Member

#### **ORDER REPORTING**

Ref	Event	<b>Event Details</b>	
		Firm 1.	
6	Member Firm routes order to Member Firm 2.	Firm A electronically routes 5,000 s	hares to Member
		Firm 2.	
7	Member Firm 1 executes order.		
8	Member Firm 2 executes order.		
9	Member Firm 1 submits a trade to	Trade report includes Branch Sequence ID of KLM123 is	
	FINRA/NASDAQ Trade Reporting Facility.	included.	
10	Member Firm 2 submits a trade to	Trade report includes Branch Sequen	nce ID of NOP456 is
	FINRA/NASDAQ Trade Reporting Facility.	included.	
11	Member Firm submits three Execution Reports.	Execution Report sample data include	
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231102435111
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20101231102435111
		Branch Sequence Number:	T
		Reporting Exception Code:	T 3000
		Execution Quantity: Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	A
		capacity code.	11
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231102435111
		Order Receiving Firm Order ID:	DEF456
		Execution Timestamp:	20101231102435111
		Branch Sequence Number:	
		Reporting Exception Code:	T
		Execution Quantity:	4000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	A
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20101231102435111
		Order Receiving Firm Order ID:	GHI789
		Execution Timestamp:	20101231102435111
		Branch Sequence Number:	
		Reporting Exception Code:	T
		Execution Quantity:	3000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
12	Member Firm 1 submits a Combined	Capacity Code:	A
12	Order/Execution Report to OATS.	Combined Order/Execution sample of Order Receiving Firm MPID:	report includes: MM01
	Order/Execution Report to OATS.	Order Receiving Firm MPID: Order Received Date:	20101231102418111
		Order Received Date.  Order Receiving Firm Order ID:	KLM123
		Order Received Timestamp:	20101231102418111
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Order Origination Code:	W
		Account Type Code:	I
		Member Type Code:	M

#### ORDER REPORTING

Ref	Event	Event Details	
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231102420543
		Branch Sequence Number:	KLM123
		Execution Quantity:	5000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P
13	Member Firm 2 submits a Combined	Combined Order/Execution sample	report includes:
	Order/Execution Report to OATS.	Order Receiving Firm MPID:	MM02
	_	Order Received Date:	20101231102417111
		Order Receiving Firm Order ID:	NOP456
		Order Received Timestamp:	20101231102417111
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Order Origination Code:	W
		Account Type Code:	I
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
		Execution Timestamp:	20101231102422666
		Branch Sequence Number:	NOP456
		Execution Quantity:	5000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P

#### 4.4.32 Reserve Size Orders

A reserve size order is an order for which a customer has authorized the public display of part of the full size of the order with the remainder held in reserve on an undisplayed basis to be displayed in whole or in part as the displayed part is executed.

This scenario illustrates the reporting requirements relating to reserve size orders. In this scenario, a member firm receives an 11,000 share order with a displayed size of 1,000 shares and a reserve size of 10,000 shares. Two 1,000 share executions occur, leaving a displayed size of 1,000 shares and a reserve size of 9,000 shares. The member firm is required to report the following events to OATS:

- 1. The receipt of the reserve size order from the member firm
- 2. Executions to the reserve size order.

Furthermore, this scenario illustrates the following details:

- 1. The Shares Quantity on the New Order Report is the total of the displayed size and the reserve size. In this example, the Shares Quantity of the initial order is 11,000 (1,000 displayed size + 10,000 reserve size).
- 2. The Special Handling Code of 'RSV' must be reported for reserve size orders.
- 3. When reporting to a FINRA transaction reporting system, the Member Firm is required to submit a Branch Sequence Number. The Branch Sequence Number enables the matching of an FINRA Trade Reporting Facility trade to each OATS reported order.

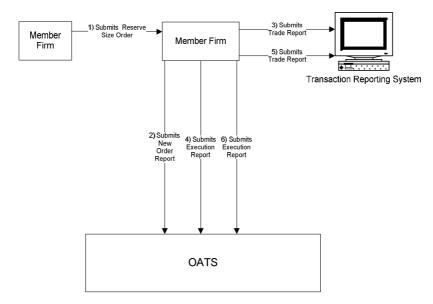


Figure 4-32. Reserve Size Orders

This scenario includes the following assumptions:

- 1. Time of receipt at firm and transmittal of the order to another desk or department is simultaneous or within the same second.
- 2. The trades are reported to the FINRA/NASDAQ Trade Reporting Facility.

Table 4-33. Reserve Size Orders, Event Listing

Ref	Event	Event Details		
1	Member Firm submits reserve size	Reserve size order to sell 11,000 shares of ORCL at 31.00.		
	order to Member Firm.	Displayed size of 1,000; reserved si	ize of 10,000.	
2	Member Firm submits New Order	New Order Report sample data incl	udes:	
	Report to OATS.	Order Receiving Firm MPID:	FIRM	
		Order Received Date:	20101231102033999	
		Order Receiving Firm Order ID:	ABC123	
		Routing Firm MPID:	FRM1	
		Order Received Timestamp:	20101231102033999	
		Received Method Code:	E	
		Issue Symbol ID:	ORCL	
		Buy/Sell Code:	SL	
		Shares Quantity:	11000	
		Limit Price:	31.00	
		Time in Force Code:	DAY	
		Receiving Department ID:	ATS	
		Originating Department ID:		
		Order Origination Code:	W	
		Account Type Code:	U	
		First Special Handling Code:	RSV	
		Member Type Code:	M	
		ECN Flag:		
		Desk Timestamp:		
		Desk Type Code:		
3	Member Firm reports trade report	Trade report includes Branch Sequence Number DEF456.		
	for 1,000 shares to the			
	FINRA/NASDAQ Trade Reporting			
	Facility.			
4	Member Firm reports Execution	Sample data from the first Execution		
	Report to OATS.	Order Receiving Firm MPID:	FIRM	
		Order Received Date:	20101231102033999	
		Order Receiving Firm Order ID:	ABC123	
		Execution Timestamp:	20101231104555671	
		Branch Sequence Number:	DEF456	
		Execution Quantity: Trader Terminal ID:	1000 TERM01	
			ORCL	
		Issue Symbol ID: Execution Type Indicator:	P P	
		Market Center ID:	L L	
		Execution Price:	31.00	
		Capacity Code:	A	
		Leaves Quantity:	10000	
5	Member Firm reports trade report	Trade report includes Branch Seque		
	for 1,000 shares to the	Soque		
	FINRA/NASDAQ Trade Reporting			
	Facility.			
6	Member Firm reports Execution	Sample data from the first Execution	on Report includes:	
	Report to OATS.	Order Receiving Firm MPID:	FIRM	
		Order Received Date:	20101231102033999	
		Order Receiving Firm Order ID:	ABC123	
		Execution Timestamp:	20101231104559880	
		Branch Sequence Number:	HIJ789	
		Execution Quantity:	1000	
		Trader Terminal ID:	TERM01	
		Issue Symbol ID:	ORCL	
		Execution Type Indicator:	P	

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

#### ORDER REPORTING

Ref	Event	Event Details	
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	A
		Leaves Quantity:	9000

# 4.4.33 Correction of Order Information that was Previously Submitted to OATS, Unexecuted Order

This scenario illustrates the reporting requirements to OATS when a firm corrects order information that was incorrectly captured when the order was recorded by the member firm and was previously submitted to OATS. In this scenario, the order is unexecuted. It would not apply if the customer modified the terms of an existing order because the scenario for Cancel/Replace Report would apply.

In this scenario, the member firm recorded the limit price for the customer's order to buy 1,000 shares of AAII as 12. The next day, after confirmation of the order with the customer and after the previous day's OATS reports had been submitted, the member firm discovered that the customer actually requested a limit price of 11. The member firm would report the following events to OATS:

- 1. The receipt of the order from the customer (New Order Report).
- 2. The erroneous New Order Report with Action Type Code "R," indicating a delete for replacement order event, followed by the corrected New Order Report with Action Type Code "C," indicating a corrected order event.

If the customer had modified the terms of the existing order, the member firm would report the changes using the Cancel/Replace Report. If the member firm had discovered the error before any of information was submitted to OATS, it would not be required to submit the New Order Report with the erroneous limit price.

Furthermore, this scenario illustrates the following details:

- The corrected New Order Report must have the same Order Receiving Firm Order ID as the erroneous New Order Report. Firms are not allowed to use corrections to change the Order Receiving Firm Order ID, the Order Receiving Firm Order Received Date, or the Order Receiving Firm MPID. If the member firm had made a mistake in one of these fields, it would be required to submit a delete New Order Report and generate a new New Order Report.
- 2. Firms should only submit corrected reports for events previously accepted by OATS; a corrected report should NOT be generated for rejected reports.
- 3. Firms must place the original report and the corrected report in sequence in a single file. If the corrected report does not immediately follow the replaced (i.e. the original report) report, both reports will be rejected. The pairs of replaced and corrected reports may be commingled with reports of other Action Type Codes in a file or they may be submitted in a separate file.

Figure 4-33. Correction of Order Information that was Previously Submitted to OATS, Unexecuted Order

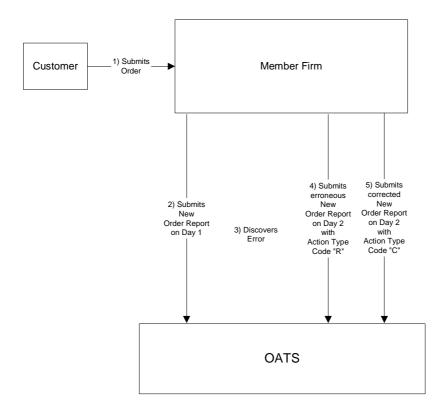


Table 4-34. Correction of Order Information that was Previously Submitted to OATS, Unexecuted Order, Event Listing

Ref	Event	Event Details		
1	Member Firm receives order from customer.	Buy order for 2,000 shares of AAII		
		the Sales Desk mistakenly records the		
2	Member Firm submits New Order Report to	New Order Report sample data inclu	ıdes:	
	OATS.	Action Type Code:	N	
		Order Receiving Firm MPID:	FIRM	
		Order Received Date:	20101231102033999	
		Order Receiving Firm Order ID:	ABC123	
		Order Received Timestamp:	20101231102033999	
		Received Method Code:	E	
		Issue Symbol ID:	AAII	
		Buy/Sell Code:	В	
		Shares Quantity:	2000	
		Limit Price:	12	
		Time in Force Code:	GTC	
		Receiving Department ID:	T	
		Originating Department ID:	Г	
		Order Origination Code:	F I	
		Account Type Code: Member Type Code:	N	
		ECN Flag:	11	
		Desk Timestamp:		
		Desk Type Code:		
3	Member Firm discovers error.	The customer's limit price for 2,000 shares of AAII was		
3	Weinber 1 mm discovers error.	actually 11.		
4/5	Member Firm submits replace New Order	The replace New Order Report sample	ole data includes:	
	Report followed by a corrected New Order	Action Type Code:	R	
	Report to OATS.	Order Receiving Firm MPID:	FIRM	
	•	Order Received Date:	20101231102033999	
		Order Receiving Firm Order ID:	ABC123	
		Order Received Timestamp:	20101231102033999	
		Received Method Code:	Е	
		Issue Symbol ID:	AAII	
		Buy/Sell Code:	В	
		Shares Quantity:	2000	
		Limit Price: Time in Force Code:	12 GTC	
		Receiving Department ID:	T	
		Originating Department ID:	1	
		Order Origination Code:	F	
		Account Type Code:	I	
		Member Type Code:	N	
		31		
		The corrected New Order Report sa	mple data includes:	
		Action Type Code:	C	
		Order Receiving Firm MPID:	FIRM	
		Order Received Date:	20101231102033999	
		Order Receiving Firm Order ID:	ABC123	
		Order Received Timestamp:	20101231102033999	
		Received Method Code:	E	
		Issue Symbol ID:	AAII	
		Buy/Sell Code: Shares Quantity:	B 2000	
		Limit Price:	2000	
		Time in Force Code:	GTC	
l		I mic m i orce code.	010	

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

#### ORDER REPORTING

Ref	Event	<b>Event Details</b>	
		Order Origination Code: F	
		Account Type Code:	
		Member Type Code: N	

# 4.5 Capacity Scenarios

This section provides an illustration of the different capacities that firms may act in each order reporting scenario.

# 4.5.1 Firm Acting in a Principal Capacity

This scenario illustrates the reporting requirements to OATS of member firm acting in a principal capacity when filling a customer's order. Upon receipt of a customer order to buy 2,000 shares of an OATS reportable security, the member firm determines to execute the customer's order by selling the customer 2,000 shares from its principal account. In this scenario, the sale of the 2,000 shares to the customer requires the member firm to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The sale of the 2,000 shares to the customer.

When reporting the execution of the order to a FINRA transaction reporting system, the member firm must include the same Branch Sequence Number on the trade report as is reported on the OATS Execution Report so OATS can link the trade report to the OATS Execution Report.

Transaction Reporting System

4) Submits
Trade
Report

1) Submits Buy
Order for 2,000 shares
New
Order
Report

OATS

Figure 4-34. Firm Acting in a Principal Capacity

This scenario includes the following assumption:

1. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Table 4-35. Firm Acting in a Principal Capacity

Ref	Event	Event Details	
1	Member Firm receives order from customer.	Buy order for 2,000 shares of AAII.	
2	Member Firm submits New Order Report to	New Order Report sample data inclu	ides:
	OATS.	Action Type Code:	N
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20100103102033912
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20100103102033912
		Received Method Code:	E
		Issue Symbol ID:	AAII
		Buy/Sell Code:	В
		Shares Quantity:	2000
		Limit Price:	
		Time in Force Code:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		Receiving Department ID:	T
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
3	Member Firm sells 2,000 shares to customer.	Sells 2,000 shares of AAII.	
4	Member Firm submits a FINRA/NASDAQ	Trade report includes Branch Seque	nce Number GHI789.
	Trade Reporting Facility Report for 2,000		
	shares.		
5	Member Firm submits Execution Report for	Execution Report sample data include	
	2,000 shares to OATS.	Order Receiving Firm MPID:	FIRM
		Order Received Date:	20100103102033912
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20100103102555123
		Branch Sequence Number:	GHI789
		Execution Quantity:	2000
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	AAII
		Execution Type Indicator:	F
		Market Center ID:	L 21.00
		Execution Price:	31.00
		Capacity Code:	P

#### 4.5.2 Firm Acting in an Agency Capacity

This scenario illustrates the reporting requirements to OATS of a member firm that fills a customer's order while acting in an agency capacity. Upon receipt of the customer order for 2,000 shares of an OATS reportable security, the member firm routes 500 shares of the order to a national securities exchange, 1,000 shares to an ECN, and 500 shares to a market maker for handling and execution. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The route of the customer order to each executing market center.

The ECN would be required to report the following events to OATS:

- 1. The receipt of the order.
- 2. The execution of the order.

The market maker would be required to report the following events to OATS:

- 1. The receipt of the order.
- 2. The execution of the order.

Furthermore, this scenario illustrates the following details:

- 1. The member firm is required to send a New Order Report for the order it received from the customer and three Route Reports, one each for routing to The NASDAQ Stock Market, market maker, and ECN.
- 2. The market maker and ECN are each required to send a New Order Report and Execution Report for the order they executed with the member firm.
- 3. When reporting the execution of the order to a FINRA transaction reporting system, the market maker and ECN must include the same Branch Sequence Number on the trade report as is reported on the OATS Execution Report so OATS can link the trade report to the OATS Execution Report.

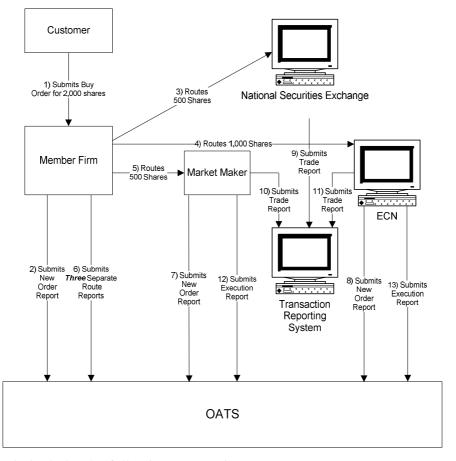


Figure 4-35. Firm Acting in an Agency Capacity

This scenario includes the following assumption:

- 1. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.
- 2. The order is routed to The NASDAQ Stock market for execution.

# **OATS REPORTING TECHNICAL SPECIFICATIONS**

Table 4-36. Firm Acting in an Agency Capacity

Ref	Event	Event Detail	s
1	Member Firm receives order from customer.	Buy order for 2,000 shares of AAII.	
2	Member Firm submits New Order Report to	New Order Report sample data includes:	
	OATS.	Action Type Code:	N
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20100103012550745
		Order Receiving Firm Order ID:	ABCD1234
		Order Received Timestamp:	20100103012550745
		Received Method Code:	E
		Issue Symbol ID:	AAII
		Buy/Sell Code:	В
		Shares Quantity:	2000
		Limit Price:	
		Time in Force Code:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		Receiving Department ID:	A
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
3	Member Firm routes Buy order for 500 shares	Trade fills customer order ABCD12	34.
	to The NASDAQ Stock Market where the		
	order is executed.		
4	Member Firm routes Buy order for 1,000	Routed Buy order for 1,000 shares of AAII.	
	shares to ECN.		
5	Member Firm routes Buy order for 500 shares	Routed Buy order for 500 shares of	AAII.
	to Market Maker.		

Ref	Event	Event Details	
6	Member Firm submits Three Separate Route	Route Report sample data includes:	
Ü	Reports to OATS.	Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Sent to Firm MPID:	FIRM 20100103012550745 ABCD1234 MM01
		Routed Order ID: Issue Symbol ID:	ABCD1234 AAII
		Order Sent Timestamp: Routed Shares Quantity: Routing Method Code: Special Routing Condition: Exchange Participant ID:	20100103012551235 500 E
		Destination Code:	M
		Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Sent to Firm MPID:	FIRM 20100103012550745 ABCD1234
		Routed Order ID: Issue Symbol ID: Order Sent Timestamp: Routed Shares Quantity: Routing Method Code:	JKL567 AAII 20100103012551236 500 E
		Special Routing Condition: Exchange Participant ID: Destination Code:	FIRM XQ
		Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Sent to Firm MPID: Routed Order ID: Issue Symbol ID:	FIRM 20100103012550745 ABCD1234 ECN1 XYZ890 AAII
		Order Sent Timestamp: Routed Shares Quantity: Routing Method Code: Special Routing Condition: Exchange Participant ID: Destination Code:	20100103012551237 1000 E
7	Market Maker submits New Order Report to	New Order Report sample data includes:	
	OATS.	Action Type Code: Order Receiving Firm MPID: Order Received Date: Order Receiving Firm Order ID: Order Received Timestamp: Received Method Code: Issue Symbol ID: Buy/Sell Code: Shares Quantity: Limit Price:	N MM01 20100103012551235 ABC123 20100103012551235 E AAII B 500
		Time in Force Code: Order Origination Code: Account Type Code: Member Type Code: Receiving Department ID: ECN Flag: Desk Timestamp: Desk Type Code:	W I M T

#### **ORDER REPORTING**

Ref	Event	Event Details	
8	ECN submits New Order Report to OATS.	New Order Report sample data includes:	
		Action Type Code:	N
		Order Receiving Firm MPID:	ECN1
		Order Received Date:	20100103012551237
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20100103012551237
		Received Method Code:	E
		Issue Symbol ID:	AAII
		Buy/Sell Code:	В
		Shares Quantity:	1000
		Limit Price:	
		Time in Force Code:	
		Order Origination Code:	W
		Account Type Code:	I
		Member Type Code:	M
		Receiving Department ID:	ATS
		ECN Flag:	Y
		Desk Timestamp:	
		Desk Type Code:	
9	A trade is executed for 500 shares on The		
- 10	NASDAQ Stock Market.		
10	Market Maker executes trade for 500 shares	Trade report includes Branch Seque	ence Number
	and submits Trade Report.	MM2GHI78.	
11	ECN executes trade for 1,000 shares and	Trade report includes Branch Sequence Number	
	submits Trade Report.	ECNGHI789.	
12	Market Maker submits Execution Report to	Execution Report sample data inclu	
	OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20100103012551235
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20100103012558554 MM2GHI78
		Branch Sequence Number: Execution Quantity:	500
		Trader Terminal ID:	
		Issue Symbol ID:	TERM00392 AAII
		Execution Type Indicator:	F
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	P
13	ECN submits Execution Report to OATS.	Execution Report sample data includes:	
		Order Receiving Firm MPID:	ECN1
		Order Received Date:	20100103012551237
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20100103012552346
		Branch Sequence Number:	ECNGHI789
		Execution Quantity:	1000
		Trader Terminal ID:	TERM01
		Issue Symbol ID:	AAII
		Execution Type Indicator:	F
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	A

# 4.5.3 Firm Acting in a Riskless Principal Capacity

This scenario illustrates the reporting requirements to OATS for a member firm filling a customer's order while acting in a riskless principal capacity. Upon receipt of a customer order for 2,000 shares of an OATS reportable security, the member firm or market maker executes trades with a national stock exchange for 1000 shares, and an ECN for 1,000 shares at the same price, in a principal capacity, in order to satisfy the customer's order. In this scenario, the member firm is required to report the following events to OATS:

- 1. The receipt of the order from the customer.
- 2. The execution of the customer order.

Furthermore, this scenario illustrates the following details:

- 1. The requirement to send a New Order Report for the order received from the customer and an Execution Report reflecting the execution of the customer's order applies to both Market Makers and Non-Market Makers.
- 2. Member firms using the "original approach" for complying with FINRA Trade Reporting Rules for riskless principal transactions (*Notice to Members 99-65*) should populate the Reporting Exception Code field on the OATS Execution Report with "R" (Riskless Principal Transaction) if the member firm was unable to populate the Branch Sequence Number in the original transaction report reflecting the member firm's capacity as "R".
- 3. Member firms using the "alternative approach" for complying with FINRA Trade Reporting Rules for riskless principal transactions (*Notice to Members 00-79*) must provide a Branch Sequence Number on both the OATS Execution Report and the FINRA transaction reporting system report in order for OATS to match the OATS Execution Report to the related clearing only or non-clearing, non-tape FINRA transaction reporting system report if the street side execution occurred over-the-counter or if the member elected to submit a riskless transaction report for a trade where the initial leg was executed on a national securities exchange.

Transaction Reporting System

A) Submits
Trade Report

Non Market Maker or
Market Maker

2) Submits
New
Order
Report

OATS

OATS

Figure 4-36. Firm Acting in a Riskless Principal Capacity

This scenario includes the following assumption:

1. The trade is reported to the FINRA/NASDAQ Trade Reporting Facility.

# The following events occur:

- 1. Member Firm (market maker or non-market maker) submits New Order Report to reflect receipt of customer order.
- 2. Member Firm (market maker or non-market maker) submits an OATS Execution Report to reflect execution of the customer leg of the transaction.
- 3. \*\*If a member firm uses the original approach for complying with FINRA rules for reporting of riskless principal transactions, the member firm populates the Reporting Exception Code field on the OATS Execution Report with "R" (Riskless Principal Transaction) if unable to populate the Branch Sequence Number on the transaction report reflecting the member firm's capacity as "R". If a firm uses the alternative approach for complying with FINRA rules for reporting of riskless principal transactions and submits a clearing only or non-tape, non-

clearing report to a FINRA transaction reporting system for regulatory purposes, the firm populates the Branch Sequence Number on both the OATS Execution Report and the related FINRA transaction reporting system clearing only or non-clearing, non-tape report in order for the two reports to match.

4. The proprietary order and related execution is not reportable to OATS by market makers or non-market makers in a riskless principal transaction.

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Table 4-37. Firm Acting in a Riskless Principal Capacity

Ref	Event	<b>Event Details</b>	
1	Member Firm receives order from customer.	Buy order for 2,000 shares.	
2	Member Firm submits New Order Report to	New Order Report sample data includes:	
	OATS.	Action Type Code:	N
		Order Receiving Firm MPID:	MM01
		Order Received Date:	20100103102050123
		Order Receiving Firm Order ID:	ABC123
		Order Received Timestamp:	20100103102050123
		Received Method Code:	E
		Issue Symbol ID:	AAII
		Buy/Sell Code:	В
		Shares Quantity:	2000
		Limit Price:	
		Time in Force Code:	
		Order Origination Code:	F
		Account Type Code:	I
		Member Type Code:	N
		Receiving Department ID:	T
		ECN Flag:	
		Desk Timestamp:	
		Desk Type Code:	
3	Member Firm submits Execution Report for	Execution Report sample data includes:	
	Customer Leg to OATS.	Order Receiving Firm MPID:	MM01
		Order Received Date:	20100103102050123
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20100103102051278
		Branch Sequence Number:	DEF456
		Execution Quantity:	2000
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	AAII
		Execution Type Indicator:	F
		Market Center ID:	L
		Execution Price:	31.00
		Capacity Code:	R
4	Member Firm submits Trade Report for the Customer Leg.	Trade report includes Branch Sequence Number DEF456.	

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

ORDER REPORTING

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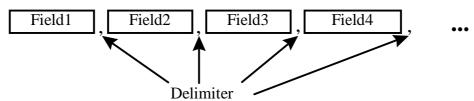
# 5. Data Reporting Formats

This section and Appendix C—Order Report Formats, describe the detailed specification for the layout of the OATS submissions (files).

#### **5.1 Record Formats**

The OATS system maintains an audit trail of Reportable Order Event records (ROEs), which contain several data elements, or fields. This section describes the methods required to format and package these ROEs for submission to OATS. OATS supports only a delimited format. Additional details about this format, including a complete description of all fields in each order event, are contained in Appendix C—Order Report Formats.

Figure 5-1. Record Format



The delimited format, shown in Figure 5-1, can also be described as a field separated format, because fields within each record are separated by a delimiter. The delimiter marks the end of the current field and the beginning of the next field. Each field is identified by its relative position within each record. The sequence of the fields within each record must be exactly as stated in the record descriptions. In addition, each field is designated mandatory (M) or conditional (C). Conditional fields must appear in the record, but they may contain only the delimiter.

The following rules apply to the delimited formats:

- 1. The sequence of the fields within each record is fixed. Each record must be in the sequence described in Appendix C—Order Report Formats.
- 2. Each field must be terminated by a delimiter even if the field is the maximum length.
- 3. None of the fields in the record can contain the character used for the delimiter.
- 4. The last field in a record is not required to be terminated by a delimiter, but the field will still be considered to be acceptable if the delimiter is included.
- 5. The delimiter is determined by examination of the fifth character of the header record. (See Section 5.2.1.) Each record must end with an end of record marker (ASCII LF or CR/LF) as shown in the format descriptions in Appendix C—Order Report Formats.
- 6. Each field is positional, that is, the order of the fields within each record is a fixed sequence. The position of each field is relative to the beginning of its associated record. Record type is always the first field.
- 7. Fields must be equal to or less than the full length specified.
- 8. Conditional fields (C) are omitted by only including the delimiter.

- 9. Mandatory (M) fields must contain an appropriate value and be terminated by the delimiter.
- 10. Values that do not fill the fields may be padded with blanks or zeroes, as appropriate, but padding is NOT required.
- 11. Numeric fields may be padded with leading zeros.
- 12. Alphanumeric fields may be optionally padded with trailing blanks.
- 13. Date fields are always eight (8) digits and are specified as date (8) formatted as "YYYYMMDD".
- 14. Timestamp fields are always seventeen (17) digits and are specified as numeric (14) formatted as "YYYYMMDDHHMMSSCCC".
- 15. Fields labeled as Numeric (n,m) must contain no more than n characters, including the decimal; must contain no more than m characters to the right of the decimal; and must contain no more than n-m characters to the left of the decimal, whether a decimal is implied or not. The decimal is optional only in a case where the price is a whole number. These fields are used for price fields.

#### 5.2 File Formats

Several ROEs are combined into a single FORE, and one or more FOREs may comprise a FORE file. FOREs must be assembled in a prescribed sequence: <header><one or more order event records><trailer>. The header record is required to be the first record, and the trailer record is required to be the last record. The rest of the records may be included in any order. (NOTE: Corrections require an ordered sequence as described in Section 6.5.1) Figure 5-2, shows the relationship between the files, record and fields for the delimited format.

Firm Order Report (FORE) Firm Order Report **File Submission** (FORE) Header Header **FORE** Reportable Order One or more ROEs Event (ROE) Trailer ROEs **FORE** or more **FORE** One **FORE** Fields are in a Field fixed sequence value<delimiter> and are terminated **FORE** by a delimiter. Trailer

Figure 5-2. Delimited Format

All order events within a FORE (header/trailer pair) must apply to the Order Receiving Firm MPID identified in the header. If order events for more than one combination of Order Receiving Firm MPID and Reporting OSO are generated, the order events for each combination of Order Receiving Firm MPID and Reporting OSO must be packaged in a separate FORE. If a firm uses multiple MPIDs, a separate FORE must be submitted for each MPID. Order events must include the firm MPID that was in effect when the event occurred.

The following rules apply to the formatting of FOREs and FORE files:

- 1. Each FORE must contain a header record as the first record.
- 2. Each FORE must contain a trailer as the last record.
- 3. Each file is limited to a maximum uncompressed size of 25MB.
- 4. Compressed files must have a root file name the same as the original uncompressed file and a file extension of .gz.
- 5. OATS will examine each header to determine if the User ID supplied is associated with a valid Transmitting Order Sending Organization (OSO).
- 6. OATS will examine each header to determine if the Order Receiving Firm MPID is valid.
- 7. OATS will examine each header to determine if the Reporting/Transmitting OSO ID, if supplied, is valid.
- 8. OATS will examine each OSO ID and Order Receiving Firm MPID for FORE file reporting/transmitting privileges.
- 9. Failure to pass validation on any mandatory header or trailer values will result in rejection of the entire FORE.
- 10. All order events contained in a FORE (header/trailer pair) must apply to the combination of Order Receiving Firm MPID and Reporting OSO identified in the header.
- 11. Order events within the FORE may be in any sequence, except for the events addressed in Section 6.5.
- 12. Firms may send order events in more than one file if the file size limit is reached. However, an individual ROE record may not be split or submitted in multiple FORE files.
- 13. Each file may contain multiple FOREs; when it does, the record immediately following a trailer record must be a header record, which must have a corresponding trailer record. There is no limit to the number of FOREs in a file.
- 14. Each FORE (i.e. each header when files contain multiple FOREs) must contain a Firm FORE ID to identify it. The Firm FORE ID is an alphanumeric field of up to 20 characters. The Firm FORE ID must be unique to the OSO for the supplied Generation Date. OATS will validate this field against a list of recently sent files to detect duplicate submissions. Duplicate file submissions will be rejected.
- 15. FORE filenames may not have filename extensions of .status or .rejects, and may not include colons or spaces.

#### 5.2.1 Header Records

Header records are used to identify and authenticate files and the firms submitting files. A header identifies the Order Receiving Firm MPID that is the subject of reporting; the Transmitting OSO, which packages FORE files and physically transfers order data to OATS; and the Reporting OSO, a third party that is authorized to view, submit, or repair the Order Receiving Firm's data. (For example, a Reporting OSO could be a clearing firm with responsibilities to repair rejections for the Order Receiving Firm.)

The header consists of a record type, Version Description, Generation Date, Firm FORE ID, Reporting OSO ID, User ID, Password, Order Receiving Firm MPID and an end of record marker.

### Figure 5-3. Header Example

#HD#,OATS D1999-01,19981008,MyFirmFOREID,ReportingOSOID,Myuserid,Mypassword,MPID

NOTE: User ID and password fields are not required in the header of FOREs sent via FTP, SFTP and IFT.

Transmitting OSOs must submit a separate FORE for each combination of Order Receiving Firm MPID and Reporting OSO ID. The Order Receiving Firm, Transmitting OSO, and Reporting OSO all have access to any records contained in the FORE. If no Reporting OSO is designated, only the Transmitting OSO and the Order Receiving Firm have access to the records in the FORE. Multiple FOREs can be packaged in a single file.

A FINRA member firm that meets the requirements for OATS Reporting is required to designate an OSO; however, a member firm may designate more than one OSO, employing one organization for the handling of a portion of its records (e.g., institutional orders) and another for other records (e.g., retail orders). There may only be one Transmitting OSO and one Reporting OSO associated with each FORE.

The following figures illustrate some possible scenarios by showing how records in the FORE header would identify the separate organizations and their roles. In Scenario 1, the Order Receiving Firm acts as its own Transmitting OSO. In Scenario 2, the Transmitting OSO (financial service bureau) sends the Order Receiving Firm's data to OATS. In Scenario 3, a clearing firm reports on behalf of an Order Receiving Firm via a financial service bureau.

Figure 5-4. OSO Scenario 1

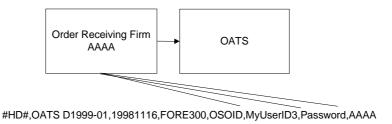


Figure 5-5. OSO Scenario 2

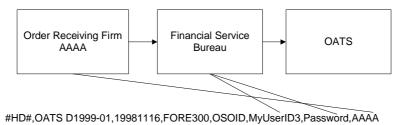
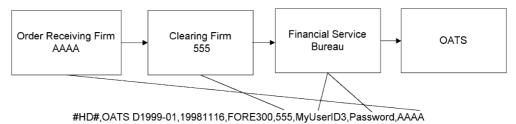


Figure 5-6. OSO Scenario 3



The header is also used to set the delimiter character to be used for the remainder of the FORE. The delimiter character is determined by the fifth character in the header, which follows the four character record type code "#HD#". The delimiters are restricted to one of the following ASCII characters: (comma (,), semicolon (;), pipe (|), tab ( $\rightarrow$ )).

Each header record must be terminated by an end of record marker, which can be either a single ASCII LF character, or the combination ASCII CR/LF.

### 5.2.2 Trailer Records

Trailer records are used to signify the end of the FORE. They include integrity information, such as the number of records included in the FORE. OATS verifies the record count, but it is not a reason for rejection. If the supplied count is incorrect, a warning (W) exception type is included in the FORE status report. Each trailer record must be terminated by an end of record marker, which can be either a single ASCII LF character or the combination ASCII CR/LF.

The trailer consists of a record type and an end of record marker. It may also contain a count of the number of order event records in the file. An example trailer is shown in Figure 5-7.

## Figure 5-7. Trailer Example

#TR#,7654

# 5.2.3 Reportable Order Event Records

The contents of each of the eight types of order events have been discussed in Section 4—Order Reporting Scenarios and the formats are shown in complete detail in Appendix A—Data Dictionary and Appendix C—Order Report Formats. The eight types of order events are as follows: New Order, Route, Desk, Execution, Cancel, Cancel/Replace, and Combined Order/Execution, and Combined Order/Route.

# 5.3 Feedback Formats

Feedback items, including FORE status files, ROE rejection files, Unmatched Execution Reports, Unmatched Exchange Route Reports, and Unmatched Interfirm Route Reports, may be downloaded via FTP, SFTP, IFT or the Web. The formats of each feedback item are explained in Appendix C.

# 6. Feedback and Corrections

OATS provides feedback to firms and Order Sending Organizations (OSOs) regarding the status of their OATS submissions, including:

- FORE Status—indicates acceptance or rejection of a Firm Order Report file (FORE)
- **ROE Rejections**—identifies Reportable Order Event records (ROEs) that failed validation
- Reporting Statistics—provides daily summary statistics of reporting activity
- Out of Sequence Reports identifies subsequent events reported to OATS with an event timestamp prior to the Order Received timestamp of the originating event
- **Unmatched Execution Reports** identifies match eligible Execution Reports that do not link with trades reported to a FINRA transaction reporting system
- Unmatched Exchange Route Reports—identifies match eligible Route Reports that do not link with orders submitted to a national securities exchange
- Unmatched Interfirm Route Reports—identifies match eligible Route Reports that
  do not link to a corresponding New, Cancel/Replace, Combined Order/Execution or
  Combined Order/Route Report

Feedback information may indicate that repairs to the FORE or one or more ROEs are required. Firms may also identify errors made in reporting during routine order reconciliation activities. This section addresses the procedures for repairing FORE and ROE errors and generating firminitiated corrections. (For a list of error messages, see Appendix B—Error Messages.)

### **6.1 FORE Status**

The purpose of the FORE Status is to indicate whether a FORE was accepted or rejected. The FORE Status is provided within one hour after the FORE file is received via the same method used for file submission. The FORE Status is also available on the Web and accessible to the Order Receiving Firm, Transmitting OSO, and Reporting OSO, if applicable. A separate FORE Status record is generated for each FORE (header/trailer pair) in the FORE file.

If a FORE is accepted, OATS will process the ROEs within it; if the FORE is rejected, OATS will not process any of the ROEs within the FORE. Rejection of one FORE does not automatically result in rejections of other FOREs within the file. If a FORE is rejected, the OSO must repair and repackage the FORE and resubmit the file to OATS. Only the rejected FORE should be resubmitted. If other FOREs within the file were accepted, they should not be resubmitted. The Firm FORE ID on the resubmitted FORE may either be the same identifier used for the rejected FORE or a new Firm FORE ID that is unique within the generation date. (For a list of error messages, see Appendix B—Error Messages.)

Common reasons for rejections include:

• **Duplicate FORE**—the Firm FORE ID is the same as a FORE previously accepted by OATS for the same Generation Date.

- **Invalid OSO ID**—the OSO ID in the Header record is not recognized by OATS, is no longer valid, or does not have a reporting/transmitting relationship with the firm designated in the header.
- **Missing or Invalid User ID**—the User ID was either missing, in an invalid format, or was not recognized by OATS.
- **Missing or Invalid Password**—the Password was either missing, in an invalid format, expired, or was not recognized by OATS.
- **Missing or Invalid Market Participant Identifier (MPID)**—the MPID in the Header Record is missing, inactive, or is not recognized by OATS.
- Missing or Invalid Header Record Type Code—the value provided in the Record Type Code field was either missing or was a value other than "#HD#" (Header). In this case, no FORE Status will be available because the OSO cannot be identified.
- **Missing or Invalid Trailer Record Type Code**—the value provided in the Record Type Code field was either missing or was a value other than "#TR#" (Trailer).
- **Missing or Invalid Generation Date**—the Generation Date in the Header record is missing or invalid.
- **Missing or Invalid Version Description**—the Version Description provided in the Header record is missing or invalid.

If the FORE Status indicates the FORE was accepted with a warning that one or more errors were detected, the FORE file should NOT be resubmitted. However, the FORE packaging program should be modified to supply the correct information in the future. One common warning is Invalid Record Count. This warning means that the record count provided by the firm in the Trailer record does not match the number of ROEs received by OATS.

FORE Status should be available no later than one hour after the file is submitted. For instance, if the FORE were submitted at 13:00 Eastern Time on Tuesday, the Status should be available by 14:00 Eastern Time on the same day.

# 6.2 Reportable Order Event (ROE) Rejections

ROE rejections are ROEs that failed to pass validation checks. If any validation fails, the ROE is rejected and an associated error message is assigned representing each validation that failed. ROE validations include:

- Syntax and Semantics determines for each field in the ROE if the format and length are correct, valid values are used, and required fields are populated. Syntax and Semantic errors are available within four hours of receipt of an accepted FORE status message. Common syntax and semantic reasons include:
  - o **Missing mandatory field**—a value is not provided for a mandatory field. For example, the order quantity field is blank. (NOTE: Under certain conditions, "Conditional" fields are mandatory. For example, the Customer Instruction Flag is mandatory if a limit or stop price is provided.)

- Invalid Field—value supplied contains invalid characters or is not among the
  allowed values for the field. For example, OATS does not recognize the provided
  issue symbol or the Time in Force field contains a code that is not an allowed
  value for the field.
- o **Invalid Field Combination**—two fields supplied in the ROE are in conflict. For instance, the Order Expiration Date is earlier than the Order Received Date.
- Context Checking compares the ROE against previously received ROEs to identify duplicates or secondary events without an originating event. Context errors are available within 24 hours after the OATS Reporting deadline. Context rejection reasons include:
  - o **Duplicate ROE** the ROE is a duplicate of a previously submitted ROE.
  - o **Duplicate Order Identifier**—the order identifier of the ROE is a duplicate of a previously submitted ROE. Order identifiers must be unique for each originating event for an OATS Business Day.
  - Report is for an order that does not exist in OATS—a Cancel, Route, Execution, Desk, or Cancel/Replace Report references an order identifier for which an originating event (New, Combined Order/Route, Combined Order/Execution or Cancel/Replace Report) cannot be found in OATS. This may be because the order was not reported, or was rejected.

### 6.2.1 Accessing Rejections

Rejections that require repair may be viewed in detail and repaired via the OATS Web interface; formatted ROE rejection files may also be downloaded from OATS via the FTP, SFTP, IFT and Web.

ROE rejection files downloaded via FTP, SFTP, and IFT are available only to the OSO that submitted the original ROEs; therefore, any rejections of ROEs submitted for a firm by one OSO would not be available to another OSO. Firms viewing or downloading rejections via the Web can access all of their rejections, regardless of which OSO submitted the original records.

Once ROE rejections are available, they may be repaired.

# 6.2.2 Rejection Repair

All ROE rejections that require repair must be researched and repaired by the firm within five OATS Business Days from the date when Context Rejections are available.

Firms that use multiple Transmitting OSOs may need to coordinate with these entities to ensure that ROE rejections are repaired and resubmitted in a timely manner. There are two ways to repair a rejected ROE:

- **Resubmit the repaired ROE in a new FORE**—a firm may regenerate the repaired ROE, package it in a new FORE, and resubmit the FORE to OATS. The following rules apply when resubmitting a rejected ROE via a FORE:
  - 1. Indicate the ROE is a rejection resubmission by setting the Rejected ROE Resubmit Flag to 'Y' (Yes). OATS will auto-populate this field to 'Y' in the download file(s) available via FTP, SFTP, IFT, and the Web Interface.

- 2. The Rejected ROE ID of the resubmitted ROE must be equal to the value assigned by OATS when the ROE rejected. OATS will auto-populate this field in the download file(s) available via FTP, SFTP, IFT, and the Web Interface.
- 3. The resubmitted ROE may be commingled with other ROEs in a FORE, or may be sent in a FORE that contains only rejection resubmissions.
- 4. The Action Type Code of the repaired ROE should retain its original value (provided it was a valid value). For instance, if a New Order Report had an Action Type Code of 'N' (New), the repaired ROE would also have an Action Type Code of 'N'. It should **NOT** have an Action Type Code of 'C' (Correction). In addition, the Correction/Deletion Timestamp should only be used when submitting a correction to an order that was previously accepted by OATS.
- **Repair the ROE via the Web**—users from the Transmitting OSO, Reporting OSO, or Order Receiving Firm may repair and resubmit the ROE via the OATS Web interface.
  - 1. OATS will auto-populate the Rejected ROE Resubmit Flag to 'Y' on the Web Interface.
  - 2. OATS will auto-populate the Rejected ROE ID with a unique identifier.

Upon receipt of a resubmitted rejection, OATS will use the Rejected ROE ID to link the repaired report with the original rejection. Firms MUST populate the Rejected ROE ID field on resubmissions with the OATS assigned value; otherwise, OATS will not reconcile the rejection and the record will be considered unrepaired.

#### 6.2.3 Rejections that Do Not Require Repair

ROEs that reject for a reason that do not require repair are not provided back to firms. Rejections that do not require repair include:

- **Duplicate Order Event** the ROE is a full duplicate of a previously submitted ROE.
- **Issue is Not Reportable to OATS** the ROE contains a symbol that is not an OATS Reportable issue.

Note: Rejections that do not require repair are available upon request. Firms may contact the OATS Business Support Helpdesk to obtain this data.

## **6.3 Reporting Statistics**

On a daily basis, OATS provides summary statistics via the Web for reporting activity for the previous OATS Reporting Day. For example, if the OATS Reporting Day ended at 08:00 Eastern Time on Tuesday, the statistics will be available by 08:00 Eastern Time on Wednesday. Statistics are available to Transmitting OSOs, Reporting OSOs and Member Firms and include:

- Total ROE Count total number of ROES received from an OSO or Member Firm.
- Late ROE Count total number of ROES that were received late.

- Total Resubmit Count total number of ROES resubmitted from an OSO or Member
   Firm
- Total Rejected ROE Count total number of ROES that were rejected.
- Order Event Counts total number of ROES broken down by order report type.
- Rejected ROE Counts total number of rejected ROES broken down by order report type.

# **6.4 Out of Sequence Events**

On a daily basis, OATS provides a summary and list of events where the event timestamp reported on the Route, Desk, Execution or Cancel report is prior to the Order Received timestamp reported on the originating event.

- Route Order sent timestamp reported on the Route report is prior to the order received timestamp reported on the originating event.
- Desk Desk received timestamp reported on the Desk report is prior to the order received timestamp reported on the originating event.
- Execution Execution timestamp reported on the Execution report is prior to the order received timestamp reported on the originating event.
- Cancel Order cancel timestamp reported on the Cancel report is prior to the order received timestamp reported on the originating event.
- Cancel/Replace Order cancel timestamp reported on the Cancel/Replace report is prior to the order received timestamp reported on the originating event.

### 6.5 Unmatched Execution and Combined Order/Execution Report Data

OATS must be able to link Execution and Combined Order/Execution reports with trades reported to a FINRA transaction reporting system as per the following:

- Event Type Code is 'EX' (Execution) or 'OE' (Combined Order/Execution)
- Market Center ID represents a FINRA transaction reporting system (Refer to Appendix A for a list of Market Center IDs which represent a FINRA transaction reporting system).
- Reporting Exception Code is not populated
- Action Type Code is 'N' (New)

The following fields are used for the match criteria:

- 1. MPID
- 2. Execution Date
- 3. Branch/Sequence Number

- 4. Issue Symbol<sup>1</sup>
- 5. Execution Timestamp

OATS attempts to match for the OATS Reporting Day when the report is received, and if there is no match, OATS will attempt to match again on the next OATS Reporting Day. If after two days, OATS cannot find a corresponding trade record with the exact same values in these fields, the OATS report is considered to be unmatched.

Each unmatched ROE will have one associated error message. (For a list of Unmatched Reason Codes, refer to Appendix B). The primary reasons for unmatched ROEs include:

- Late Reported ROEs Execution or Combined Execution is reported more than one OATS business day after the order was executed.
- Branch Sequence Number- Value supplied to OATS does not match to a corresponding trade report.
- Execution Timestamp all values supplied to OATS except the Execution Timestamp match to a corresponding trade report.

Unmatched ROEs may also occur when a Branch Sequence Number is identified but the MPID, Issue Symbol, or a combination of fields does not match to a corresponding trade. OATS considers these ROEs unmatched due to a secondary data error.

Unmatched Execution and Combined Order/Execution Reports may be retrieved via FTP, SFTP, IFT and the OATS Web interface within three business days of the processing date of the original FORE.

### 6.6 Unmatched Exchange Route Report Data

OATS must be able to link Route and Combined Order/Route reports with orders sent to an exchange as per the following:

- Event Type Code is 'RT' (Route) or 'OR' (Combined Order/Route)
- Destination Code is any of the following:
  - o 'XQ' (The NASDAQ Stock Market)
  - o 'XB' (NASDAQ OMX BX)
  - o 'XX' (NASDAQ OMX PHLX)
  - o 'XN' (New York Stock Exchange)

<sup>&</sup>lt;sup>1</sup> Symbol formats required by transaction reporting systems may be different than the primary listing format as required by OATS. OATS will map the OATS reported symbol to the applicable transaction reporting system symbol format for matching purposes.

- o 'XA' (NYSE Amex)
- o 'XP' (NYSE Arca)
- Action Type Code of 'N' (New)
- Routing Method Code of 'E' (Electronic) or 'S' (Smart Router)

The following fields are used for the match criteria:

- 1. Exchange Participant ID to Exchange Participant ID<sup>2</sup>
- 2. Trade Date to OATS Order Sent Timestamp (Date portion)
- 3. Exchange Symbol to Issue Symbol<sup>3</sup>
- 4. Order ID<sup>4</sup> to OATS Routed Order ID (RT) or Sent to Routed Order ID (OR)
- 5. Connection ID to Connection ID, if provided

If after two days, OATS cannot find a corresponding order record with the exact same values in these fields, the OATS report is considered to be unmatched.

Each unmatched route will have one associated error message. (For a list of Unmatched Reason Codes, refer to Appendix B). The primary reasons for unmatched routes include:

- Late Reported ROEs Route or Combined Order/Route is reported more than one OATS business day after the order was routed.
- Routed Order ID/Sent to Routed Order ID The value supplied to OATS does not match to a corresponding exchange order for the trade date.
- Exchange Participant ID A matching Order ID was identified in the exchange order data for the trade date; however, the Exchange Participant ID did not match.

Unmatched Route and Combined Order/Route Reports may be retrieved via FTP, SFTP, IFT and the OATS Web interface within three business days of the processing date of the original FORE.

<sup>2</sup> Exchange Participant ID refers to the firm identifier used for order entry into an exchange. Use the MPID for The NASDAQ Stock Market, NASDAQ OMX BX and NASDAQ OMX PHLX; the entering firm mnemonic for NYSE and NYSE Amex; the Equity Trading Permit ID for NYSE Arca.

<sup>3</sup> Symbol formats required by national securities exchanges may be different than the primary listing format as required by OATS. OATS will map the OATS reported symbol to the applicable exchange symbol format for matching purposes.

<sup>4</sup> Depending on the access protocol the firm employs, the Order ID generically refers to: the "User Order ID" in QIX; the ".UID" in CTCI; the "ClOrdID" in FIX; the "Order Token" in OUCH and to the "Order Token/Client Order ID" in RASH.

# 6.7 Unmatched Interfirm Route Report Data – Orders Routed

OATS must be able to link Route and Combined Order/Route reports to the corresponding New Order, Cancel/Replace, Combined Order/Execution or Combined Order/Route report submitted by the firm to which the order was routed as per the following:

- Event Type Code is 'RT' (Route) or 'OR' (Combined Order/Route)
- Routing Method Code is 'E' (Electronic) or 'S' (Smart Router)
- Destination Code is 'M' (Member) or 'E' (ECN)

The following criteria are used for the comparison:

- 1. Sent to Firm MPID to Order Receiving Firm MPID
- 2. Order Receiving Firm MPID to Routing Firm MPID
- 3. Routed Order ID (RT) or Sent to Routed Order ID (OR) to Routed Order ID
- 4. Issue Symbol
- 5. Order Sent Timestamp (Date portion) to Order Received Timestamp (Date portion)

OATS attempts to match for the OATS Reporting Day when the report is received, and if there is no match, OATS will attempt to match again on the next OATS Reporting Day. If after two days, OATS cannot find a corresponding order record with the exact same values in these fields, the OATS report is considered to be unmatched.

Each unmatched order will have one associated error message. (For a list of Unmatched Reason Codes, refer to Appendix B). The primary reasons for unmatched orders include:

- Late Reported ROEs Route or Combined Order/Route is reported more than one OATS business day after the order was routed.
- Routed Order ID/Sent to Routed Order ID-value supplied to OATS does not match to a corresponding Receiving Firm Order for the Order Sent Date.
- Sent to MPID A Routed Order ID was identified in the Receiving Firm Order data for the Order Sent Date; however, the Sent To/Order Receiving Firm MPIDs did not match.

Unmatched Route and Combined Order/Route Reports may be retrieved via FTP, SFTP, IFT and the OATS Web interface within three business days of the processing date of the original FORE.

### 6.8 Unmatched Interfirm Route Report Data – Orders Received

OATS must be able to link Route and Combined Order/Route reports to the corresponding New Order, Cancel/Replace, Combined Order/Execution or Combined Order/Route report submitted by the firm to which the order was routed as per the following:

- Event Type Code is 'RT' (Route) or 'OR' (Combined Order/Route)
- Routing Method Code is 'E' (Electronic) or 'S' (Smart Router)
- Destination Code is 'M' (Member) or 'E' (ECN)

The following criteria are used for the comparison:

- 1. Sent to Firm MPID to Order Receiving Firm MPID
- 2. Order Receiving Firm MPID to Routing Firm MPID
- 3. Routed Order ID (RT) or Sent to Routed Order ID (OR) to Routed Order ID
- 4. Issue Symbol
- 5. Order Sent Timestamp (Date portion) to Order Received Timestamp (Date portion)

OATS attempts to match for the OATS Reporting Day when the report is received, and if there is no match, OATS will attempt to match again on the next OATS Reporting Day. If after two days, OATS cannot find a corresponding order record with the exact same values in these fields, the OATS report is considered to be unmatched.

Each unmatched order will have one associated error message. (For a list of Unmatched Reason Codes, refer to Appendix B). The primary reasons for unmatched orders include:

- Late Reported ROEs Route or Combined Order/Route is reported more than one OATS business day after the order was routed.
- Routed Order ID/Sent to Routed Order ID-value supplied to OATS does not match to a corresponding Receiving Firm Order for the Order Sent Date.
- Sent to MPID A Routed Order ID was identified in the Receiving Firm Order data; however, the Sent To/Order Receiving Firm MPIDs did not match.

Unmatched Route and Combined Order/Route Reports may be retrieved via FTP, SFTP, IFT and the OATS Web interface within three business days of the processing date of the original FORE.

### 6.9 Firm-Generated Corrections and Deletions

A firm may determine through routine data reconciliation procedures that information previously sent to and accepted by OATS is invalid. OATS provides two mechanisms to correct inaccurate reports: corrections and deletions. Corrections are made in response to data entry errors that resulted in one or more values within a ROE being entered incorrectly at the firm. Deletions are made in response to order events that did not actually occur but were mistakenly reported. Firms that utilize a Reporting Agent(s) may need to coordinate with them to ensure that its ROE rejections are repaired and resubmitted in a timely manner.

All accepted New Order and Cancel/Replace Reports that have a Time in Force Code of 'GTC', 'GTD' or 'GTM' must be corrected within two years, or as soon as possible, after they are accepted by OATS; all other accepted order reports must be corrected within 5 business days after OATS accepts the original New Order or Cancel/Replace Report. For example, if you submit an order to OATS on Friday and OATS accepts it by 08:00 Eastern Time on Saturday, you must submit all related order events by 08:00 Eastern Time the following Friday. Order reports that are submitted later than this deadline will be rejected for context.

#### **6.9.1** Corrections

A firm may submit a correction to OATS if it is found that one or more values for a ROE were incorrect. A firm may only correct an order event if there was a mistake, such as a data entry

error on the part of an individual entering order event information or by an automated system. For instance, if the order quantity was mistakenly entered as 100 rather than 1000, the firm could correct the error using a correction report. However, if the customer requested that the order quantity be changed from 100 to 1000 shares, the firm must generate a Cancel/Replace Report. Corrections should be submitted as soon as possible after the error is identified.

The following rules apply to correcting a ROE:

- 1. The firm must submit a pair of ROEs, the first to identify the ROE in error, and the second to replace the ROE in error.
- 2. The original ROE and the corrected ROE must be placed in sequence in a single FORE. If the corrected ROE does not immediately follow the original ROE, both events will be rejected.
- 3. The Action Type Code for the ROE in error must be set to 'R'. This indicates that the ROE will be replaced by a subsequent ROE. All information contained in the original ROE must be repeated in the corrected ROE.
- 4. The Action Type Code for the corrected ROE must be set to 'C'. All information associated with the original event must be repeated in the corrected ROE, not just the information that changed.
- 5. The Correction/Deletion Timestamp for both ROEs must be set to the date and time the correction was made by the firm.
- 6. Corrected ROEs cannot be used to change the three-part key used by OATS to identify the order. These fields include the Order Receiving Firm Order ID, the Order Receiving Firm Order Received Date, and the Order Receiving Firm MPID. If one of these fields was submitted in error, a Deletion Report should be submitted for the incorrect report. (See Section 6.9.2.) The corrected ROE should then be submitted with an Action Type Code of 'N'.
- 7. Corrected ROEs cannot be used to change the replaced key of a Cancel/Replace report, which is used by OATS to identify the cancelled order. These fields include the Replaced Order Received Date and the Replaced Firm Order ID. If one of these fields was submitted in error, a Deletion Report should be submitted for the incorrect report. (See Section 6.9.2.) The corrected ROE should then be submitted with an Action Type Code of 'N'.
- 8. Corrected ROEs cannot be used to change the Issue Symbol. If an order with an incorrect Issue Symbol was submitted in error, a Deletion Report should be submitted for the incorrect report. (See Section 6.8.2) The corrected ROE should then be submitted with an Action Type Code of 'N'.
- 9. A corrected ROE should only be submitted for events previously accepted by OATS; a corrected ROE should NOT be generated for rejected ROEs. (See Section 6.2 for ROE Repair procedures.)
- 10. Corrected ROEs may be commingled with ROEs of other Action Type Codes in a FORE, or they may be submitted in a separate file.

#### **6.9.2** Deletions

If a ROE was mistakenly sent to OATS with information about an order event that did not actually take place, the firm should delete the previously-submitted ROE. For instance, if the firm mistakenly reported that an order was cancelled when in fact it was executed, the Cancel Report should be deleted. Deletion reports can also be used to correct the three-part key used by OATS to identify the order or to correct an Issue Symbol. Deletions should be submitted as soon as possible after the error is identified.

The following rules apply to deleting a ROE.

- 1. The Action Type Code for the ROE to be deleted must be set to 'D'. All information contained in the original ROE must be repeated in the deleted ROE.
- 2. The Correction/Deletion Timestamp for the deleted ROE must be set to the date and time the event was deleted by the firm.
- 3. A deleted ROE should be used to change the three-part key used by OATS to identify the order. These fields include the Order Receiving Firm Order ID, the Order Receiving Firm Order Received Date, and the Order Receiving Firm MPID. If one of these fields was submitted in error, a deleted ROE should be submitted for the incorrect report. The revised report should then be submitted with an Action Type Code of 'N'.
- 4. A deleted ROE should be used to change the replaced key of a Cancel/Replace report, which is used by OATS to identify the cancelled order. These fields include the Replaced Order Received Date and the Replaced Firm Order ID. If one of these fields was submitted in error, a Deletion Report should be submitted for the incorrect report. (See Section 6.9.2.) The corrected ROE should then be submitted with an Action Type Code of 'N'.
- 5. A deleted ROE should be used to change the Issue Symbol of a previously submitted order. If an order with an incorrect Issue Symbol was submitted in error, a Deletion Report should be submitted for the incorrect report. (See Section 6.8.2) The corrected ROE should then be submitted with an Action Type Code of 'N'.
- 6. A deleted ROE should only be submitted for events previously accepted by OATS. A deleted ROE should NOT be generated for rejected ROEs. (See Section 6.2 for ROE Repair procedures.)
- 7. Deleted ROEs may be commingled with ROEs of other Action Type Codes in a FORE, or they may be submitted in a separate file.

### **OATS REPORTING TECHNICAL SPECIFICATIONS**

FEEDBACK AND CORRECTIONS

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# 7. Testing

OATS provides an independent environment for testing. All parties transmitting information to OATS should test their order reporting systems thoroughly before they begin reporting production data. Testing is available before and during production. OSOs may access the test environment any time to retest order-reporting systems. Parties that have not successfully tested in the OATS test environment are not able to submit order data to the OATS production environment.

Before testing with the OATS application can begin, OSOs must register with OATS to obtain a valid User ID and password. Refer to Chapter 3, System Access, for information on how to Register with OATS and the transmission methods available to users.

FINRA encourages OSOs to test actual market data and volume. All OATS reportable securities are valid for testing. Any symbols for securities which are not OATS reportable will be rejected by the OATS test environment.

OATS processes all order data it receives in the test environment in the same way as in the production environment; for example, after sending order data to OATS, firms are able to obtain or view feedback on the status of that data. The only difference between the test and production environments are the addresses used to contact OATS (presented in Table 3-3 in Chapter 3, System Access).

The OATS test environment is available 24 hours per day from 8:00 a.m. Eastern Time on Monday to 8:00 a.m. Eastern Time on Saturday. FINRA Business and Technology Support Services provides technology support during that same time period, but provides business support only between Monday and Friday, 8:00 a.m. to 6:00 p.m., Eastern Time.

The OATS test environment will be available after reporting to the production environment begins; for instance, if changes are made to an OSO's order processing system after production begins, that processing system should be thoroughly tested before transmitting files to the production environment.

NOTE: Testing does not alleviate the firm from its responsibility to continue to submit data to Production unless otherwise specified.

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# 8. Additional Information

The following information is important for member firms that must meet the requirements of FINRA Rules 7400 through 7470. It provides requirements not covered elsewhere and gives information about where to seek assistance for understanding these technical specifications.

# 8.1 OATS Reporting Hours and Late Criteria

OATS will accept FORE files 24 hours per day, 5 days per week, from 08:00 Eastern Time on Monday to 08:00 Eastern Time on Saturday. Events that occurred during a particular OATS Business Day may be reported anytime between the time the event occurred and the reporting deadline, which is 08:00 a.m. Eastern Time on the following calendar day. Reports received after the deadline will be marked late by OATS. An OATS Business Day begins at 16:00:01 Eastern Time on one market day and ends at 16:00:00 Eastern Time on the next market day. Table 8-1 illustrates the time periods involved.

NOTE: All times are reflected in military (24 hour clock) time.

<b>Event Occurs</b>	Holiday	Business Day	Report Due to OATS
Wednesday 15:15 ET	N/A	Wednesday	Thursday 08:00 ET
Wednesday 17:30 ET	N/A	Thursday	Friday 08:00 ET
Friday 10:00 ET	N/A	Friday	Saturday 08:00 ET
Friday 19:30 ET	N/A	Monday	Tuesday 08:00 ET
Friday 19:30 ET	Following Monday	Tuesday	Wednesday 08:00 ET
Saturday 06:00 ET	N/A	Monday	Tuesday 08:00 ET
Monday 14:00 ET	Monday	Tuesday	Wednesday 08:00 ET

**Table 8-1. Scenarios for OATS Order Reporting Hours** 

### 8.2 Deadlines for ROE Submission

All order events that occur during a particular OATS Business Day must be reported by 08:00 a.m. Eastern Time the following calendar day. Order reports that are submitted later than this deadline will be marked late by OATS.

New Order, Cancel/Replace, Combined Order/Execution and Combined Order/Route Reports that have a Time in Force Code of 'GTC', 'GTD, or 'GTM' remain on line in the OATS system for **two years**. Subsequent events associated with these orders, therefore, must be reported within two years of the original order submission or they will be rejected for context.

New Order, Cancel/Replace, Combined Order/Execution and Combined Order/Route Reports that do not have a Time in Force Code of 'GTC', 'GTD, or 'GTM' remain on line in the OATS system for **five days** from the date when Context Rejections are available. Subsequent events associated with these orders, therefore, must be reported within five days of the original order submission or they will be rejected for context.

The five OATS Business Days allowed between OATS' acceptance of a New Order, Cancel/Replace, Combined Order/Execution or Combined Order/Route Reports and subsequent events related to those orders begins on the OATS Reporting Day that OATS accepted the original order submission and ends four OATS Reporting Days later. For example, if an order is

submitted to OATS on Friday and OATS accepts it by 08:00 a.m. Eastern Time on Saturday, all related order events must be submitted by 08:00 a.m. Eastern Time the following Friday.

# 8.3 Deadline for ROE Rejection Repair

ROE Rejections are provided back to firms as per the following timeline:

- **Syntax and Semantics** available within 4 hours of receipt of an accepted FORE status message.
- Context Checking available within 24 hours after the OATS Reporting deadline.

Once rejections are available, repairs can be made immediately.

All ROE Rejections that require repair must be repaired and resubmitted within **five OATS Business Days** from the date when Context Rejections are available. ROE Repairs received after this day will be considered as late repairs.

Firms are responsible for researching and repairing their own ROE rejections. Firms that utilize a Reporting Agent(s) may need to coordinate with them to ensure that its ROE rejections are repaired and resubmitted in a timely manner.

#### 8.4 Deadline for ROE Corrections and Deletions

New Order, Cancel/Replace, Combined Order/Execution and Combined Order/Route Reports that have a Time in Force Code of 'GTC', 'GTD, or 'GTM' remain on line in the OATS system for **two years**. Corrections and deletions associated with these orders, therefore, must be reported within two years of the original order submission or they will be rejected for context.

New Order, Cancel/Replace, Combined Order/Execution and Combined Order/Route Reports that do not have a Time in Force Code of 'GTC', 'GTD, or 'GTM' remain on line in the OATS system for **five days** from the date when Context Rejections are available. Corrections and deletions associated with these orders, therefore, must be reported within five days of the original order submission or they will be rejected for context. (See NOTE below)

The five OATS Business Days allowed between OATS' acceptance of a New Order, Cancel/Replace, Combined Order/Execution or Combined Order/Route Reports and repairs related to those orders begins on the OATS Reporting Day that OATS accepted the original order submission and ends four OATS Reporting Days later. For example, if an order is submitted to OATS on Friday and OATS accepts it by 08:00 a.m. Eastern Time on Saturday, all related order events must be submitted by 08:00 a.m. Eastern Time the following Friday.

# 8.5 Data Retention Requirements

As stated in FINRA Rule 7440, each reporting member must retain records of the information required to be recorded under this rule in accordance with FINRA Rule 3110 and SEC Rule 17a-4(b). Thus, OATS records must be preserved at least three years, the first two years in an accessible place.

# 8.6 FINRA Business and Technology Support Services

FINRA Business and Technology Support Services is the primary source of information about OATS. It can be used as a source for answers to questions about interpretation of FINRA Rules 7400 through 7470, clock synchronization, member firm reporting responsibilities, technical specifications for reporting to FINRA, OATS publications, deadlines, OATS Announcements, and more.

FINRA Business and Technology Support Services can be reached by phone, fax, or e-mail. Technology support is available from 8:00 a.m. Monday to 8:00 a.m. Saturday, Eastern Time. Business support is available Monday through Friday, 8:00 a.m. to 6:00 p.m., Eastern Time. In addition, FINRA Business and Technology Support Services publish information about OATS on a Web Page on the FINRA Web Site. Please provide your name, title, firm's name, Broker/Dealer Number, and a phone number when contacting FINRA Business and Technology Support Services via phone, fax, or e-mail.

Technical Support Business Support

Telephone: 800-321-6273 800-321-6273 Fax: 240-386-6499 240-386-4841

E-mail: supportservices@finra.org supportservices@finra.org
Web: http://www.finra.org http://www.finra.org

### **OATS REPORTING TECHNICAL SPECIFICATIONS**

**ADDITIONAL INFORMATION** 

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# **APPENDIX A – DATA DICTIONARY**

Name	Per	rmitted Values and	Definition
	De	scription	
Account Type Code	A	Institutional Customer – An institutional account as defined in NASD Rule 3110(c)(4)	Represents the type of beneficial owner of the account for which an order was received or originated.
	С	Combined – An order representing more than one type of account	Note: 'R' is a temporary allowable value representing either an institutional or individual customer if a firm is unable to determine the
	Е	Employee Account – An employee or associated person of a member firm	appropriate status. 'R' will be eliminated as an allowable value after firms have had adequate time to make the programming changes
	I	Individual Customer – An account that does not meet the definition of NASD Rule 3110(c)(4) and is also not a proprietary account.	necessary to distinguish between individual and institutional accounts.
	O P	Market Making Other Proprietary	
	R U	Not a Broker/Dealer Unknown – Beneficial	
	X	owner is not known Error Account – Error account of the firm	
Action Type Code	N	New order event	Indicates the purpose of the Order Report,
Tiedon Type Code	C	Corrected order event	whether to report a new event to OATS, to correct
	D	Deleted order event	a previously reported event, to delete a previously
	R	Delete for replacement order event	reported event, or to delete a previously reported event with the intention of correcting it.
Arbitrage Code	Y	Part of an arbitrage	Indicates if an order is part of an arbitrage trading
		strategy	strategy involving the purchase or sale of a
	N	Not part of an arbitrage	"basket" or group of securities in conjunction
	3.7	strategy	with the purchase or sale (or intended purchase or
	X	Not known (not an	sale) of one or more cash–settled options or
		accepted value for retail or employee orders)	futures contracts on index stock groups, or options on any such futures contracts in an
		emproyee orders)	attempt to profit by the price difference, as further
			defined in New York Stock Exchange Rule 132B.
Branch Sequence Number			The Branch Sequence Number assigned to an
			order by the order receiving firm, as reported to a
			FINRA transaction reporting system.
			Must be provided when a trade is executed by the
			member and reported to a FINRA transaction
			reporting system.  Must be unique within the firm within the day
			except in instances involving an agency cross
			where one side of the cross is comprised of
			multiple orders. Each of the orders on the same
			side of market involved in the single agency cross
			execution may share the same branch sequence number.

APPENDIX A -DATA DICTIONARY

Name	Permitted Values and Description	Definition
Buy/Sell Code	B Buy SL Sell Long SS Short Sale SX Short Exempt	Indicates if an order is an instruction to buy or to sell shares of a security.
Calculated Record Count		Total number of order entry records in the FORE file as calculated by OATS. NOTE: This does not include the header and the trailer.
Cancel Leaves Quantity		The number of shares remaining open when an order is partially cancelled.
Cancel Quantity		The number of shares cancelled for a partial cancel. Values are any integer greater than zero.
Cancel Type Flag	F Full–Cancel quantity equals total shares quantity of the order P Partial–Cancel quantity is less than the total shares quantity of the order	Indicates if the cancellation was a full or partial cancellation.
Cancelled by Flag	C Order cancelled by customer or client F Cancelled by member receiving or originating the order	Indicates whether the order was cancelled by the customer or client that placed the order, or the member that received or originated the order.
Capacity Code	A Agency P Principal R Riskless Principal	The capacity in which the firm acted for purposes of the transaction. The capacity needs to be the same capacity that is reported to the applicable transaction reporting system for trade reporting purposes.
Connection ID		The unique identifier representing the name of the connection used when routing to another firm or national securities exchange. The Connection ID is an optional field that may be populated to guarantee uniqueness for a Routed Order ID / Sent to Routed Order ID. If populated, the Connection ID will be included as match criteria in the Exchange Route Matching process.
Continuation	Y Continuation N Not a continuation	Indicates that this ROE rejection description record is the continuation of the previous description record.
Correction/Deletion Timestamp		The date and time a correction or a deletion to an order was effective. The alphanumeric string must use the format YYYYMMDDHHMMSSCCC where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, DD is the two-digit number for the current day of the month, HH is the two-digit number (using a 24-hour clock) for the current hour of the day, MM is the two-digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.
Customer Instruction Flag	Y Yes. Customer has	Indicates if a customer has instructed that a limit

Name	Permitted Values and	Definition
	Description	
	instructed that a limit order should not be displayed or that a block size order be displayed.  No. No instruction has been received from the customer that a limit order should not be displayed or that a block size order be displayed.	order should not be displayed or that a block size order be displayed. For additional information, refer to NTM 00–26.
Desk Received Timestamp		The date and time the order was received by a desk or department from another desk or department. The alphanumeric string must use the format YYYYMMDDHHMMSSCCC where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, DD is the two-digit number for the current day of the month, HH is the two-digit number (using a 24-hour clock) for the current hour of the day, MM is the two-digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.
Desk Type Code	A Agency AR Arbitrage B Block Trading C Convertible Desk CR Central Risk Books D Derivatives EC Equity Capital Markets IN International IS Institutional O Other PF Preferred Trading PR Proprietary PT Program Trading S Sales SW Swaps T Trading Desk TR Treasury	Indicates the type of Desk or Department to which the order was transmitted.
Destination Code	A Affiliate, Not a FINRA Member E ECN M FINRA Member N Not a FINRA Member  Exchanges: XA NYSE Amex XB NASDAQ OMX BX XC National Stock Exchange XF Non-US Exchange XI International Securities Exchange	Indicates whether the Route Report or Combined Order/Route Report was routed to a FINRA Member, Non–FINRA Member, ECN, or Exchange.

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Name	Permitted Values and	Definition
	Description	
	XJ EDGA Exchange XK EDGX Exchange XM Chicago Stock Exchange XN New York Stock Exchange XO Bourse de Montreal XP NYSE Arca XQ The NASDAQ Stock Market XT Toronto Stock Exchange XV TSX Venture Exchange XW CBOE Stock Exchange XX NASDAQ OMX PHLX XY BATS Y Exchange XZ BATS Exchange  Options Exchanges: OA NYSE Amex Options OB Boston Options Exchange, LLC OC Chicago Board Options Exchange OI International Securities	
	OI International Securities Exchange OJ C2 Options Exchange	
	OP NYSE Arca Options OQ NASDAQ OMX Options	
	OX NASDAQ OMX PHLX Options	
	OZ BATS Option Exchange	
Do Not Reduce/Do Not Increase Code	    	Indicates if the customer has specified that the order price or shares quantity not be adjusted to reflect a cash or stock dividend.
ECN Flag	Y The identified order is submitted by an ECN     The identified order is not submitted by an ECN ECN	Indicates whether the organization submitting the report is an ECN. If the organization submitting the report is an ECN, the flag is set to 'Y'. If the organization submitting the report is not an ECN, the field is left blank.
End of Record Marker	LF Line Feed CR/LF Carriage Return/Line Feed	End of record marker for the Header Record, the Trailer Record, or specified record type.
Exception Code		The numeric value code for a FORE exception. See Appendix B, Error Messages, for a list of FORE exceptions.
Exception Code Description		A text description of the FORE exception code.
Exception Type Code	W Warning E Error	Specifies the type of FORE exception that occurred.
Exchange Participant ID		Firm identifier assigned by the exchange.

APPENDIX A -DATA DICTIONARY

Name	Permitted Values and Description	Definition
	•	Required for all orders routed to an exchange. For example: For orders routed to The NASDAQ Stock Market, NASDAQ OMX BX and NASDAQ OMX PHLX enter the MPID. For orders routed to the New York Stock Exchange and NYSE Amex enter the entering firm mnemonic. For orders routed to NYSE Arca, enter the Equity Trading Permit ID.
Execution Price		The price at which the order is ultimately executed. This price needs to be the same price that is reported to the applicable transaction reporting association for trade reporting purposes.
Execution Quantity		The number of shares filled in an execution.
Execution Timestamp		Values are any integer greater than zero.  The date and time of an execution. The alphanumeric string must use the format YYYYMMDDHHMMSSCCC where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, DD is the two-digit number for the current day of the month, HH is the two-digit number (using a 24-hour clock) for the current hour of the day, MM is the two-digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.
Execution Type Indicator	F Full-Execution equals total shares quantity of the order P Partial-Execution is less than the total shares quantity of the order	Indicates if the execution was a full or partial execution.
Expiration Date		The date on which an order with a Time in Force Code value of Good Till Date expires at the close of market. The alphanumeric string must use the format YYYYMMDD where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, and DD is the two-digit number for the current day of the month.
Expiration Time		The time at which an order with a Time in Force Code value of Good Till Time expires. The alphanumeric string must use the format HHMMSSCCC where HH is the two–digit number (using a 24–hour clock) for the current hour of the day, MM is the two–digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.
Fifth Desk Special Handling Code (Maximum of 5 codes)	See First Special Handling Code	See First Special Handling Code

Name	Permitted Values and	Definition
	Description	
Fifth Special Handling Code (Maximum of 5 codes)	See First Special Handling Code	See First Special Handling Code
Firm FORE ID		Identifier assigned by the OSO to uniquely identify the FORE within the file generation date.
Firm ROE ID		An identifier assigned to a ROE by the reporting firm.
First Desk Special Handling Code (Maximum of 5 codes)	See First Special Handling Code	See First Special Handling Code
First Special Handling Code (Maximum of 5 codes)	ADD Add-on Order– Reflects that the customer added additional shares to the order after it was fully executed; May only be used with Cancel/Replace events.  AON All or None – Requires that if an order cannot be filled in its entirety, the order should not be executed.  CND Conditional Order – An order where the terms and conditions of the order are derived from a related transaction in another security (other than an option).  CNH Cash Not Held – Instructs the trader to buy or sell as much stock as possible, over the course of a trading day, for a specified dollar amount.  CSH Delivery Instructions: Cash-trade settles on the same trade date  DIR Directed Orders – Orders that meet the definition of "Directed Order" under Rule 600(b)(19) of Regulation NMS (formerly defined under SEC Rule 11Ac1–6). That definition specifies that the term directed order shall mean a customer order that the customer specifically instructed the broker or dealer to route to a particular venue for	Additional order instructions that serve to qualify the pricing, quantity, execution timing, or execution method of an order.

APPENDIX A -DATA DICTIONARY

Name	Permitted Values and Description	Definition
	execution	
	DLO Discretionary Limit Order	
	- Orders for which the	
	customer defines an	
	amount off the limit price	
	(for example \$.50) to	
	increase the price range	
	over which the limit order	
	is eligible to execute	
	E.W Exchange for Physical	
	Transaction – Equity trade	
	component of an	
	"exchange for physical"	
	transaction. An exchange	
	for physical transaction	
	involves two parties	
	simultaneously executing	
	a futures contract and an	
	equity transaction (for the	
	securities covered by the	
	futures contract), typically	
	involving baskets that	
	replicate common indices.	
	FOK Fill or Kill – Indicates the	
	order is intended for	
	immediate execution in its	
	entirety, and if not	
	executed in its entirety,	
	the order is cancelled.	
	G G Order – An order for an	
	account covered by 1934	
	Exchange Act §11(a) that	
	relies on §11(a)(1)(G) as	
	an exemption to $\S11(a)(1)$ .	
	IDX Intra-Day Cross -	
	An order designated for	
	participation in an	
	Intra-Day cross.	
	IO Imbalance Only – An	
	order to buy or sell at a	
	specified price or better	
	that may be executed only	
	during the Nasdaq	
	Opening/ Closing Cross	
	and only against an	
	imbalance.	
	IOC Immediate or Cancel –	
	Requires all or part of the	
	order be executed	
	immediately, and any	
	remaining shares be	
	cancelled.	
	ISO Intermarket Sweep Order	
	– An order that meets the	

APPENDIX A -DATA DICTIONARY

Name	Permitted Values and	Definition
	Description	
	definition of "Intermarket	
	Sweep Order" under Rule	
	600(b)(30) of Regulation	
	NMS.	
	LOO Limit on Open – Instructs	
	the trader to execute the	
	order at the opening price	
	provided that the opening	
	price is at or within the	
	limit specified. LOC Limit on Close – Instructs	
	the trader to execute the	
	order at the closing price	
	provided that the closing	
	price is at or within the	
	limit specified.	
	MACMarket at Close –	
	Instructs the trader to	
	execute the order at the	
	closing inside quote price	
	of regular market hours.	
	MAO Market at Open –	
	Instructs the trader to	
	execute the order at the	
	opening inside quote price	
	of regular market hours.	
	MOCMarket on Close –	
	Instructs the trader to	
	execute the order at the	
	closing last sale price of	
	regular market hours.	
	MOO Market on Open –	
	Instructs the trader to	
	execute the order at the	
	opening print price of	
	regular market hours.	
	MTL Market to Limit – An	
	order that is sent in as a	
	market order to execute at	
	the current best price. If	
	the entire order does not	
	immediately execute at	
	the market price, the	
	remainder of the order is	
	re–submitted as a limit	
	order with the limit price	
	set to the price at which	
	the original order	
	executed.	
	MQTMinimum Quantity –	
	Instruction to cancel the	
	order if a specified	
	minimum quantity cannot	
	be executed.	

Name	Permitted Values and	Definition
1 tame	Description	Demiller
	MPT Merger Related Transfer	
	Position	
	ND Delivery Instructions:	
	Next Day – trade settles	
	on next trade date.	
	NH Not Held – Requires that	
	the trader use best	
	judgment as to the time of	
	execution and the issue	
	price.	
	OPT Options Related	
	Transaction – Represents	
	an order where the terms	
	and conditions of the order	
	are derived from a related	
	options transaction.	
	OVD Over the Day – Requires	
	that a trader break up an	
	order into several partial	
	executions. The customer	
	may specify the number of	
	executions.	
	PEG Indicates that the	
	customer's limit price is to	
	be determined by a	
	specific market price	
	and/or volume factor or	
	that the limit price should	
	be determined pursuant to	
	a specified formula.	
	RSV Reserve Size Order –	
	Required for an order for	
	which a customer has	
	authorized the public	
	display of part of the full	
	size of the order with the	
	remainder held in reserve	
	on an undisplayed basis to	
	be displayed in whole or in part as the displayed	
	part is executed.	
	S.W Stop Stock Transaction –	
	Any transaction resulting	
	from an order for which a	
	member and another party	
	agree that the order will be	
	executed at a Stop Stock	
	Price or better.	
	SCL Scale – Requires partial	
	executions that are not	
	more than a specified	
	price increment apart	
	(e.g., 1/8 of a point).	
	SLR Delivery Instructions:	
	zzi: zen er j mstraetions.	

Name	Permitted Values and	Definition
	Description	
	Seller's Option – trade	
	settles on a date	
	determined by a seller.	
	TMOTime Order – Represents	
	an order that becomes a	
	market or limit price order	
	at a specific time.	
	TS Trailing Stop – In the case	
	of a sell order, a Trailing	
	Stop Order allows the stop	
	price to increase by a	
	predetermined amount or	
	formula (e.g. a specified	
	dollar amount, a	
	percentage of the market	
	price, or some other predetermined criteria), as	
	the market price of the	
	security advances. In the	
	case of a buy order, a	
	Trailing Stop Order	
	allows the stop price to	
	decrease by a	
	predetermined amount or	
	formula (e.g. a specified	
	dollar amount, a	
	percentage of the market	
	price, or some other	
	predetermined criteria), as	
	the market price of the	
	security declines. Once	
	the Trailing Stop price is	
	triggered, the buy or sell	
	order becomes either an	
	executable market order	
	or a limit order (i.e. a	
	Trailing Stop Limit Order).	
	WRK Work – Leaves the	
	time of execution to the	
	trader's discretion; either	
	a full execution or partial	
	executions are accepted.	
	F0 Stay on Offerside	
	F3 Go Along	
	F6 Participate Don't Initiate –	
	An order that may	
	participate in a transaction	
	initiated by another party,	
	but may not initiate a	
	transaction. For example,	
	on US ECNs / Exchanges,	
	this may represent an	
	order that will be quoted	

I	Description	
		the state of the s
l l	to the marketplace and	
	will trade if another party	
	initiates a trade (i.e. hits	
	the posted quote), but	
	cannot be routed to initiate	
	a trade with another	
	market or market maker.	
F		
F		
F	•	
FA	3	
	executing this trade is	
	forbidden from taking the	
	other side of the trade.	
	Opposite of OK to Cross.	
F	1.1	
	executing this trade is	
	allowed to take the other	
	side of the trade. Opposite	
	of No Cross.	
FG		
l F		
	before trading.	
FI		
	sender does not want to be	
	all of the volume.	
F	3	
	Failure – If a system	
	failure interrupts trading	
	or order routing, attempt	
	to reinstate this order,	
	subject to time in force	
	limitations. Note that	
	depending on the type and	
	severity of the failure, this	
	might not be possible.	
Fl	3	
	is restricted to dealing	
	with other buy side firms.	
F	$\mathcal{E}$	
	<ul> <li>If trading in this</li> </ul>	
	instrument is halted,	
	reinstate this order	
	when/if trading resumes,	
	subject to time in force	
	limitations.	
F	$\mathcal{E}$	
	trading in this instrument	
	is halted, cancel this order	
	and do not reinstate it	
	when/if trading resumes.	
FI	=	
	M Mid–price Peg	
FI	1 0	
F		

APPENDIX A -DATA DICTIONARY

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Name	Permitted Values and		Definition
	_	cription	
	FP FQ	Market Peg Cancel on System Failure  – If a system failure interrupts trading or order	
		routing, attempt to cancel this order. Note that	
		depending on the type and severity of the failure, this might not be possible.	
	FR	Primary Peg	
	FS	Suspend	
	FT	Fixed Peg to Local Best Bid or Offer at time of order	
	FW	Peg to VWAP	
	FX	Trade Along – Clients who specify "Trade	
		Along" give brokers permission to handle and place their order in the	
		market even if the broker	
		already has its own	
		proprietary orders for the	
		same security placed in	
	EX	the market.	
	FY	Try to Stop – Used in specialist–driven markets	
		to direct the specialist to	
		try and stop the order.	
	FZ	Cancel if Not Best –	
		Indicates that an order should be cancelled if it is	
		no longer the best bid if buying, or the best offer if	
	Fb	selling. Strict Limit – A limit	
		order that must be traded at the exact limit price specified without any	
		price improvement.	
	Fc	Ignore Price Validity	
		Checks – Disables validity	
		checking of price fields for an order or change	
		request.	
	Fd	Peg to Limit Price	
	Fe	Work to Target Strategy	
FORE Received Timestamp			The date and time that a FORE was received by OATS.
FORE Status	A	Accepted	Indicates if the FORE was accepted or rejected by
EODE Volidated	R	Rejected	OATS. The date and time that a FORE was validated by
FORE Validated Timestamp			The date and time that a FORE was validated by OATS.
rimestamp			OVIP.

### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Name	Permitted Values and Description	Definition
Fourth Desk Special Handling Code (Maximum of 5 codes)	See First Special Handling Code	See First Special Handling Code
Fourth Special Handling Code (Maximum of 5 codes)	See First Special Handling Code	See First Special Handling Code
Generation Date		The date the FORE file was generated. The alphanumeric string must use the format YYYYMMDD, where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, DD is the two-digit number for the current day of the month.
Information Barrier ID		The identifier of the information barrier in place for a trading unit that will meet the criteria of the "no-knowledge" exception in FINRA Rule 5320.02.
Issue Symbol ID		The unique symbol for an OATS reportable security. For exchange listed securities, the symbol format must follow the format published by the primary listing market.
ISO Indicator	Y Intermarket Sweep Order                	Indicates the order was sent as an Intermarket Sweep Order (ISO).
Last File	Y Last file N Not last file	Indicate the last ROE rejection file for the generation date.
Leaves Quantity		The quantity of shares remaining open in a partially executed order.
Limit Price		The per–share maximum buy price or minimum sell price for a limit order or stop limit order; this is the price at which the customer is protected.
Market Center ID	A NYSE Amex B NASDAQ OMX BX C National Stock Exchange F Non-Us Exchange I International Securities Exchange J EDGA Exchange K EDGX Exchange M Chicago Stock Exchange N New York Stock Exchange P NYSE Arca Q The NASDAQ Stock Market W CBOE Stock Exchange X NASDAQ OMX PHLX Y BATS Y Exchange (BYX) Z BATS Exchange	The national securities exchange or transaction reporting system operated by registered securities association where the trade was reported.
	FINRA transaction reporting	

Name	Permitted Values and Description	Definition
Member Type Code	systems:  DN FINRA/NYSE Trade Reporting Facility D ADF L FINRA/NASDAQ Trade Reporting Facility O OTC Reporting Facility A Affiliate, Not a FINRA Member C ECN E FINRA Member Firm does not meet the definition of reporting	Indicates from where the order was received.
	member under FINRA Rule 7410 M FINRA Member N Not a FINRA Member	
Negotiated Trade Flag	Y Indicates respondent portion of a negotiated trade    	The Negotiated Trade Flag identifies orders that are the result of a negotiated trade between two members where both members, for OATS purposes, are considered to have executed the trade and must submit an Execution Report to OATS. Examples include negotiated telephone trades or trades executed as the result of an electronic negotiation system such as Pink Link operated by OTC Pink Markets.  The flag should never be used in an order routing scenario where an order is routed to another member for further handling and execution. The flag should be set to Y when a member is required to report a new order and execution as the result of an incoming negotiation that results in a trade. For example, if a member receives a Pink Link message or a telephone call and agrees to execute a trade as a result of such Pink Link message or telephone call, the member would report a New Order and Execution Report or Combined Order/Execution with the Negotiated Trade Flag set to Y.
Order Cancel Timestamp		The date and time a cancellation was originated or received. The alphanumeric string must use the format YYYYMMDDHHMMSSCCC where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, DD is the two-digit number for the current day of the month, HH is the two-digit number (using a 24-hour clock) for the current hour of the day, MM is the two-digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.
Order Event Type Code	NW New Order Report RT Route Report	Indicates the type of Order Event received by OATS.

Name	Permitted Values and	Definition
	Description  DS Desk Report  EX Execution Report  CL Cancel Report  CR Cancel/Replace Report  OE Combined Order/  Execution Report  OR Combined Order/Route  Report	
Order Origination Code	F Order was received from a customer or originated with the Firm W Received from another Broker/Dealer	Identifies whether the order was received from a customer of the firm, originated by the firm, or whether the order was received from another Broker/Dealer.
Order Received Timestamp  Order Receiving Firm		The date and time the order was received or originated. The alphanumeric string must use the format YYYYMMDDHHMMSSCCC where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, DD is the two-digit number for the current day of the month, HH is the two-digit number (using a 24-hour clock) for the current hour of the day, MM is the two-digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.  The –MPID of the member firm that received the
MPID Order Receiving Firm		order.  The identifier assigned to an order by the order
Order ID		receiving firm to uniquely identify the order for the firm within the order received date.
Order Receiving Firm Order Received Date		The date and time the order was received by the order receiving firm. Date portion must equal the date portion of the Order Received Timestamp (for orders received on or after October 17, 2011). The alphanumeric string must use the format YYYYMMDDHHMMSSCCC where YYYY is the four–digit number for calendar year, MM is the two–digit number for the current month of the year, and DD is the two–digit number for the current day of the month, HH is the two–digit number (using a 24–hour clock) for the current hour of the day, MM is the two–digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.
Order Sent Timestamp		The date and time the order was sent outside the firm. The alphanumeric string must use the format YYYYMMDDHHMMSSCCC where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, DD is the two-digit number for the current day of the month, HH is the two-digit number (using a 24-hour clock) for the

Name	Permitted Values and Description	Definition
		current hour of the day, MM is the two-digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.
Originating Department ID	A Agency - A desk or department where orders may be routed to other market centers, either by a trading system or with the assistance of traders. This would include smart routers and algorithmic trading.  ATS ATS - A trading system that meets the definition of "Alternative Trading System" under Regulation ATS.  MA Market Access - When a member permits another	An identifier representing the department or desk within the firm that originated the order.
	broker-dealer to use a market participant identifier assigned to the member to route orders directly to market centers.  T Trading - A desk or department where orders	
	are executed. This may be interpreted as either a trading system or a desk or department where orders are executed with the assistance of traders. O Other – A department that does not execute orders or make routing decisions.	
Originating Broker/Dealer Number	The second secon	In instances of a merger or acquisition where the originating firm had open limit orders on its books that will be executed or otherwise resolved under the surviving firm, the Originating Broker/Dealer Number field must be populated on the secondary order event so that the surviving firm's secondary order event can link to the originating primary order event.
OSO ID		Order Sending Organization ID–a unique identifier assigned to an Order Sending Organization by FINRA.
Password Life		The password for the supplied User ID.  Remaining life in the password used by this User ID. NOTE: This will only be supplied when the

Name		mitted Values and cription	Definition
			value is less than 14 days.
Program Trading Code	Y N X	Part of a program trade Not part of a program trade Not known–Not an accepted value for retail or employee orders	Indicates if an order is part of a program trade, a strategy involving the related purchase or sale of a "basket" or group of 15 or more stocks. Program trading includes the purchases or sales of stocks that are part of a coordinated trading strategy, even if the purchases or sales are neither entered nor executed contemporaneously, nor part of a trading strategy involving options or futures contracts on an index stock group, or options on any such futures contracts, or otherwise relating to a stock market index.
Reason 1–5			Numeric error number indicating reason for ROE rejection.
Received Method Code	E N	Electronic Manual	Indicates whether the order was received electronically or manually.
Receiving Department ID	A	Agency - A desk or department where orders may be routed to other market centers, either by a trading system or with the assistance of traders. This would include smart routers and algorithmic trading.	An identifier representing the department or desk within the firm that received the order.
	ATS	A trading system that meets the definition of "Alternative Trading System" under Regulation ATS.	
	MA	Market Access - When a member permits another broker-dealer to use a market participant identifier assigned to the member to route orders directly to market centers.  Trading - A desk or	
	0	department where orders are executed. This may be interpreted as either a trading system or a desk or department where orders are executed with the assistance of traders. Other – A department that does not execute orders or	
Receiving Terminal ID		make routing decisions.	The identifier of the terminal where the order was received from a customer.

**APPENDIX A -DATA DICTIONARY** 

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Name	Permitted Values and Description	Definition
Record Count		Total number of records in the FORE File, not including header and trailer records.
Record Type Code	#HD# Header #TR# Trailer #OE# New Order Route Desk Execution Cancel Cancel/Replace Combined Order/Execution Combined Order/Route	Identifies the record type.  Valid values to be submitted by firm to OATS.
	#RH# Rejected ROE Header #RD# Rejected ROE Description #RT# Rejected ROE Trailer #ST# Status Header #SE# Status Event #SR# Status Trailer #UH# Unmatched Execution Header #UD# Unmatched Execution Description #UT# Unmatched Exchange Route Header #ED# Unmatched Exchange Route Description #ET# Unmatched Exchange Route Trailer #OH# Unmatched Interfirm Route Header #OD# Unmatched Interfirm Route—Orders Routed Description #OT# Unmatched Interfirm Route—Orders Routed Trailer #ID# Unmatched Interfirm Route—Orders Received Description #IH# Unmatched Interfirm Route—Orders Received Trailer	Values that are generated by OATS only and returned to the firm.
Rejected ROE Resubmit Flag	Y Resubmitted ROE    	Indicates if the ROE submitted to OATS was previously rejected.
Rejected ROE ID	ROE	The unique identifier assigned by OATS to a rejected ROE.
Rejection Text		Text of the originally submitted ROE (delimiters

Name	Permitted Values and Description	Definition
Replaced Firm Order ID	<b>X</b>	are changed to commas if not originally submitted as commas).  The identifier assigned to an order that was replaced in a Cancel/Replace Report.
Replaced Order Received Date		The date the order being replaced in a Cancel/Replace Report was received. The alphanumeric string must use the format YYYYMMDD where YYYY is the four-digit number for calendar year, MM is the two-digit number for the current month of the year, and DD is the two-digit number for the current day of the month, SS is the current second of the minute, and CCC is the milliseconds.
Reporting Exception Code	A Agency Average Price Transaction F Reported on Form T pursuant to FINRA Trade Reporting Rules M Execution where entry of branch/sequence number is not possible P Intra-firm order filled from firm's proprietary account R Riskless principal transaction T Agency Post Trade Allocation	Indicates the reason that a Branch Sequence Number was not supplied to a transaction reporting system.
Reporting OSO ID		The OSO ID assigned to the third party that is authorized to report on a firm's behalf, in addition to the Transmitting OSO.
Routed Order ID		Orders Received: Routing identifier used by the order sending member during the order routing process. Required for all orders received electronically from another Broker/Dealer.  Orders Routed: Routing identifier used during the order routing process. Required for all electronically routed orders.  Must be unique for the MPID, Order Sent Date, Connection ID, and Sent to MPID (if routed to another FINRA member) or Destination Code and Exchange Participant ID (if routed to a national securities exchange), except for instances when the route has a special routing
Routed Order Type Indicator	L Order Routed as a Limit Order M Order Routed as a Market Order	condition.  Indicates whether an order was routed as a market order or a limit order.

Name	Permitted Values and Description	Definition
Route Price		The price at which the order is routed. Required if the Routed Order Type Indicator is set to 'L'. If the Routed Order Type Indicator is set to 'M', this field must be blank.
Routed Shares Quantity		The number of shares routed to another firm. If the order was bunched, this would be the total number of bunched shares routed. Values are any integer greater than zero.
Routing Firm MPID		The MPID of the firm from which the order was received. Required and must be a valid MPID for the Order Received Timestamp if the order is received from another FINRA member. If received from a non–FINRA member, must be blank or contain a non–FINRA member MPID. Must be blank if the order originated with the firm.
Routing Method Code	E Electronic N Manual S Smart Router	Indicates whether the order was sent electronically, manually or via a Smart Router.
Second Desk Special Handling Code (Maximum of 5 codes)	See First Special Handling Code	See First Special Handling Code
Second Special Handling Code (Maximum of 5 codes)	See First Special Handling Code	See First Special Handling Code
Sent to Firm MPID		The MPID of the firm, ECN or Exchange to which the order was routed.
		Required for all orders routed to a FINRA member. If routed to a non–FINRA member it must be blank or contain a non–FINRA member MPID.
		May be populated for routes to a national securities exchange, however the value will be ignored by OATS.
Sent to Routed Order ID		Routing identifier used during the order routing process.
		Required for all electronically routed orders.
		Must be unique for the MPID, Order Sent Date, Connection ID, and Sent to MPID (if routed to another FINRA member) or Destination Code and Exchange Participant ID (if routed to a national securities exchange), except for instances when the route has a Special Routing Condition.
Sequence Number		Sequence number of the ROE rejection files generated for the generation date.
Shares Quantity		The number of shares indicated in an order to buy or sell. For reserve size orders, must be the sum

**APPENDIX A -DATA DICTIONARY** 

#### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Name	Permitted Values and Description		Definition
			of displayed size and reserve size. Values are any integer greater than zero.
Short Sale Exempt Indicator	Y <blank></blank>	Short Sale Exempt Order Not a Short Sale Exempt Order	Indicates the order may be marked "short exempt" consistent with SEC Rule 201.
Special Routing Condition	X Y <blank></blank>	The identified order has an exchange routing condition that requires a duplicated Routed Order ID The identified order is part of a bunch The identified order does not have a special routing condition	<ul> <li>Indicates the Route or Combined Order/Route Report has a special routing condition including:</li> <li>Route is part of a bunched order.</li> <li>Route represents a modification to an order previously routed to a national securities exchange that includes a duplicated Routed Order ID/Sent to Routed Order ID.</li> <li>The Special Routing Condition indicator is used to identify instances where the Routed Order ID/Sent to Routed Order ID will be duplicated.</li> <li>Some order modification types accepted by a national securities exchange require firms to use the original order identifier when submitting an order modification. For example, the Fast Cancel function offered by NYSE Arca requires a firm to use the Client Order ID entered with the original order for all subsequent modifications. In these limited situations involving a national securities exchange, a duplicate Routed order ID/Sent To Routed Order ID will be allowed.</li> <li>The Special Routing Condition of 'X' can only be used when routing to a national securities exchange.</li> </ul>
Stop Price			The per–share stop price; the order becomes either a market order or a limit order (i.e. if a Limit Price is specified) once the security has been quoted at or through the specified stop price.
Third Desk Special Handling Code (Maximum of 5 codes)	See First	Special Handling Code	See First Special Handling Code
Third Special Handling Code (Maximum of 5 codes)	See First	Special Handling Code	See First Special Handling Code
Time in Force Code	 oblank> DAY GTC	Market Order–Valid for execution at the prevailing market price Day Order–Valid until executed or the next market close Good Till Cancelled–Valid until executed or cancelled by the customer	The length of time when an order is valid.

### APPENDIX A -DATA DICTIONARY

Name	Permitted Values and	Definition	
T (unit)		20mmion	
TMO Timestamp	GTD Good Till Date–Valid until the close of market on a specified date GTM Good Till Month – Valid until the last business day of the month in which the order was received GTT Good Till Time–Valid until the specified time GTX Good Through Extended Hours–Valid until executed or the close of the extended hours session	The specific date and time that an order becomes a market or limit price order. The alphanumeric string must use the format YYYYMMDDHHMMSSCCC where YYYY is the four–digit number for calendar year, MM is the two–digit number for the current month of the	
		year, DD is the two-digit number for the current day of the month, HH is the two-digit number (using a 24-hour clock) for the current hour of the day, MM is the two-digit number for the current minute of the hour, SS is the current second of the minute, and CCC is the milliseconds.	
Trader Terminal ID		The identifier of the terminal where the order was executed or the identifier of the executing trader.	
User ID		The User ID assigned to identify the user in OATS.	
Version Description	OATS D1999-01	The current version number of the format specification.	

# APPENDIX B — ERROR MESSAGES

This section defines the error messages generated by OATS. The first portion defines the messages generated for Firm Order Report files (FOREs) that fail validation checks; the second portion defines the messages generated for Reportable Order Event records (ROEs) that fail validation checks; and the third portion defines the unmatched reasons for ROEs which do not link to a corresponding report.

## Firm Order Report Status Messages

The table below details messages that are associated with the FORE Status. The Exception Type Code indicates whether the exception is a Warning ('W') or Error ('E'); the Exception Code is a numeric value for the exception; and the Exception Code Description is a textual description for the Exception Code.

Exception Type Code	Exception Code	<b>Exception Code Description</b>	Explanation
E	1001	Duplicate FORE	A file with the same Firm FORE ID, Generation Date and User ID has previously been accepted by OATS.
Е	1003	Missing or invalid User ID	User ID in the Header record is missing or invalid. (e-mail only)
Е	1004	Missing or invalid Password	The Password in the Header record is missing or invalid. (e-mail only)
Е	1005	Missing or invalid MPID	Firm MPID in the Header record is missing or is not a valid Market Participant symbol for the Generation Date.
Е	1006	Missing or invalid Header	The value provided in the Record Type Code field of the Header Record was either missing or was a value other than '#HD#' (Header).
Е	1007	Missing or invalid Trailer	The value provided in the Record Type Code field of the Trailer Record is either missing or is a value other than '#TR#'(Trailer).
Е	1008	Missing or invalid Generation Date	Generation Date is missing or is not a valid date.
Е	1009	Missing or invalid Version Description	Version Description is missing or is not a valid value.
Е	1010	Invalid Delimiter	The delimiter must equal the fifth character of the Header Record. Valid delimiters are ASCII comma $(`,')$ , semicolon $(`;')$ , pipe $(` ')$ , and tab $(`\rightarrow')$ .
Е	1011	User ID not registered with an OSO	User ID in the Header record is not registered with an OSO.
Е	1013	User is not recognized by OATS	User ID does not exist in OATS.
Е	1014	Missing or invalid Firm FORE ID	Firm FORE ID is missing or is invalid.
Е	1015	User's Order Sending Organization has expired	The User's OSO has expired.

Exception Type Code	Exception Code	<b>Exception Code Description</b>	Explanation
Е	1016	MPID has expired	MPID in the Header record has expired.
Е	1019	Password has expired	The Password for the user has expired.
E	1020	User ID locked	The User ID is locked.
Е	1021	User ID disabled	The User ID is disabled.
Е	1022	Invalid Reporting OSO ID	Reporting OSO ID provided is in an invalid format.
Е	1023	Reporting OSO ID invalid or expired	Reporting OSO ID provided is invalid or has expired.
Е	1029	No status sent due to violation of submission requirements	If OATS submission requirements are violated, OATS will not generate FORE status.
Е	1030	FORE file exceeds the supported size limit	FORE file size exceeds the maximum uncompressed size of 25MB.
Е	1033	Unauthorized Transmitting OSO ID	Transmitting OSO ID has not been authorized to submit for the Firm MPID. Verify that the Transmitting OSO ID and Firm MPID in the FORE file header have a transmitting relationship.
Е	1034	Missing Reporting/Transmitting OSO ID	Reporting or Transmitting OSO ID is missing from the FORE file header.
Е	1035	Unauthorized Reporting OSO ID	Reporting OSO ID has not been authorized to submit for the Firm MPID. Verify that the Reporting OSO ID and Firm MPID in the FORE file header have a reporting relationship.
E	1036	Invalid Forefile Format	A file that is missing an end of file or end of line marker, or contains invalid special or hidden characters which prevents OATS from processing the file.
W	1101	Firm provided ROE count does not equal ROEs received	The number of ROEs in the FORE, as calculated by OATS, does not match the Record Count provided in the Trailer Record.

# **Reportable Order Event Messages**

The table below lists the rejection reasons for Reportable Order Events that failed validation checks.

Rejection	Rejection Description	Explanation
Code		
2001	Missing or invalid Order Receiving Firm	Order Receiving Firm MPID must be a valid
	MPID	symbol for the event date.
2002	Missing or invalid ROE Record Type	The first field in an ROE record must be #OE#.

Rejection Code	Rejection Description	Explanation
2003	Missing or invalid Order Received Date	A valid Order Received Date must be provided on each order report.
2004	Order Received Date is greater than current system date	The date provided indicates the event had not yet occurred at the time it was reported to OATS.
2006	Missing or invalid Firm Order ID	A valid Firm Order ID must be provided on all order events.
2007	Missing or invalid Order Event Type	Order Event Type Code must be one of the following values: 'NW'(New Order Report), 'RT'(Route Report), 'DS'(Desk Report), 'EX'(Execution Report), 'CL'(Cancel Report), 'CR'(Cancel/Replace Report), or 'OE'(Combined Order/Execution Report), 'OR'(Combined Order/Route Report).
2008	Missing or invalid Action Type Code	Action Type Code must be one of the following values: 'N'(new event, not previously accepted by OATS), 'D'(deletion of an event previously accepted by OATS), 'R'(deletion of an event previously accepted by OATS for purposes of replacement by the subsequent event), and 'C'(correction of an event previously accepted by OATS).
2009	Missing or invalid Order Received Timestamp	A valid Order Received Timestamp must be provided on all New Order, Cancel/Replace, Combined Order/Route, and Combined Order/Execution Report.
2010	Missing or invalid Correction Deletion Timestamp	Correction Deletion Timestamp is required when the Action Type Code is 'R'(delete for replacement), 'C'(corrected), or 'D'(deleted).
2011	Correction Deletion Timestamp is greater than current system date	The Timestamp indicates the event had not yet occurred at the time it was reported to OATS.
2012	Invalid Rejected ROE Resubmit Flag	The value must be either 'Y' or null.
2013	Missing or invalid Rejected ROE ID	Rejected ROE ID must be blank when the Rejected ROE Resubmit Flag is blank.
2018	Delete/Replace Report received without a valid Corrected Report	The Corrected Report that followed the Delete/Replace Report did not match or was invalid.
2019	Corrected Report received without a valid Delete/Replace report	A Corrected Report was received by OATS following an invalid Delete/Replace Report, or the Delete/Replace Report was not received.
2021	Missing or invalid Issue Symbol ID	Issue Symbol ID must be provided and must be in the correct format.
2022	Invalid Firm ROE ID	Firm ROE ID must be in the correct format.
2023	Sent To Firm MPID must be a non-FINRA member when the Destination Code is 'N' or 'A'	If the Destination Code is 'N' or 'A', the Sent to MPID must be blank or contain a non-FINRA member MPID.
2024	Invalid Sent To Firm MPID	Sent to Firm MPID must be a valid Market Participant symbol for the event date.

Rejection Code	Rejection Description	Explanation
2025	Delete/Replace Report must be followed immediately by a Corrected Report	Two reports are required in sequence when an order report is corrected: the first identifies the incorrect report and must have an Action Type Code of 'R'(delete for replacement). The second report is the correct report and must have an Action Type of 'C'(correct). The Delete/Replace Report was not followed by a Corrected Report.
2026	Corrected Report must be immediately preceded by a Delete/Replace Report	Two reports are required in sequence when an order report is corrected: the first identifies the incorrect report and must have an Action Type Code of 'R'(delete for replacement). The second report is the correct report and must have an Action Type of 'C'(correct). The Corrected Report was not preceded by a Delete/Replace Report.
2027	Missing Sent To Firm MPID	Sent to Firm MPID is required on the 'RT'(Route) or 'OR'(Combined Order/Route) when the Destination Code is 'M'(FINRA Member) or 'E'(ECN).
2028	Order Received Timestamp is greater than the current date and time	Timestamp indicates the event had not yet occurred at the time it was reported to OATS.
2029	Issue is not reportable to OATS	The issue is a valid symbol but is not reportable to OATS.
2030	Issue Symbol invalid for Order Event Date	Issue Symbol ID is not effective on the order event date.
2031	ROE line length exceeds maximum length	ROE line length must not exceed maximum length for the ROE type.
2032	Issue Symbol does not match listing market format	For exchange listed securities, the symbol format must match the format published by the primary listing market.
2033	Additional fields specified in ROE but are not defined for this ROE type	Refer to Appendix C, "Order Report Formats," for permitted fields for each order event type.
2034	Firm MPID in the ROE must equal MPID in header	If populated, the Order Receiving Firm MPID in all ROEs within a single FORE must equal the Order Receiving Firm MPID in the FORE header.
2035	Invalid ROE delimiter	The delimiter in the ROE either does not match the delimiter established in the header record, or is not a valid delimiter of ASCII comma (','), semicolon (';'), pipe (' '), or tab ('->').
2036	Cancelled Timestamp is prior to Order Received Timestamp	An order cannot be Cancelled before it is received. Therefore, the Cancelled Timestamp must be equal to or later than the Order Received Timestamp.
2037	Invalid Alphanumeric Character	A field value in the ROE contains a delimiter or a non-allowable ASCII character.
2039	Invalid Information Barrier ID	Information Barrier ID must be in the correct format.
2040	Invalid Connection ID	Connection ID must be in the correct format.
2102	Invalid Routing Firm MPID	Routing Firm Market Participant ID must be effective for the Order Received Timestamp.
2107	Missing or invalid Routed Order ID	Routed Order ID must not contain a delimiter or leading zeroes and must be in the correct format.  Must be populated when the Order Origination Code is 'W', Received Method Code is 'E'.

Rejection Code	Rejection Description	Explanation
2108	Invalid Sent To Routed Order ID	Sent To Routed Order ID provided must not contain a delimiter or leading zeroes and must be in the correct format.
2110	Missing or invalid Buy Sell Code	Buy Sell Code must be one of the following values: 'B'(buy), 'SL'(sell long), 'SS'(short sale) or 'SX'(short sale exempt).
2111	Missing Time In Force Code	If the order contains a Limit Price, a Stop Price, or both, a Time in Force Code must be provided.
2112	Invalid Time In Force Code	If provided, Time in Force must be one of the following values: 'DAY'(day order); 'GTD'(good till date), 'GTT'(good till time), 'GTC'(good till cancel), 'GTM'(good till month), or 'GTX'(good through extended hours).
2113	Missing Expiration Date	Expiration Date must be provided if the Time in Force Code is 'GTD' (good till date).
2115	Invalid Expiration Date	Expiration Date provided must be in the correct format.
2117	Expiration Date is less than the Order Received Date	Expiration Date must be equal to or greater than the Order Received Date.
2118	Missing or invalid Expiration Time	Expiration Time provided must be in the correct format.
2119	Expiration Time required for Good Till Time orders	Expiration time must be provided for orders with a Time in Force of 'GTT' (good till time).
2120	Missing or invalid Shares Quantity	Shares Quantity is required and must be an integer greater than zero.
2123	Missing or invalid Received Method Code	Received Method Code must be one of the following values: 'E'(Electronic), or 'N'(Manual).
2125	Missing or invalid Account Type Code	Account Type Code must be provided and must be one of the following values: 'A'(Institutional Customer), 'C'(Combined), 'I'(Individual Customer), 'O'(Market Maker Proprietary), 'P'(Other Proprietary), 'E'(Employee Account), 'R' (Not a Broker/Dealer), 'U'(Unknown), or 'X'(Error Account).
2126	Invalid Receiving Terminal ID	Receiving Terminal ID must be in the correct format.
2128	Invalid Receiving Department ID	When populated, must be one of the following values: 'A' (Agency), 'ATS' (Alternative Trading System), 'MA' (Market Access), 'T'(Trading) or 'O'(Other).
2129	Missing or invalid Program Trading Code	Program Trading Code must be one of the following values: 'Y'(yes), 'N'(no), or 'X'(not known). If the Order Origination Code is 'F', must not equal 'X'.
2130	Invalid Arbitrage Code	If provided, Arbitrage Code must be one of the following values: 'Y'(yes), 'N'(no), 'X'(not known). If the Order Origination Code is 'F', must not equal 'X'.
2131	Invalid Limit Price	Limit Price provided must be in the correct format.
2133	Invalid Stop Price	Stop Price provided must be in the correct format.

Rejection Code	Rejection Description	Explanation
2136	Invalid Do Not Reduce Do Not Increase Code	If provided, Do Not Reduce/Do Not Increase Code must be one of the following values: 'DNR'(do not reduce), 'DNI'(do not increase), 'DIR'(do not reduce or increase).
2138	Missing or invalid Order Origination Code	Order Origination Code must be one of the following values: 'F'(Order Originated with Firm) or 'W'(Received from another Broker/Dealer)
2139	Missing or invalid Exchange Participant ID	Required for all Route and Combined Order/Route reports with a Destination Code representing a national securities exchange.
2144	Missing or invalid Customer Instruction Flag	If the ECN flag is blank and a limit price is provided, the Customer Instruction Flag must be provided.
2145	Invalid Originating Department ID	When populated, must be one of the following values: 'A' (Agency), 'ATS' (Alternative Trading System), 'MA' (Market Access), 'T'(Trading) or 'O'(Other).

Rejection	Rejection Description	Explanation
2147	Invalid First Special Handling Code	If provided, the First Special Handling Code must be one of the following values:  'ADD' (Add), 'AON' (All or None),  'CND' (Conditional Order), 'CNH' (Cash Not Held), 'CSH' (Delivery Instructions: Cash- trade settles on the same trade date.), 'DIR' (Directed Orders), 'DLO' (Discretionary Limit Order),  'E.W' (Exchange for Physical Transaction),  'F0' (Stay on Offerside), 'F3' (Go Along),  'F6' (Participate Don't Initiate), 'F7' (Strict Scale),  'F8' (Try to Scale), 'F9' (Stay on Bidside), 'FA' (No Cross), 'FB' (OK to Cross), 'Fb' (Strict Limit),  'FC' (Call First), 'Fc' (Ignore Price Validity Checks), 'FD' (Percent of Volume), 'Fd' (Peg to Limit Price), 'Fe' (Work to Target Strategy),  'FH' (Reinstate on System Failure), 'FI' (Institutions Only), 'FJ' (Reinstate on Trading Halt),  'FK' (Cancel on Trading Halt), 'FL' (Last Peg),  'FM' (Mid), 'FN' (Non), 'FO' (Opening Peg),  'FOK' (Fill or Kill), 'FP' (Market Peg), 'FQ' (Cancel on System Failure), 'FR' (Primary Peg),  'FS' (Suspend), 'FT' (Fixed Peg to Local Best Bid or Offer at time of order), 'FW' (Peg to VWAP),  'FX' (Trade Along), 'FY' (Try to Stop), or  'FZ' (Cancel if Not Best), 'G' (G Order),  'IDX' (Intra-Day Cross), 'IO' (Imbalance Only),  'IOC' (Immediate or Cancel), 'ISO' (Intermarket Sweep Order), 'LOC' (Limit on Close),  'MAO' (Market at Open), 'MAC' (Market at Close),  'MAO' (Market at Open), 'MPT' (Merger Related Transfer Position), 'MQT' (Minimum Quantity),  'MTL' (Market to Limit), 'ND' (Delivery Instructions: Next Day - trade settles on a next trade date.), 'NH' (Not Held), 'OPT' (Options Related Transaction), 'OVD' (Over the Day), 'PEG' (PEG),  'RSV' (Reserve Size Order), 'S.W' (Stop Stock Transaction), 'SCL' (Scale), 'SLR' (Delivery Instructions: Seller's Option - trade settles on a date determined by a seller.), 'TMO' (Time Order),
2148	Invalid Second Special Handling Code	'TS'(Trailing Stop ) or 'WRK'(Work). See Exception Code 2147
2149	Invalid Third Special Handling Code	See Exception Code 2147  See Exception Code 2147
2150	Invalid Fourth Special Handling Code	See Exception Code 2147
2151	Invalid Fifth Special Handling Code	See Exception Code 2147
2153	Routing Firm MPID must be a non-FINRA member when the Order Origination Code is 'W' and the Member Type Code 'N' or 'A'	If the Order Origination Code is 'W' and the Member Type Code is 'N' or 'A', the Routing Firm MPID must be blank or contain a non-FINRA member MPID.
2154	Routing Firm MPID must be blank when the Order Origination Code is 'F'	For the New Order, Cancel/Replace, Combined Order/Route and Combined Order/Execution Report, the Routing Firm MPID must be blank if the Order Origination Code is 'F'.

### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Rejection Code	Rejection Description	Explanation
2156	Missing or invalid Market Center ID	Required on all Execution and Combined Order/Execution Reports and must be one of the following values: 'A'(NYSE Amex), 'B'(NASDAQ OMX BX), C'(National Stock Exchange), 'DN'(FINRA/NYSE TRF), 'D'(ADF), 'F'(Non-US Exchange), 'I'(International Securities Exchange), 'L'(FINRA/NASDAQ TRF), 'M'(Chicago Stock Exchange), 'N'(New York Stock Exchange), 'O'(OTC Reporting Facility), 'P'(NYSE Arca Exchange), 'Q'(The NASDAQ Stock Market), 'W'(CBOE Stock Exchange) or 'X'(NASDAQ OMX PHLX).
2157	Invalid Originating Broker/Dealer Number	If populated, Originating Broker/Dealer Number must be provided in the correct format on all Desk, Route, Execution, Cancel/Replace and Cancel orders.
2158	No relationship exists between Originating Broker/Dealer and Order Receiving Firm MPID	A valid relationship must exist between the Originating Broker/Dealer and the Order Receiving Firm MPID.
2159	Missing or invalid Member Type Code	Required on all New Order, Cancel/Replace, Combined Order/Route, and Combined Order/Execution Reports and must be one of the following values: 'A'(Affiliate, Not a FINRA Member), 'C'(ECN), 'E'(Non-Reporting Member), 'M'(FINRA Member), or 'N'(Not a FINRA Member).

Rejection	<b>Rejection Description</b>	Explanation
2161	Missing or invalid Destination Code	Required on all Route Reports and Combined Order/Route Reports and must be one of the following values: 'A'(Affiliate, Not a FINRA Member), 'E'(ECN), 'M'(FINRA Member), or 'N'(Not a FINRA Member).
		The following codes are used to identify <b>Equity Exchanges</b> :  'XA'(NYSE Amex), 'XB'(NASDAQ OMX BX),  'XC'(National Stock Exchange), 'XF'(Non-US Exchange), 'XI'(International Securities Exchange),  'XM (Chicago Stock Exchange), 'XN (The New York Stock Exchange), 'XO'(Bourse de Montreal),  'XP'(NYSE Arca), 'XQ'(The NASDAQ Stock Market), 'XT'(Toronto Stock Exchange),  'XV'(TSX Venture Exchange), 'XW'(CBOE Stock Exchange) or 'XX'(NASDAQ OMX PHLX),  'XY'(BATS Y Exchange), or 'XZ'(BATS Exchange).
		The following codes are used to identify <b>Options Exchanges</b> :  'OA'(NYSE Amex Options Exchange),  'OB'(Boston Options Exchange, LLC),  'OC'(Chicago Board Options Exchange),  'OI'(International Securities Exchange), 'OJ'(C2 Options Exchange), 'OP'(NYSE Arca Options Exchange), 'OQ'(NASDAQ OMX Options),  'OX'(NASDAQ OMX PHLX Options), or  'OZ'(BATS Options Exchange).
2162	Invalid ECN Flag	Required on all New Order, Cancel/Replace, Combined Order/Route, and Combined Order/Execution Reports if the Order Receiving Firm MPID is an ECN.
2163	Combination of Member Type Code and Account Type Code is not valid	For the New Order, Cancel/Replace, Combined Order/Route, and Combined Order/Execution Reports, when the Order Origination Code is 'F', the following Member Type Code and Account Type Code combinations are invalid:  • Member Type Code is 'A' or 'N', and the Account Type Code is 'O', 'P', or 'X'  • Member Type Code is 'M', and the Account Type Code is 'A', 'C', 'I', 'E' or 'R'
2164	Missing , Invalid, or Invalid use of TMO Trigger Timestamp	TMO Trigger Timestamp must be provided in the correct format and must be supplied if one of the Special Handling Codes is 'TMO'.
2165	Invalid Negotiated Trade Flag	If provided, Negotiated Trade Flag must be 'Y'

Rejection Code	Rejection Description	Explanation
2166	Combination of Order Origination Code and Member Type Code is not valid	For the New Order, Cancel/Replace, Combined Order/Route, and Combined Order/Execution Reports, the following Order Origination Code and Member Type Code combinations are invalid:  Order Origination Code is 'F' and Member Type Code is 'C', or 'E'
2167	Combination of Order Origination Code and Account Type Code is not valid	For the New Order, Cancel/Replace, Combined Order/Route, and Combined Order/Execution Reports, the following Order Origination Code and Account Type Code combination is not valid:  Order Origination Code is 'F' and Account Type Code is 'U'
2168	Receiving Department ID or Originating Department ID must be populated.	If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or Originating Department ID must be populated.
2169	Missing Receiving Department ID	Must be provided if the Order Origination Code is 'W' or if the Order Origination Code is 'F' and the Account Type Code is 'A', 'E', 'I', or 'R'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.
2170	Missing Originating Department ID	If the Order Origination Code is 'W', the Originating Department ID must be blank. Must be provided if the Order Origination Code is 'F' and the Account Type Code is 'O', 'P' or 'X'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.
2171	Combination of Reporting Exception Code and Capacity Code is not valid	For Execution and Combined Order/Execution reports, the following Reporting Exception Code and Capacity Code combinations are required:  If the Reporting Exception Code is 'R', the capacity code must be 'R'  If the Reporting Exception Code is 'A' or 'T', the capacity code must be 'A'  If the Reporting Exception Code is 'P', the capacity code must be 'P'
2172	Missing or invalid Routed Order Type Indicator	Routed Order Type Indicator must be one of the following values: 'L'( Order Routed as a Limit Order) or 'M'(Order Routed as a Market Order).
2173	Missing or invalid Route Price	Route Price must be provided if the Routed Order Type Indicator is set to 'L' and must be in the correct format.
2174	Route Price must be blank when Routed Order Type Indicator is 'M'	If the Routed Order Type Indicator is set to 'M', Route Price must be blank.
2201	Missing or invalid Branch Sequence Number	Must be provided when a trade is reported to a FINRA transaction reporting system and must not contain a delimiter, spaces, blanks, or leading zeroes.
2202	Missing or invalid Execution Type Flag	Execution Type Flag must be one of the following values: 'F'(full execution), or 'P'(partial execution).

Rejection Code	Rejection Description	Explanation
2203	Missing or invalid Execution Timestamp	Execution Timestamp must be provided in the correct format on the Execution or Combined Order/Execution Report.
2204	Execution Timestamp is greater than the current date and time	The Timestamp indicates the event had not yet occurred at the time it was reported to OATS.
2205	Invalid Execution Quantity	Execution Quantity must be greater than zero.
2206	Missing or invalid Trader Terminal ID	Trader Terminal ID must be populated and must be in the correct format.
2207	Invalid Reporting Exception Code	Must be provided if the execution is not required to be reported to a FINRA transaction reporting system. If provided, the Reporting Exception Code must be one of the following values:  'P'(Intra-firm order filled from firm's proprietary account), 'M'(Execution where entry of branch/sequence number is not possible),  'R'(Riskless principal transaction), 'A'(Agency Average Price Transaction), 'T'(Agency Post Trade Allocation), or 'F'(Reported on Form T pursuant to FINRA Trade Reporting Rules).
2208	Invalid ISO Indicator	If populated, ISO Indicator must be 'Y'
2209	Invalid Short Sale Exempt Indicator	If populated, Short Sale Exempt Indicator must be 'Y'
2211	Missing or invalid Leaves Quantity	A valid Leaves Quantity must be provided if the Execution Type is 'P'(partial). A value of zero or greater is acceptable.
2212	A valid Cancel Leaves Quantity is required for partial cancellations	The number of shares remaining in the order must be supplied when the order is partially Cancelled (Cancel Type Flag is 'P'). A value of zero or greater is acceptable.
2213	Invalid Cancel Leaves Quantity	If the Cancel Leaves Quantity is populated, it must be 0 or a positive integer.
2215	Missing or invalid Execution Price	Execution price provided must be in the correct format.
2216	Missing or invalid Capacity Code	Capacity Code must be one of the following values: 'A'(Agent), 'P'(Principal), or 'R'(Riskless Principal).
2301	Missing or invalid Cancelled Timestamp	Cancelled Timestamp must be provided on a Cancel Report.
2302	Missing or invalid Cancel Type Flag	Cancel Type Flag must be one of the following values: 'F'(full) or 'P'(partial).
2303	Missing or invalid Cancel Quantity	Cancel Quantity must be greater than zero when the Cancel Type Flag is 'P'(partial cancellation).
2304	Missing or invalid Cancelled By Flag	The Cancelled By Flag must be one of the following values: 'C'(Customer Cancelled), or 'F'(Firm Cancelled).
2308	Cancelled Timestamp greater than current date and time	The Timestamp indicates the event had not yet occurred at the time it was reported to OATS.
2401	Missing or invalid Order Sent Timestamp	A valid Order Sent Timestamp must be provided on a Route Report.
2402	Order Sent Timestamp is greater than the current date and time	The Timestamp indicates the event had not yet occurred at the time it was reported to OATS.

Rejection Code	Rejection Description	Explanation
2403	Invalid Routed Shares Quantity	Routed Shares Quantity must be in a valid format and an integer greater than zero.
2406	Missing or invalid Routing Method Code	Routing Method Code must be one of the following values: 'E'(Electronic), 'N'(Non-Electronic), or 'S'(Smart Router).
2407	Invalid Special Routing Condition	If provided, Special Routing Condition must be 'X' (Exchange Order Modification) or 'Y' (Bunched Order). Special Routing Condition of 'X' is permitted only when routing to a national securities exchange.
2411	Routed Order ID is required for electronically routed orders	Routed Order ID must be provided if the Routing Method Code is 'E'(Electronic,) or 'S'(Smart Router).
2412	Sent To Firm and Order Receiving Firm must not be identical	A firm may not route an order to itself.
2413	Order Sent Timestamp is prior to Order Received Timestamp	An order cannot be routed before it is received. Therefore, the Order Sent Timestamp must be equal to or later than the Order Received Timestamp.
2414	Cancelled Timestamp is prior to Order Sent Timestamp	An order cannot be routed after it has been fully Cancelled. Therefore, the Cancelled Timestamp must be equal to or later than the Order Sent Timestamp.
2501	Missing or invalid Desk Received Timestamp	Desk Received Timestamp must be provided on the Desk Report and must be in a valid format.
2506	Desk Received Timestamp greater than current date and time	The Timestamp indicates the event had not yet occurred at the time it was reported to OATS.
2507	Missing or invalid Desk Shares Quantity	Desk Shares Quantity must be in a valid format and an integer greater than zero.
2508	Missing or invalid Desk Type Code	Must be one of the following values: 'A'(Agency), 'AR'(Arbitrage), 'B'(Block Trading), 'C'(Convertible Desk), 'CR'(Central Risk Books), 'D'(Derivatives), 'EC'(Equity Capital Markets), 'IN'(International), 'IS'(Institutional), 'O'(Other), 'PF'(Preferred Trading), 'PR'(Proprietary), 'PT'(Program Trading), 'S'(Sales), 'SW'(Swaps), 'T'(Trading) or 'TR'(Treasury).
2509	Invalid First Desk Special Handling Code	See Exception Code 2147
2510	Invalid Second Desk Special Handling Code	See Exception Code 2147
2511	Invalid Third Desk Special Handling Code	See Exception Code 2147
2513	Invalid Fourth Desk Special Handling Code	See Exception Code 2147
2514	Invalid Fifth Desk Special Handling Code	See Exception Code 2147
2515	Desk Received Timestamp is prior to Order Received Timestamp.	An order cannot be transmitted to an internal desk before it is received at the firm. Therefore, the Desk Received Timestamp must be equal to or later than the Order Received Timestamp.
2603	Missing or invalid Replaced Order Received Date	Replaced Order Received Date is required on the Cancel/Replace Report and must be in the correct format. This is the date the order being replaced was received.

Rejection Code	Rejection Description	Explanation
2604	Replaced Order Received Date greater than current date	The date provided indicates the event had not yet occurred at the time it was reported to OATS.
2606	Missing or invalid Replaced Firm Order ID	Replaced Firm Order ID is required on the Cancel/Replace Report and must be in the correct format. Must be equal to the Firm Order ID of the order being replaced.
2607	Order Received Date must be equal to the Date Portion of the Order Received Timestamp	The date portion of the Order Received Date must equal the date portion of the Order Received Timestamp (for orders received on or after October 17, 2011). Note: For orders received prior to October 17, 2011, this validation does not apply.
2617	Replaced Order ID must not be identical to the Firm Order ID	The replacement order must have an order identifier that is unique within the Order Received Date.
2703	Routing Firm and Order Receiving Firm must not be identical	A firm may not route an order to itself.
2750	Sent To Routed Order ID is required for electronically routed orders	Sent To Routed Order ID must be provided if the Routing Method Code is 'E'(Electronic) or 'S'(Smart Router)
2752	Missing Routing Firm MPID	Routing Firm MPID must be populated when the Order Origination Code is 'W' and Member Type Code is 'M', 'E' or 'C'.
3004	Route Report is for an order that does not exist in OATS	The Route Report references an order that does not exist in OATS, either because it was not reported or was rejected. The order must be reported on a valid New Order or Cancel/Replace Report before the Route Report will be accepted.
3008	Desk Report is for an order that does not exist in OATS	The Desk Report references an order that does not exist in OATS, either because it was not reported or was rejected. The order must be reported on a valid New Order, Combined Order/Route, Cancel/Replace, or Combined Order/Execution Report before the Desk Report will be accepted.
3014	Execution Report is for an order that does not exist in OATS	The Execution Report references an order that does not exist in OATS, either because it was not reported or was rejected. The order must be reported on a valid New Order or Cancel/Replace Report before the Execution Report will be accepted.
3020	Cancel Report is for an order that does not exist in OATS	The Cancel Report references an order that does not exist in OATS, either because it was not reported or was rejected. The order must be reported on a valid New Order, Combined Order/Route, or Cancel/Replace Report before the Cancel Report will be accepted.
3023	Cancel/Replace Report is for an order that does not exist in OATS	The Cancel/Replace Report references an order that does not exist in OATS, either because it was not reported or was rejected. The order must be reported on a valid New Order, Combined Order/Route or Cancel/Replace Report before the Cancel/Replace Report will be accepted.
3026	Deleted Report is for an event that does not exist in OATS	Deleted Report references an event that was not reported to OATS or was rejected.

Rejection Code	Rejection Description	Explanation
3030	Delete/Replace Report is for an event that does not exist in OATS	Delete/Replace Report references an event that was not reported to OATS or was rejected.
3031	Corrected Report is for a Delete/Replace Report that does not exist in OATS	Corrected Report references a Delete/Replace Report that was not reported to OATS or was rejected.
3032	Issue Symbol is unrelated to Symbol reported on Originating Order	Issue Symbol on the Desk, Cancel, Route, Cancel/Replace, or Execution Report is not related to the Issue Symbol reported on the corresponding New, Combined Order/Route, Cancel/Replace, or Combined Order/Execution. Example: If the New Order Report is submitted with Issue Symbol "MSFT" and the Execution Report is submitted with Issue Symbol "YHOO", the Execution Report will be rejected. If the New Order Report is submitted with Issue Symbol "ANLY" and the Execution Report is submitted with the related Issue Symbol "ANLYD", the Execution Report will be accepted.
3501	Duplicate Order Event	The order event has already been received by OATS. The first instance of an event will be retained; all subsequent submissions will be rejected.
3502	Duplicate Order identifiers reported on same day	More than one order was reported for the same OATS Order ID (Order Receiving Firm, Order Received Date, and Order Receiving Firm Order ID) on the current OATS Reporting Day. All events associated with the duplicate OATS Order ID will be rejected.
3503	Duplicate Order identifiers reported on previous day	One or more orders were reported that have the same OATS Order ID (Order Receiving Firm, Order Received Date, and Order Receiving Firm Order ID) as an order reported on a previous day. All events received on the current OATS Reporting Day having the duplicate OATS Order ID will be rejected. The events received on a previous day having the duplicate OATS Order ID will not be rejected.
3512	Duplicate Routed Order ID or Sent to Routed Order ID reported on same day	For Route and Combined Order/Route reports, if the Destination Code is 'M' or 'E', the Routed Order ID or Sent to Routed Order ID must be unique for the MPID, the Order Sent Date, Connection ID, and Sent to MPID.  For Route and Combined Order/Route reports, if the Destination Code represents a national securities exchange, the Routed Order ID or Sent to Routed Order ID must be unique for the MPID, the Order Sent Date, Connection ID, Destination Code, and Exchange Participant ID.
		All Route and Combined Order/Route Reports containing the duplicated Routed Order ID or Sent to Routed Order ID will be rejected.

Rejection	Rejection Description	Explanation
Code		
3513	Duplicate Routed Order ID or Sent to Routed Order ID reported on previous day	One or more Route and Combined Order/Route reports were reported that have the same Routed Order ID or Sent to Routed Order ID as a Route or Combined Order/Route reported on a previous day.  All Route and Combined Order/Route Reports received on the current OATS Reporting Day containing the duplicated Routed Order ID or Sent to Routed Order ID will be rejected. The events received on a previous day having the duplicated Routed Order ID or Sent to Routed Order ID or Sent to Routed Order ID will not be rejected.

# **Out of Sequence Events**

The table below lists of the Out of Sequent reason codes for subsequent events reported with an event timestamp prior to the Order Received timestamp reported on the originating event.

Out of	Code Description	Explanation
Sequence Reason Code		
3003	Order Sent Timestamp is prior to Order Received Timestamp	Order Sent Timestamp reported on the Route Report is prior to the Order Received Timestamp reported on the originating event.
3007	Desk Received Timestamp is prior to Order Received Timestamp	Desk Received Timestamp reported on the Desk Report is prior to the Order Received Timestamp reported on the originating event.
3013	Execution Timestamp is prior to Order Received Timestamp	Execution Timestamp reported on the Execution Report is prior to the Order Received Timestamp reported on the originating event.
3019	Cancel Timestamp is prior to Order Received Timestamp	Order Cancel Timestamp reported on the Cancel Report is prior to the Order Received Timestamp reported on the originating event.
3039	Order Received Timestamp of Cancel/Replace event is prior to Order Received Timestamp of original event	Order received timestamp reported on the Cancel/Replace Report is prior to the Order Received Timestamp reported on the originating event.

## **Unmatched Records**

The table below lists the unmatched reasons for Reportable Order Events that did not link to a corresponding event.

Unmatched	Code Description	Explanation
Reason Code		
4001	Late reported Execution or Combined Order/Execution	Execution or Combined Order/Execution was reported more than one day late; therefore, no Order/Trade match was possible.

Unmatched Reason Code	Code Description	Explanation
4002	Matching Branch Sequence Number cannot be found	Branch Sequence Number reported on OATS Execution or Combined Order/Execution did not match the Market Participant Branch Sequence Number or Contra Branch Sequence Number on
4003	Execution Timestamp reported on the Execution event is not equal to the Trade Report	trade report.  Execution timestamp reported on OATS Execution or Combined Order/Execution did not match the Execution Time on the trade report.
4004	Unmatched due to secondary execution match data error	A trade report with a matching Branch Sequence Number or Contra Branch Sequence Number was found; however, the issue symbol, MPID, or a combination of fields reported on the OATS Execution or Combined Order/Execution did not match.
4011	Late reported Route or Combined/Order Route	Route or Combined Order/Route was reported more than one day late; therefore, no Exchange Route match was possible.
4012	Matching Routed Order ID/Sent to Routed Order ID cannot be found	Routed Order ID/Sent to Routed Order ID reported on OATS Route or Combined Order/Route does not match to a corresponding exchange order.
4013	Exchange Participant ID did not match	A matching Routed Order ID was identified in the exchange order data for the trade date; however, the Exchange Participant ID did not match.
4014	Issue Symbol did not match	A matching Routed Order ID was identified in the exchange order data for the trade date; however, the Issue Symbol did not match.
4015	Multiple fields did not match	A matching Routed Order ID was identified in the exchange order data for the trade date; however, the issue symbol, Exchange Participant ID, or a combination of fields reported on the OATS Route or Combined Order/Route did not match.
4021	Late reported Route or Combined/Order Route	Route or Combined Order/Route was reported more than one day late; therefore, no Interfirm match was possible.
4022	Matching Routed Order ID/Sent to Routed Order ID cannot be found	Routed Order ID/Sent to Routed Order ID reported on Routing Firm's Route or Combined Order/Route did not match to the Receiving Firm's Routed Order ID order report.
4023	Routing Firm or Order Receiving Firm Market Participant ID did not match	A matching Routed Order ID was identified in the Receiving Firm order data for the Order Sent Date; however, the Routing Firm MPID or the Order Receiving Firm MPID did not match.
4024	Issue Symbol did not match	A matching Routed Order ID was identified in the Receiving Firm order data for the Order Sent Date; however, the Issue Symbol did not match.
4025	Multiple fields did not match	A matching Routed Order ID was identified in the Receiving Firm order data for the Order Sent Date; however, the issue symbol, Exchange Participant ID, or a combination of fields did not match.

## APPENDIX C — ORDER REPORT FORMATS

This appendix describes the detailed specification for the layout of delimited Firm Order Report files (FOREs). OATS will accept only files delivered in this format.

#### **Delimited Format**

The delimited format is a field separated format where fields within each record are separated by a delimiter, which marks the end of the current field and the beginning of the next field. Each field is identified by its relative position within each record. The sequence of the fields within each record must be exactly as stated in the record descriptions.

The following rules apply to the delimited formats:

- 1. The sequence of the fields within each record is fixed. Each record must be in the sequence described in this appendix.
- 2. Each field must be terminated by a delimiter even if the field is the maximum length.
- 3. None of the fields in the record can contain the character used for the delimiter.
- 4. The last field in a record is not required to be terminated by a delimiter, but the field will still be considered to be acceptable if the delimiter is included.
- 5. The delimiter is determined by examination of the fifth character of the header record. Each record must end with an end of record marker (ASCII LF or CR/LF) as shown in the format descriptions in this appendix.
- 6. Each field is positional, that is, the order of the fields within each record is a fixed sequence. The position of each field is relative to the beginning of its associated record. Record type is always the first field.
- 7. Fields must be equal to or less than the full length specified.
- 8. Conditional fields (C) are omitted by only including the delimiter.
- 9. Mandatory (M) fields must contain an appropriate value and be terminated by the delimiter.
- 10. Values that do not fill the fields may be padded with blanks or zeroes, as appropriate, but padding is NOT required.
- 11. Numeric fields may be padded with leading zeros; however OATS will remove them during processing.
- 12. Alphanumeric fields may be optionally padded with trailing blanks.
- 13. Date fields are always eight (8) digits and are specified as date (8) formatted as 'YYYYMMDD'.
- 14. Timestamp fields are always seventeen (17) digits and are specified as numeric (17) formatted as 'YYYYMMDDHHMMSSCCC'.
- 15. Fields labeled as Numeric (n,m) must contain no more than n characters, including the decimal; must contain no more than m characters to the right of the decimal; and must

contain no more than n-m characters to the left of the decimal, whether a decimal is implied or not. The decimal is optional only in a case where the price is a whole number. These fields are used for price fields.

## **Packaging**

A Firm Order Report (FORE) must be assembled in a prescribed sequence, which is <header><one or more order event records><trailer>. Multiple FOREs may be packaged in a file. The header record is required to be the first record, and the trailer record is required to be the last record. The rest of the records may be included in any order (corrections require an ordered sequence as described in Section 6.5). All order events must apply to the Order Receiving Firm MPID and the Reporting OSO identified in the header. A Transmitting OSO must send a separate FORE (header/trailer pair) for each combination of Reporting OSO and Order Receiving Firm MPID. If a firm uses multiple MPIDs, a separate FORE must be submitted for each MPID.

Figure C-1 shows the relationship between the file, records, and fields for the delimited format. In all cases, records consist of an ordered series of fields, and a file consists of a header record, one or more order event records, and a trailer record. Each of the Order Event Types that is detailed in this appendix is of differing lengths, but each is terminated by an ASCII line feed (LF), or a combination of carriage return and line feed (CR/LF).

FORE Header One or more Reportable Order Events (ROEs)

Figure C-1. Packaging of Delimited Records

The following rules apply to the formatting of the files:

- 1. Each FORE must contain a header record as the first record.
- 2. Each FORE must contain a trailer as the last record.
- 3. Each file is limited to a maximum uncompressed size of 25MB.
- 4. OATS will examine each header to determine if the User ID supplied is associated with a valid Transmitting Order Sending Organization (OSO).
- 5. OATS will examine each header to determine if the Order Receiving Firm MPID is valid.
- 6. OATS will examine each header to determine if the Reporting/Transmitting OSO ID, if supplied, is valid.
- 7. OATS will examine each OSO ID and Order Receiving Firm MPID for FORE file reporting/transmitting privileges.
- 8. Failure to pass validation on any mandatory header or trailer values will result in rejection of the entire FORE.

- 9. All order events contained in a FORE (header/trailer pair) must apply to the combination of Order Receiving Firm MPID and Reporting OSO identified in the header.
- 10. Order events within the FORE may be in any sequence, except for the events addressed in Section 6.5.
- 11. Firms may send order events in more than one file if the file size limit is reached. However, an individual ROE record may not be split or submitted in multiple FORE files.
- 12. Each file may contain multiple FOREs; when it does, the record immediately following a trailer record must be a header record, which must have a corresponding trailer record. There is no limit to the number of FOREs in a file.
- 13. Each FORE (i.e. each header when files contain multiple FOREs) must contain a Firm FORE ID to identify it. The Firm FORE ID is an alphanumeric field of up to 20 characters. The Firm FORE ID must be unique to the OSO for the supplied Generation Date. OATS will validate this field against a list of recently sent files to detect duplicate submissions. Duplicate file submissions will be rejected.
- 14. FORE filenames may not have filename extensions of .status or .rejects, and may not include colons or spaces.

Rules for Content Preparation Table C-1 shows a definition and a description of the data types used in OATS Order Report formats. The definition of the layouts of the various Order Event Type types describes each attribute in terms of the data type.

Table C-1. Data Types

Data Type	Description
Delimiter	A single ASCII character used to separate fields. Permissible delimiters are
	ASCII comma (","), semicolon (";"), pipe (" "), tab (" $\rightarrow$ ").
Alphanumeric (n)	ASCII characters between 32 and 127, except for a delimiter character are
	acceptable. The length n refers to the maximum length, if the field is shorter
	than the maximum length, the value sent should be left-justified and
	terminated with a delimiter. An alphanumeric (8) field representing FINRA
	would be encoded as: "FINRA,".1
Date (8)	Data content must be a date field, and must include the full four digits of the
	year, two digits of the month, and two digits of the day. January 1, 2000 will
	be "20000101". Valid values: YYYY = 0000 - 9999, MM = 01 - 12, DD = 01
	- 31.
Numeric (n)	This field must contain all numeric characters (0-9) only and must be less than
	or equal to n characters. If the field is shorter than the maximum length, the
	field should be left-justified and terminated with a delimiter. The format for
	Numeric (8) of the quantity five hundred and twelve would be encoded: "512,"
Numeric (n,m)	This field must contain all numeric characters (0-9) and a decimal point (".").
	The decimal is optional only in a case where the price is a whole number. The
	field must contain no more than n characters, including the decimal; must
	contain no more than m characters to the right of the decimal; and must
	contain no more than n-m (n minus m) characters to the left of the decimal, whether a decimal exists or not. If the field is shorter than the maximum
	length, the field should be left-justified and terminated with a delimiter. <b>Example</b>
	The format for Numeric (18,8) of the quantity three hundred twenty-two and
	one eighth would be encoded: "322.125,". Fractions are not allowed.
	The largest possible number for (18,8) is 9,999,999,999,9999999. There may
	be no more than 8 digits to the right of the decimal; however, if there are 10
	digits to the left of the decimal, there may be no more than 7 digits to the right
	of the decimal.

<sup>▶</sup> ¹The Routed Order ID and/or the Sent to Routed Order ID must not contain a delimiter or leading zeroes.

# **Summary of Record Types**

The following table summarizes the record types that OATS uses. The detailed definitions and descriptions for each of these record types follow.

Description	Record Type	Order Event Type		
		Code	Number	
FORE Header	#HD#	N/A	6	
FORE Trailer	#TR#	N/A	6	
New Order Report	#OE#	NW	7	
Route Report	#OE#	RT	11	
Desk Report	#OE#	DS	13	
Execution Report	#OE#	EX	15	
Cancel Report	#OE#	CL	17	
Cancel/Replace Report	#OE#	CR	18	
Combined Order/Route Report	#OE#	OR	22	
Combined Order/Execution Report	#OE#	OE	27	
Status Header	#ST#	N/A	32	
Status Exception	#SE#	N/A	33	
Status Trailer	#SR#	N/A	33	
Rejected ROE Header	#RH#	N/A	34	
Rejected ROE Description	#RD#	N/A	35	
Rejected ROE Trailer	#RT#	N/A	35	
Unmatched Execution Report Header	#UH#	N/A	36	
Unmatched Execution Report Description	#UD#	N/A	36	
Unmatched Execution Report Trailer	#UT#	N/A	37	
Unmatched Exchange Route Report Header	#EH#	N/A	38	
Unmatched Exchange Route Report Description	#ED#	N/A	38	
Unmatched Exchange Route Report Trailer	#ET#	N/A	39	
Unmatched Interfirm Route Report – Orders Routed Header	#OH#	N/A	40	
Unmatched Interfirm Route Report – Orders Routed Description	#OD#	N/A	40	
Unmatched Interfirm Route Report – Orders Routed Trailer	#OT#	N/A	41	
Unmatched Interfirm Route Report – Orders Routed Header	#IH#	N/A	42	
Unmatched Interfirm Route Report – Orders Routed Description	#ID#	N/A	42	
Unmatched Interfirm Route Report – Orders Routed Trailer	#IT#	N/A	43	
Out of Sequence Events Header	#QS#	N/A	43	
Out of Sequence Events Description	#QD#	N/A	43	
Out of Sequence Events Trailer	#QT#	N/A	44	

## **Detailed Record Descriptions**

The tables that follow provide detailed descriptions of records in delimited format. The first column in each of the descriptions that appears below indicates the sequence number of each field. The sequence of each field is significant. Mandatory fields are required to contain order data every time they are submitted to OATS. When a field is marked 'C' (Conditional), the conditions under which data must be provided are described in the Permissible Values and Instructions column. Under certain conditions, they become mandatory. Even if no data is required, the delimiter must appear. A more complete definition of the items in the tables can be found in Appendix A—Data Dictionary.

## **FORE Header Record**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#HD#'—identifies a header record. Delimiter character
	Code			must follow these four characters.
2	Version	Alphanumeric (16)	M	'OATS D1999-01' (NOTE: There is a single space between
	Description			OATS and D1999 in the Version Description.)
3	Generation Date	Date (8)	M	Date of file generation. Format: YYYYMMDD
4	Firm FORE ID	Alphanumeric (20)	M	Unique for an OSO for a Generation Date, for each FORE
				submission. OSO must avoid the use of "OATS_" as the
				first five characters.
5	Reporting/Trans	Alphanumeric (8)	M	The OSO ID assigned to the organization that is authorized
	mitting OSO ID			to report/transmit on a firm's behalf.
6	User ID	Alphanumeric (20)	C	The User ID assigned to identify the user transmitting the
				file to OATS. Optional when FORE is sent via FTP, SFTP
				or IFT.
7	Password	Alphanumeric (20)	C	Password for this User ID. Optional when FORE is sent via
				FTP, SFTP or IFT.
8	Order Receiving	Alphanumeric (4)	M	The Order Receiving Firm MPID identifying the MPID for
	Firm MPID			which the ROEs in the FORE are reported. Must be valid
				for the Generation Date.
9	End of Record	(1 or 2)	M	Values: LF (Line Feed), or CR/LF (Carriage Return/Line
	Marker			Feed)

### **FORE Trailer Record**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#TR#' —identifies a trailer record.
2	Record Count	Numeric (8)		Total number of order entry records in the file. NOTE: This does not include the header and the trailer.
3	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed), or CR/LF (Carriage Return/Line Feed)

# **New Order Report**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#'—identifies an order event record.
	71	. , ,		Case sensitive.
2	Order Event	Alphanumeric (2)	M	'NW'—identifies the order event record type as a new
	Type Code			order. Case sensitive.
3	Action Type	Alphanumeric (1)	M	Values: 'N', 'C', 'D', or 'R'. Case sensitive.
	Code		1	, and on the case sensitives
4	Firm ROE ID	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.
5	Correction/	Numeric (17)	C	Format: YYYYMMDDHHMMSSCCC
	Deletion	Trainerie (17)		Tomas TTTMMBBIIIMMBBCCC
	Timestamp			Required if the Action Type Code is 'C', 'D', or 'R'.
6	Rejected ROE	Alphanumeric (1)	С	Value: 'Y'. Case sensitive.
	Resubmit Flag	ruphunumerie (1)		varae. 1 . case sensitive.
	resubilit Tiug			Required when the ROE has been rejected by OATS and
				has been corrected for resubmission.
7	Order Paceiving	Alphanumeric (4)	С	Case sensitive.
'	Firm MPID	Aiphanumene (4)		Case sensitive.
				If populated, must be equal to the Order Receiving Firm
				MPID in the Header of the FORE.
8	Order Receiving	Numaria (17)	M	Format: YYYYMMDDHHMMSSCCC
O	Firm Order	ivullieric (17)	IVI	Tomat. TTTTWWDDITTWWSSCCC
	Received Date			Date portion must equal the date portion of the Order
	Received Date			Received Timestamp (for orders received on or after
				October 17, 2011).
9	Ondan Dagairring	Almhanymania (40)	M	Values: Any alphanumeric not containing a delimiter.
9	Firm Order ID	Alphanumeric (40)	IVI	values. Any arphanument not containing a definiter.
	Firm Order ID			Must be unique for the firm within the Order Dessived
				Must be unique for the firm within the Order Received
10	Dantina Einn	A 1-1	C	Date.
10	Routing Firm MPID	Alphanumeric (4)	C	Case sensitive.
	MPID			Must be a EIND A member MDID for the Order Descived
				Must be a FINRA member MPID for the Order Received
				Timestamp if the Order Origination Code is 'W' and the
				Member Type Code is 'C', 'E' or 'M'. If the Order
				Origination Code is 'W' and the Member Type Code is 'N'
				or 'A', must be blank or a non-FINRA member MPID. If
11	Daniel Onlan	A 1-1 (40)	C	the Order Origination Code is 'F', this field must be blank.
11	Routed Order	Alphanumeric (40)	C	Values: Any alphanumeric not containing a delimiter or
	ID			leading zeroes.
				Required when the Order Origination Code is 'W', and the
10	0.1.0.1.1	N : (17)	3.6	Received Method Code is 'E'.
12	Order Received	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
10	Timestamp	A1.1		W.L. (E) ON G
13	Received	Alphanumeric (1)	M	Values: 'E' or 'N'. Case sensitive.
	Method Code		ļ	
14	Issue Symbol	Alphanumeric (14)	M	Case sensitive.
	ID			
				Issue symbol for a valid OATS reportable security, for the
				Order Received Date. For exchange listed securities, the
				symbol format must follow the format published by the
				primary listing market.
15	Buy/Sell Code	Alphanumeric (2)	M	Values: 'B', 'SL', 'SS', or 'SX'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
16	Shares Quantity	Numeric (11)	M	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one (1).
				For reserved size orders, must be the sum of displayed size and reserved size.
17	Limit Price	Numeric (18,8)	С	If entered, must be greater than 0. If entered, a Time in Force Code must be provided.
18	Customer Instruction Flag	Alphanumeric (1)	С	Values: 'Y' or 'N', Case sensitive.  For Non-ECNs, must be provided if a Limit Price is
19	Stop Price	Numeric (18,8)	С	populated.  If entered, a Time in Force Code must be provided.
20	Time in Force Code	Alphanumeric (3)	С	Values: 'DAY', 'GTD', 'GTT', 'GTC', 'GTM', or 'GTX'. A blank is interpreted by OATS as a market order. Case sensitive.
21	Expiration Date	Date (8)	С	Format: YYYYMMDD  Required if the Time in Force is 'GTD', If the Time in Force Code is 'DAY', an Expiration Date, if entered, must be equal to or one day greater than the Order Received Date. If the Time in Force code is 'GTM' the expiration date will be derived by OATS as the last business day of the month.
22	Expiration Time	Numeric (9)	С	Format: HHMMSSCCC  Required if the Time in Force is 'GTT',
23	Do Not Reduce/Do Not Increase Code	Alphanumeric (3)	С	Values: 'DNR', 'DNI', or 'DIR', Case sensitive.
24	First Special Handling Code	Alphanumeric (3)	С	Values: 'ADD', 'AON', 'CND', 'CNH', 'CSH', 'DIR', 'DLO', 'E.W', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'Fb', 'FC', 'Fc', 'FD', 'Fd', 'Fe', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FOK', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'G', 'IDX', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MPT', 'MQT', 'MTL', 'ND', 'NH', 'OPT', 'OVD', 'PEG', 'RSV', 'S.W', 'SCL', 'SLR', 'TMO', 'TS', 'WRK'. Case sensitive.
25	Second Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
26	Third Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
27	Fourth Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
28	Fifth Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
29	Receiving Terminal ID	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
30	Receiving	Alphanumeric (12)	С	Values: 'A', 'ATS', 'MA', 'T', or 'O'.
	Department ID			Must be provided if the Order Origination Code is 'W' or if the Order Origination Code is 'F' and the Account Type Code is 'A', 'E', 'I', or 'R'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving
				Department ID or the Originating Department ID must be populated.
31	Originating Department ID	Alphanumeric (12)	С	Values: 'A', 'ATS', 'MA', 'T', or 'O'.
				Must be blank if the Order Origination Code is 'W'. Must be provided if the Order Origination Code is 'F' and the Account Type Code is 'O', 'P' or 'X'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.
32	Account Type Code	Alphanumeric (1)	M	Values: 'A', 'C', 'E', 'I', 'O', 'P', 'R', 'U', 'X'. Case sensitive. '
33	Program Trading Code	Alphanumeric (1)	M	Values: 'Y', 'N', or 'X'. Case sensitive.
				If the Order Origination Code is 'F' this field must not be equal to 'X'.
34	Arbitrage Code	Alphanumeric (1)	M	Values: 'Y', 'N', 'X'. Case sensitive.
				If the Order Origination Code is 'F' this field must not be equal to 'X'.
35	Member Type Code	Alphanumeric (1)	M	Values: 'A', 'C', 'E', 'M', or 'N'. Case sensitive.
36	ECN Flag	Alphanumeric (1)	С	Value: 'Y'. Case sensitive. Required if the submitting organization is an ECN.
37	Order Cancel Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
				Required for orders fully cancelled on the same day the order was received.
38	Cancelled by Flag	Alphanumeric (1)	С	Values: 'C' or 'F'. Case sensitive.
				Required for orders fully cancelled on the same day the order was received.
39	Information Barrier ID	Alphanumeric (12)	С	Value: Any alphanumeric not containing a delimiter.
40	Desk Received Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
				Required for orders that are fully transmitted to an internal desk or department the same day the firm received the order.
41	Desk Type Code	Alphanumeric (12)	С	Values: 'A', 'AR', 'B', 'C', 'CR', 'D', 'EC', 'IN', 'IS', 'O', 'PF', 'PR', 'PT', 'S', 'SW', 'T', or 'TR'.
				Required for orders that are fully transmitted to an internal desk or department the same day the firm received the order.
42	Desk Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.

### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
43	Desk Special Handling Code 2	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
44	Desk Special Handling Code 3	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
45	Desk Special Handling Code 4	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
46	Desk Special Handling Code 5	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
47	TMO Trigger Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC Required for orders with any Special Handling Code of 'TMO'.
48	Negotiated Trade Flag	Alphanumeric (1)	С	Value: 'Y'. Case sensitive.  Must be populated when an order is the result of a negotiated trade between two members where both members, for OATS purposes, are considered to have executed the trade and must submit an Execution Report to OATS. The flag should be set to 'Y' when a member is required to report a new order and execution as the result of an incoming negotiation that results in a trade.
49	Order Origination Code	Alphanumeric (1)	M	Values: 'F' or 'W'
50	Rejected ROE ID	Numeric (15)	С	Must be blank when the Rejected ROE Resubmit Flag is blank
51	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **Route Report**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#'—identifies an order event record. Case sensitive.
2	Order Event	Alphanumeric (2)	M	'RT'—identifies the order event record type as a routing
	Type Code			record. Case sensitive.
3	Action Type Code	Alphanumeric (1)	M	Values: 'N', 'C', 'D', or 'R'. Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.
5	Correction/ Deletion	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
	Timestamp			Required if the Action Type Code is 'C', 'D', or 'R'.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	С	Value is: 'Y', Case sensitive.  Required when the ROE has been Rejected by OATS and has been corrected for resubmission.
7	Order Receiving	Alphanumeric (4)	С	Case sensitive.
	Firm MPID			If populated, must be equal to the Order Receiving Firm MPID in the Header of the FORE.
8	Order Receiving Firm Order Received Date	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
9	Order Receiving Firm Order ID	Alphanumeric (40)	M	Values: Any alphanumeric not containing a delimiter.
10	Sent to Firm MPID	Alphanumeric (4)	С	Case sensitive.  Required if the Destination Code is 'M' or 'E'. Optional if
				the order was routed to a national securities exchange or to a non-FINRA member firm. Must be a valid MPID for the Order Sent Timestamp. If routed to a non-FINRA member must be blank or contain a non-FINRA member MPID.
11	Routed Order ID	Alphanumeric (40)	С	Values: Any alphanumeric not containing a delimiter or leading zeroes.  Required if the Routing Method Code is 'E' or 'S'.  Must be unique for the MPID, Order Sent Date, Connection ID, and Sent to MPID (if routed to another member) or Destination Code and Exchange Participant ID (if routed to a national securities exchange), except in instances when the
			ļ	route has a special routing condition.
12	Issue Symbol	Alphanumeric (14)	M	Case sensitive.  Issue symbol for a valid OATS reportable security, for the Order Sent Date. For exchange listed securities, the symbol format must follow the format published by the primary listing market.
13	Order Sent Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
14	Routed Shares Quantity	Numeric (11)	M	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one (1).
				If the order was bunched, this would be the total number of

### **OATS REPORTING TECHNICAL SPECIFICATIONS**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
				bunched shares routed.
15	Routing Method Code	Alphanumeric (1)	M	Values: 'E', 'N' or 'S'. Case sensitive.
16	Special Routing Condition	Alphanumeric (1)	С	Values: 'X', 'Y' or blank. Case sensitive.
				Required for orders when the identified order is part of a
				bunched order or represents a modification to an order
				previously routed to a national securities change that
				includes duplicated Routed Order ID.
				The Special Routing Condition of 'X' can only be used
17	0:: "	N ' (0)	С	when routing to a national securities exchange.
17	Originating Broker/Dealer	Numeric(9)	C	Must be provided when the Broker/Dealer Number of the original Order Receiving Firm that, due to a merger or
	Number			acquisition, needs to link to a secondary event with a
	Nullibel			different Order Receiving Firm.
18	Destination	Alphanumeric (2)	M	Values: 'A', 'E', 'M', 'N', 'OA', 'OB', 'OC', 'OI', 'OJ',
	Code	Aiphanumeric (2)	IVI	'OP', 'OQ', 'OX', 'OZ', 'XA', XB', 'XC', 'XF', 'XI',
	Couc			'XJ', 'XK', 'XM', 'XN', 'XO', 'XP', 'XQ', 'XT', 'XV',
				'XW', 'XX', 'XY', or 'XZ'. Case sensitive.
19	Routed Order	Alphanumeric (1)	M	Values: 'L' or 'M'. Case sensitive.
	Type Indicator			
20	Route Price	Numeric(18,8)	C	Required if the Routed Order Type Indicator is 'L'. If
				entered, must be greater than 0.
21	ISO Indicator	Alphanumeric (1)	С	Value: 'Y'. Case sensitive.
				Required if the order was sent as an Intermarket Sweep
				Order (ISO).
22	Short Sale	Alphanumeric (1)	C	Value: 'Y'. Case sensitive.
	Exempt Indicator			Required if the order may be marked "short exempt"
	mulcator			consistent with SEC Rule 201.
23	Exchange	Alphanumeric (8)	С	Case sensitive.
23	Participant ID	inpitulation (0)		Case sensitive.
				Required for orders routed to a national securities exchange.
24	Connection ID	Alphanumeric(12)	C	Value: Any alphanumeric not containing a delimiter.
25	Rejected ROE	Numeric (15)	C	Must be blank when the Rejected ROE Resubmit Flag is
	ID			blank.
26	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

# **Desk Report**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#'—identifies an order event record. Case sensitive.
2	Order Event	Alphanumeric (2)	M	'DS'—identifies the order event record type as a desk
	Type Code			record. Case sensitive.
3	Action Type Code	Alphanumeric (1)	M	Values: 'N', 'C', 'D', or 'R', Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.
5	Correction/	Numeric (17)	C	Format: YYYYMMDDHHMMSSCCC
	Deletion Timestamp			Required if the Action Type Code is 'C', 'D', or 'R'.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	Value is: 'Y', Case sensitive.
	Resubilit I lag			Required when the ROE has been Rejected by OATS and has been corrected for resubmission.
7	Order Receiving	Alphanumeric (4)	С	Case sensitive.
'	Firm MPID	ruphunumerie (1)		Cuse sensitive.
				If populated, must be equal to the Order Receiving Firm MPID in the Header of the FORE.
8	Ondon Doggiving	Numania (17)	M	Format: YYYYMMDDHHMMSSCCC
8	Order Receiving Firm Order Received Date	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
9	Order Receiving Firm Order ID	Alphanumeric (40)	M	Values: Any alphanumeric not containing a delimiter.
10	Information Barrier ID	Alphanumeric (12)	С	Value: Any alphanumeric not containing a delimiter.
11	Issue Symbol ID	Alphanumeric (14)	M	Case sensitive.
				Issue symbol for a valid OATS reportable security, for the Desk Received Date. For exchange listed securities, the symbol format must follow the format published by the
				primary listing market.
12	Desk Received Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
13	Originating Broker/Dealer	Numeric(9)	С	Must be provided when the Broker/Dealer Number of the original Order Receiving Firm that, due to a merger or
	Number			acquisition, needs to link to a secondary event with a
1.4	D 1 01	N ' (11)	3.6	different Order Receiving Firm.
14	Desk Shares Quantity	Numeric (11)	M	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one
	Quantity			(1).
				The number of shares transmitted to another desk or
				department within a firm.
15	Desk Type Code	Alphanumeric (12)	M	Values: 'A', 'AR', 'B', 'C', 'CR', 'D', 'EC', 'IN', 'IS', 'O', 'PF', 'PR', 'PT', 'S', 'SW', 'T', or 'TR'.
16	Desk Special	Alphanumeric (3)	С	Values: 'ADD', 'AON', 'CND', 'CNH', 'CSH', 'DIR',
	Handling Code			'DLO', 'E.W', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'Fb', 'FC', 'Fc', 'FD', 'Fd', 'Fe', 'FH', 'FI', 'FJ', 'FK',
				'FL', 'FM', 'FN', 'FO', 'FOK', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'G', 'IDX', 'IO', 'IOC',
				'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MPT', 'MQT', 'MTL', 'ND', 'NH', 'OPT', 'OVD',

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
				'PEG', 'RSV', 'S.W', 'SCL', 'SLR', 'TMO', 'TS', 'WRK'. Case sensitive.
17	Desk Special Handling Code 2	Alphanumeric (3)	С	Refer to Desk Special Handling Code 1 for list of values.
18	Desk Special Handling Code 3	Alphanumeric (3)	С	Refer to Desk Special Handling Code 1 for list of values.
19	Desk Special Handling Code 4	Alphanumeric (3)	С	Refer to Desk Special Handling Code 1 for list of values.
20	Desk Special Handling Code 5	Alphanumeric (3)	С	Refer to Desk Special Handling Code 1 for list of values.
21	Rejected ROE ID	Numeric (15)	С	Must be blank when Rejected ROE Resubmit Flag is blank.
22	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **Execution Report**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#' Case sensitive.
2	Order Event Type Code	Alphanumeric (2)	M	'EX' is the value for this report. Case sensitive.
3	Action Type Code	Alphanumeric (1)	M	Values: 'N', 'C', 'D', or 'R'. Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.
5	Correction/ Deletion	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
	Timestamp			Required if the Action Type Code is 'C', 'D', or 'R'.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	С	Value is: 'Y'. Case sensitive.  Required when the ROE has been Rejected by OATS and
				has been corrected for resubmission.
7	Order Receiving Firm MPID	Alphanumeric (4)	С	Case sensitive.  If populated, must be equal to the Order Receiving Firm MPID in the Header of the FORE.
8	Order Receiving Firm Order Received Date	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
9	Order Receiving Firm Order ID	Alphanumeric (40)	M	Values: Any alphanumeric not containing a delimiter.
10	Execution Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
11	Branch/ Sequence Number	Alphanumeric (20)	С	Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes.  Must be provided when a trade is executed by the member and reported to a FINRA transaction reporting system.  Must be unique within the firm within the day except in instances involving an agency cross where one side of the cross is comprised of multiple orders. Each of the orders on the same side of market involved in the single agency cross execution may share the same branch sequence number.
12	Execution Quantity	Numeric (11)	M	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one (1).
13	Trader Terminal ID	Alphanumeric (12)	M	Values: Any alphanumeric not containing a delimiter.
14	Reporting Exception Code	Alphanumeric (1)	С	Values: 'P', 'M', 'R', 'A', 'T' or 'F'. Case sensitive.  Must be provided if the execution is not required to be reported to a FINRA transaction reporting system.
15	·	Alphanumeric (14)	M	Case sensitive.  Issue symbol for a valid OATS reportable security, for the Execution Date. For exchange listed securities, the symbol format must follow the format published by the primary listing market.
16	Execution Type Indicator	Alphanumeric (1)	M	Values: 'F' or 'P'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
17	Leaves Quantity		С	Values: Any integer greater than or equal zero. A fractional share order of less than one (1) share must be rounded up to one (1).  Must be provided when the Execution Type Indicator value is 'P', If the partial execution represents the remaining portion of an order, the value should be zero.
18	Market Center ID	Alphanumeric (2)	С	Values: 'A', 'B', 'C', 'D', 'DN', 'F', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'W', 'X', 'Y' or 'Z'. Case sensitive.
19	Originating Broker/Dealer Number	Numeric(9)	С	Must be provided when the Broker/Dealer Number of the original Order Receiving Firm that, due to a merger or acquisition, needs to link to a secondary event with a different Order Receiving Firm.
20	Execution Price	Numeric (18,8)	M	Must be the same price that is reported to the applicable transaction reporting association for trade reporting purposes.
21	Capacity Code	Alphanumeric (1)	M	Values: 'A', 'P', 'R'. Case sensitive.  Must equal 'R' if the reporting exception code is 'R'. Must equal 'A' if the reporting exception code is 'A' or 'T'.  Must equal 'P' if the reporting exception code is 'P'.
22	Rejected ROE ID	Numeric (15)	С	Must be blank when the Rejected ROE Resubmit Flag is blank.
23	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **Cancel Report**

Seq.	Name	Data Type/ Length	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#' Case sensitive.
2	Order Event Type Code	Alphanumeric (2)	M	'CL' is the value for this report. Case sensitive.
3	Action Type Code	Alphanumeric (1)	M	Values: 'N', 'C', 'D', or 'R'. Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	C	Values: Any alphanumeric not containing a delimiter.
5	Correction/ Deletion Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC  Required if the Action Type Code is 'C', 'D', or 'R'.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	С	Required when the ROE has been Rejected by OATS and has been corrected for resubmission.  Value is: 'Y', Case sensitive.
7	Order Receiving Firm MPID	Alphanumeric (4)	С	If populated, must be equal to the Order Receiving Firm MPID in the Header of the FORE. Case sensitive.
8	Order Receiving Firm Order Received Date	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
9	Order Receiving Firm Order ID	Alphanumeric (40)	M	Values: Any alphanumeric not containing a delimiter.
10	Issue Symbol ID	Alphanumeric (14)	M	Case sensitive.  Issue symbol for a valid OATS reportable security, for the Order Received Date. For exchange listed securities, the symbol format must follow the format published by the primary listing market.
11	Order Cancel Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
12	Cancel Type Flag	Alphanumeric (1)	M	Values: 'F' or 'P'. Case sensitive.
13	Cancel Quantity	Numeric (11)	С	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one.  Required when the Cancel Type Flag value is 'P'.
14	Cancel Leaves Quantity	Numeric (11)	С	Values: Any integer greater than or equal to zero. A fractional share order of less than one (1) share must be rounded up to one (1).  Required when the Cancel Type Flag value is 'P', If the partial cancellation represents the remaining portion of an order, the value should be zero.
15	Cancelled by Flag	Alphanumeric (1)	M	Values: 'C' or 'F'. Case sensitive.
16	Originating Broker/Dealer Number	Numeric(9)	С	Must be provided when the Broker/Dealer Number of the original Order Receiving Firm that, due to a merger or acquisition, needs to link to a secondary event with a different Order Receiving Firm.
17	Rejected ROE ID	Numeric (15)	С	Must be blank when Rejected ROE Resubmit Flag is blank.
18	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed), or CR/LF (Carriage Return/Line Feed)

# **Cancel/Replace Report**

Seq.	Name	Data Type/ Length	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#' Case sensitive.
2	Order Event Type Code	Alphanumeric (2)	M	'CR' is the value for this report. Case sensitive.
3	Action Type Code	Alphanumeric (1)	M	Values: 'N', 'C', 'D', or 'R'. Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.
5	Correction/ Deletion	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
_	Timestamp			Required if the Action Type Code is 'C', 'D', or 'R'.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	С	Value is 'Y', Case sensitive.  Required when the ROE has been Rejected by OATS and
				has been corrected for resubmission.
7	Order Receiving Firm MPID	Alphanumeric (4)	С	Case sensitive.
				If populated, must be equal to the Order Receiving Firm MPID in the Header of the FORE.
8	Replaced Order Received Date	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
				Order received date for the cancelled order.
9	Replaced Firm Order ID	Alphanumeric (40)	M	Values: Any alphanumeric not containing a delimiter.
				Order ID for the cancelled order.
10	Order Receiving Firm Order Received Date	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC  Order received date for the replacement order. Date portion must equal the date portion of the Order Received Timestamp (for orders received on or after October 17, 2011).
11	Order Receiving Firm Order ID	Alphanumeric (40)	M	Values: Any alphanumeric not containing a delimiter.  Order ID for the replacement order. Must be unique for the firm within the Order Received Date.
12	Routing Firm MPID	Alphanumeric (4)	С	Case sensitive.  Must be a FINRA member MPID for the Order Received Timestamp if the Order Origination Code is 'W' and the Member Type Code is 'C', 'E' or 'M'. If the Order Origination Code is 'W' and the Member Type Code is 'N'
				or 'A', must be blank or a non-FINRA member MPID. If the Order Origination Code is 'F', this field must be blank.
13	Routed Order ID	Alphanumeric (40)	С	Values: Any alphanumeric not containing a delimiter or leading zeroes.  Required when the Order Origination Code is 'W', the
				Received Method Code is 'E'.
14	Order Received Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
15	Received Method Code	Alphanumeric (1)	M	Values: 'E' or 'N'. Case sensitive.

Seq.	Name	Data Type/ Length	M/C	Permissible Values and Instructions
16	Issue Symbol ID	Alphanumeric (14)	M	Case sensitive.
				Issue symbol for a valid OATS reportable security, for the replacement Order Received Date. For exchange listed securities, the symbol format must follow the format published by the primary listing market.
17	Buy/Sell Code	Alphanumeric (2)	M	Values: 'B', 'SL', 'SS', or 'SX'. Case sensitive.
18	Shares Quantity	Numeric (11)	М	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one (1).  For reserved size orders, must be the sum of displayed size and reserved size.
19	Limit Price	Numeric (18,8)	С	If entered, must be greater than 0. If entered, a Time in Force Code should be provided.
20	Customer Instruction Flag	Alphanumeric (1)	С	Values: 'Y' or 'N'. Case sensitive.  For Non-ECNs, must be provided if a Limit Price is populated.
21	Stop Price	Numeric (18,8)	С	If entered, a Time in Force Code must be provided.
22	Time in Force Code	Alphanumeric (3)	С	Values: 'DAY', 'GTD', 'GTT', 'GTC', 'GTM', or 'GTX'. Case sensitive.  A blank is interpreted by OATS as a market order. If the
				Time in Force code is 'GTM' the expiration date will be derived by OATS as the last business day of the month.
23	Expiration Date	Date (8)	С	Format: YYYYMMDD  Required if the Time in Force is 'GTD', If the Time in Force Code is 'DAY', an Expiration Date, if entered, must be equal to or one day greater than the Order Received Date. If the Time in Force code is 'GTM' the expiration date will be derived by OATS as the last business day of the month.
24	Expiration Time	Numeric (9)	С	Format: HHMMSSCCC  Required if the Time in Force is 'GTT'
25	Do Not Reduce/Do Not Increase Code	Alphanumeric (3)	С	Required if the Time in Force is 'GTT'.  Values: 'DNR', 'DNI', or 'DIR'. Case sensitive.
26	First Special Handling Code	Alphanumeric (3)	С	Values: 'ADD', 'AON', 'CND', 'CNH', 'CSH', 'DIR', 'DLO', 'E.W', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'Fb', 'FC', 'Fc', 'FD', 'Fd', 'Fe', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FOK', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'G', 'IDX', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MPT', 'MQT', 'MTL', 'ND', 'NH', 'OPT', 'OVD', 'PEG', 'RSV', 'S.W', 'SCL', 'SLR', 'TMO', 'TS', 'WRK'. Case sensitive.
27	Second Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
28	Third Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.

Seq.	Name	Data Type/ Length	M/C	Permissible Values and Instructions
29	Fourth Special	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
30	Handling Code Fifth Special	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
31	Handling Code Receiving	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.
	Terminal ID			
32	Receiving Department ID	Alphanumeric (12)	C	Values: 'A', 'ATS', 'MA', 'T', or 'O'.
				Must be provided if the Order Origination Code is 'W' or if the Order Origination Code is 'F' and the Account Type Code is 'A', 'E', 'I', or 'R'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.
33	Originating Department ID	Alphanumeric (12)	C	Values: 'A', 'ATS', 'MA', 'T', or 'O'.
	Department ID			Must be blank if the Order Origination Code is 'W'. Must be provided if the Order Origination Code is 'F' and the Account Type Code is 'O', 'P' or 'X'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.
34	Account Type Code	Alphanumeric (1)	M	Values: 'A', 'C', 'E', 'I', 'O', 'P', 'R', 'U', 'X'. Case sensitive.
35	Program Trading Code	Alphanumeric (1)	M	Values: 'Y', 'N', or 'X'. Case sensitive.
				If the Order Origination Code is 'F' this field must not be equal to 'X'.
36	Arbitrage Code	Alphanumeric (1)	M	Values: 'Y', 'N', 'X'. Case sensitive.
				If the Order Origination Code is 'F' this field must not be equal to 'X'.
37	Member Type Code	Alphanumeric (1)	M	Values: 'A', 'C', 'E', 'M', or 'N'. Case sensitive.
38	ECN Flag	Alphanumeric (1)	С	Required if the submitting organization is an ECN.
				Value: 'Y'. Case sensitive.
39	TMO Trigger Timestamp	Numeric (17)	C	Format: YYYYMMDDHHMMSSCCC
	Timestamp			Required for orders with any Special Handling Code of 'TMO'.
40	Cancelled by Flag	Alphanumeric (1)	M	Values: 'C' or 'F'. Case sensitive.
41	Originating Broker/Dealer Number	Numeric(9)	С	Must be provided when the Broker/Dealer Number of the original Order Receiving Firm that, due to a merger or acquisition, needs to link to a secondary event with a different Order Receiving Firm.
42	Order Origination Code	Alphanumeric (1)	M	Values: 'F' or 'W'.
43	Information Barrier ID	Alphanumeric(12)	С	Value: Any alphanumeric not containing a delimiter.
44	Rejected ROE ID	Numeric (15)	С	Must be blank when Rejected ROE Resubmit Flag is blank.

### APPENDIX C —ORDER REPORT FORMATS

Seq.	Name	Data Type/ Length	M/C	Permissible Values and Instructions
45	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

# **Combined Order/Route Report**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#'—identifies an order event record. Case sensitive.
2	Order Event	Alphanumeric (2)	M	'OR'—identifies the order event record type as a combined
	Type Code			new/routing order. Case sensitive.
3	Action Type Code	Alphanumeric (1)	M	Values: 'N', 'C', 'D', or 'R', Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	C	Values: Any alphanumeric not containing a delimiter.
5	Correction/ Deletion	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
6	Timestamp	Alphanumeric (1)	С	Required if the Action Type Code is 'C', 'D', or 'R'.  Value: 'Y'. Case sensitive.
O	Rejected ROE Resubmit Flag	Aiphanumeric (1)		Required when the ROE has been rejected by OATS and has
				been corrected for resubmission.
7	Order Receiving Firm MPID	Alphanumeric (4)	С	Case sensitive.
				If populated, must be equal to the Order Receiving Firm MPID in the Header of the FORE.
8	Order Receiving Firm Order	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
	Received Date			Date portion must equal the date portion of the Order
				Received Timestamp (for orders received on or after October 17, 2011).
9	Order Receiving Firm Order ID	Alphanumeric (40)	M	Values: Any alphanumeric not containing a delimiter. Must
10	Routing Firm	Alphanumeric (4)	С	be unique for the firm within the Order Received Date.  Case sensitive.
	MPID	( )		Must be a FINRA member MPID for the Order Received Timestamp if the Order Origination Code is 'W' and the Member Type Code is 'C', 'E' or 'M'. If the Order Origination Code is 'W' and the Member Type Code is 'N' or 'A', must be blank or a non-FINRA member MPID. If the Order Origination Code is 'F', this field must be blank.
11	Routed Order ID	Alphanumeric (40)	С	Values: Any alphanumeric not containing a delimiter or leading zeroes.
				Required when the Order Origination Code is 'W', the Received Method Code is 'E'.
12	Order Received Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
13	Received Method Code	Alphanumeric (1)	M	Values: 'E' or 'N'. Case sensitive.
14	Issue Symbol ID	Alphanumeric (14)	M	Case sensitive.
				Issue symbol for a valid OATS reportable security, for the Order Received Date. For exchange listed securities, the symbol format must follow the format published by the primary listing market.
15	Buy/Sell Code	Alphanumeric (2)	M	Values: 'B', 'SL', 'SS', or 'SX'. Case sensitive.
16	Limit Price	Numeric (18,8)	С	If entered, must be greater than 0. If entered, a Time in Force Code must be provided.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
17	Customer Instruction Flag	Alphanumeric (1)	С	Values: 'Y' or 'N', Case sensitive.  For Non-ECNs, must be provided if a Limit Price is populated.
18	Stop Price	Numeric (18,8)	C	If entered, a Time in Force Code must be provided.
19	Time in Force Code	Alphanumeric (3)	С	Values: 'DAY', 'GTD', 'GTT', 'GTC', 'GTM', or 'GTX'. A blank is interpreted by OATS as a market order. Case sensitive.
20	Expiration Date	Date (8)	С	Format: YYYYMMDD  Required if the Time in Force is 'GTD', If the Time in Force Code is 'DAY', an Expiration Date, if entered, must be equal to or one day greater than the Order Received Date. If the Time in Force code is 'GTM' the expiration date will be derived by OATS as the last business day of the month.
21	Expiration Time	Numeric (9)	С	Format: HHMMSSCCC  Required if the Time in Force is 'GTT',
22	Do Not Reduce/Do Not Increase Code	Alphanumeric (3)	С	Values: 'DNR', 'DNI', or 'DIR', Case sensitive.
23	First Special Handling Code	Alphanumeric (3)	С	Values: 'ADD', 'AON', 'CND', 'CNH', 'CSH', 'DIR', 'DLO', 'E.W', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'Fb', 'FC', 'Fc', 'FD', 'Fd', 'Fe', 'FH', 'FI', 'FI', 'FK', 'FL', 'FM', 'FN', 'FO', 'FOK', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'G', 'IDX', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MPT', 'MQT', 'MTL', 'ND', 'NH', 'OPT', 'OVD', 'PEG', 'RSV', 'S.W', 'SCL', 'SLR', 'TMO', 'TS', 'WRK'. Case sensitive.
24	Second Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
25	Third Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
26	Fourth Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
27	Fifth Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
28	Receiving Terminal ID	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.
29	Receiving Department ID	Alphanumeric (12)	С	Values: 'A', 'ATS', 'MA', 'T', or 'O'.  Must be provided if the Order Origination Code is 'W' or if the Order Origination Code is 'F' and the Account Type Code is 'A', 'E', 'I', or 'R'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
30	Originating Department ID	Alphanumeric (12)	С	Values: 'A', 'ATS', 'MA', 'T', or 'O'.
				Must be blank if the Order Origination Code is 'W'. Must be provided if the Order Origination Code is 'F' and the Account Type Code is 'O', 'P' or 'X'. If the Order
				Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.
31	Account Type Code	Alphanumeric (1)	M	Values: 'A', 'C', 'E', 'I', 'O', 'P', 'R', 'U', 'X'. Case sensitive.
32	Program Trading Code	Alphanumeric (1)	M	Values: 'Y', 'N', or 'X'. Case sensitive.
				ECNs must populate this field with a value of 'X'. Non-ECNs that populate the Account Type Code with 'P' should not populate this field with 'X'.
33	Arbitrage Code	Alphanumeric (1)	M	Values: 'Y', 'N', 'X'. Case sensitive.
				If the Order Origination Code is 'F' this field must not be equal to 'X'.
34	Sent To Routed Order ID	Alphanumeric (40)	С	Values: Any alphanumeric not containing a delimiter or leading zeroes.
				Required if the Routing Method Code is 'E' or 'S'.
				Must be unique for the MPID, Order Sent Date, Connection ID and Sent to MPID (if routed to another member) or Destination Code and Exchange Participant ID (if routed to a national securities exchange), except in instances when the route has a special routing condition.
35	Sent to Firm MPID	Alphanumeric (4)	С	Case sensitive.
				Required if the Destination Code is 'M' or 'E'. Must be a valid MPID for the Order Sent Timestamp. Optional if the order was routed to a national securities exchange or to a non-FINRA member firm. If routed to a non-FINRA member, must be blank or contain a non-FINRA member MPID.
36	Order Sent Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
37	Routed Shares Quantity	Numeric (11)	M	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one (1).
				The number of shares routed. If the order was bunched, this would be the total number of bunched shares routed.
38	Routing Method Code	Alphanumeric (1)	M	Values: 'E', 'N', or 'S'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
39	Special Routing Condition	Alphanumeric (1)	С	Values: 'X', 'Y' or blank. Case sensitive.
				Required for orders when the identified order is part of a bunched order or represents a modification to an order
				previously routed to a national securities change that includes duplicated Routed Order ID.
				The Special Routing Condition of 'X' can only be used when routing to a national securities exchange.
40	Member Type Code	Alphanumeric (1)	M	Values: 'A', 'C', 'E', 'M', or 'N'. Case sensitive.
41	Destination Code	Alphanumeric (2)	M	Values: 'A', 'E', 'M', 'N', 'OA', 'OB', 'OC', 'OI', 'OJ', 'OP', 'OQ', 'OX', 'OZ', 'XA', XB', 'XC', 'XF', 'XI', 'XJ', 'XK', 'XM', 'XN', 'XO', 'XP', 'XQ', 'XT', 'XV', 'XW', 'XX', 'XY', or 'XZ'. Case sensitive.
42	ECN Flag	Alphanumeric (1)	С	Value: 'Y'. Case sensitive.
				Required if the submitting organization is an ECN.
43	Order Cancel Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
				Required for orders fully cancelled on the same day the order was received.
44	Cancelled by Flag	Alphanumeric (1)	С	Values: 'C' or 'F'. Case sensitive.
				Required for orders fully cancelled on the same day the order was received.
45	Shares Quantity	Numeric (11)	M	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one (1).
				For reserved size orders, must be the sum of displayed size and reserved size.
46	Information Barrier ID	Alphanumeric (12)	С	Value: Any alphanumeric not containing a delimiter.
47	Desk Received Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
	Timestamp			Required for orders that are fully transmitted to an internal desk or department the same day the firm received the order.
48	Desk Type Code	Alphanumeric (12)	С	Values: 'A', 'AR', 'B', 'C', 'CR', 'D', 'EC', 'IN', 'IS', 'O', 'PF', 'PR', 'PT', 'S', 'SW', 'T', or 'TR'.
				Required for orders that are fully transmitted to an internal desk or department the same day the firm received the order.
49	Desk Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
50	Desk Special Handling Code 2	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
51	Desk Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
52	Desk Special	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
	Handling Code 4			
53	Desk Special Handling Code 5	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
54	TMO Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC  Required for orders with any Special Handling Code of 'TMO'.
55	Routed Order Type Indicator	Alphanumeric (1)	M	Values: 'L' or 'M'. Case sensitive.
56	Route Price	Numeric(18,8)	С	Required if the Routed Order Type Indicator is 'L'. If entered, must be greater than 0.
57	ISO Indicator	Alphanumeric (1)	С	Value: 'Y'. Case sensitive.  Required if the order was sent as an Intermarket Sweep Order (ISO).
58	Short Sale Exempt Indicator	Alphanumeric (1)	С	Value: 'Y'. Case sensitive.  Required if the order may be marked "short exempt" consistent with SEC Rule 201.
59	Order Origination Code	Alphanumeric (1)	M	Values: 'F' or 'W'.
60	Exchange Participant ID	Alphanumeric (8)	С	Case sensitive.  Required for orders routed to a national securities exchange.
61	Connection ID	Alphanumeric (12)	С	Value: Any alphanumeric not containing a delimiter.
62	Rejected ROE ID	Numeric (15)	С	Must be blank when Rejected ROE Resubmit Flag is blank.
63	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **Combined Order/Execution Report**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#' Case sensitive.
2	Order Event Type Code	Alphanumeric (2)	M	'OE' is the value for this report. Case sensitive.
3	Action Type Code	Alphanumeric (1)	M	Values: 'N', 'C', 'D', or 'R'. Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	C	Value: Any alphanumeric not containing a delimiter.
5	Correction/ Deletion	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC
	Timestamp	A1.1 ' (1)	C	Required if the Action Type Code is 'C' 'D' or 'R'.  Value: 'Y'. Case sensitive.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	С	Required when the ROE has been Rejected by OATS and
				has been corrected for resubmission.
7	Order Receiving Firm MPID	Alphanumeric (4)	С	Case sensitive.
				If populated, must be equal to the Order Receiving Firm MPID in the Header of the FORE.
8	Order Receiving Firm Order	Numeric (17)	M	Format is YYYYMMDDHHMMSSCCC
	Received Date			Date portion must equal the date portion of the Order Received Timestamp (for orders received on or after October 17, 2011).
9	Order Receiving Firm Order ID	Alphanumeric (40)	M	Values: Any alphanumeric not containing a delimiter.
				Must be unique for the firm within the Order Received Date.
10	Routing Firm MPID	Alphanumeric (4)	С	Case sensitive.
				Must be a FINRA member MPID for the Order Received Timestamp if the Order Origination Code is 'W' and the Member Type Code is 'C', 'E' or 'M'. If the Order Origination Code is 'W' and the Member Type Code is 'N' or 'A', must be blank or a non-FINRA member MPID. If the Order Origination Code is 'F', this field must be blank.
11	Routed Order ID	Alphanumeric (40)	С	Values: Any alphanumeric not containing a delimiter or leading zeroes.
				Required when the Order Origination Code is 'W', the Received Method Code is 'E'.
12	Order Received Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
13	Received Method Code	Alphanumeric (1)	M	Values: 'E', or 'N'. Case sensitive.
14	Issue Symbol ID	Alphanumeric (14)	M	Case sensitive.
				Issue symbol for a valid OATS reportable security, for the Order Received Date. For exchange listed securities, the symbol format must follow the format published by the
1.5	D /C 11 C 1	A1.1 '. (2)	3.4	primary listing market.
15	Buy/Sell Code	Alphanumeric (2)	M	Values: 'B', 'SL', 'SS', or 'SX'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
16	Limit Price	Numeric (18,8)	С	If entered, must be greater than 0. If entered, a Time in
				Force Code must be provided.
17	Customer Instruction Flag	Alphanumeric (1)	С	Values: 'Y' or 'N'. Case sensitive.
				For Non-ECNs, must be provided if a Limit Price is populated.
18	Stop Price	Numeric (18,8)	С	If entered, a Time in Force Code must be provided.
19	Time in Force Code	Alphanumeric (3)	С	Values: 'DAY', 'GTD', 'GTT', 'GTC', 'GTM', or 'GTX'. Case sensitive.
				A blank is interpreted by OATS as a market order. If the Time in Force code is 'GTM' the expiration date will be derived by OATS as the last business day of the month.
20	Expiration Date	Date (8)	С	Format: YYYYMMDD
				Required if the Time in Force is 'GTD', If the Time in Force Code is 'DAY', an Expiration Date, if entered, must be equal to or one day greater than the Order Received Date. If the Time in Force code is 'GTM' the expiration date will be derived by OATS as the last business day of the month.
21	Expiration Time	Numeric (9)	С	Format: HHMMSSCCC
				Required if the Time in Force is 'GTT',
22	Do Not Reduce/Do Not Increase Code	Alphanumeric (3)	С	Values: 'DNR', 'DNI', or 'DIR'. Case sensitive.
23	First Special Handling Code	Alphanumeric (3)	С	Values: 'ADD', 'AON', 'CND', 'CNH', 'CSH', 'DIR', 'DLO', 'E.W', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'Fb', 'FC', 'Fc', 'FD', 'Fd', 'Fe', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FOK', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'G', 'IDX', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MPT', 'MQT', 'MTL', 'ND', 'NH', 'OPT', 'OVD', 'PEG', 'RSV', 'S.W', 'SCL', 'SLR', 'TMO', 'TS', 'WRK'. Case sensitive.
24	Second Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
25	Third Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
26	Fourth Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
27	Fifth Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
28	Receiving Terminal ID	Alphanumeric (12)	С	Values: Any alphanumeric not containing a delimiter.
29	Receiving Department ID	Alphanumeric (12)	С	Values: 'A', 'ATS', 'MA', 'T', or 'O'.
				Must be provided if the Order Origination Code is 'W' or if the Order Origination Code is 'F' and the Account Type Code is 'A', 'E', 'I', or 'R'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
30	Originating	Alphanumeric (12)	C	Values: 'A', 'ATS', 'MA', 'T', or 'O'.
	Department ID			Must be blank if the Order Origination Code is 'W'. Must be provided if the Order Origination Code is 'F' and the Account Type Code is 'O', 'P' or 'X'. If the Order Origination Code is 'F' and the Account Type Code is 'C', the Receiving Department ID or the Originating Department ID must be populated.
31	Account Type	Alphanumeric (1)	M	Values: 'A', 'C', 'E', 'I', 'O', 'P', 'R', 'U', 'X'. Case
31	Code		111	sensitive.
32	Program Trading Code	Alphanumeric (1)	M	Values: 'Y', 'N', or 'X'. Case sensitive.  If the Order Origination Code is 'F' this field must not be
				equal to 'X'.
33	Arbitrage Code	Alphanumeric (1)	M	Values: 'Y', 'N', 'X'. Case sensitive.
				If the Order Origination Code is 'F' this field must not be equal to 'X'.
34	Execution Timestamp	Numeric (17)	M	Format: YYYYMMDDHHMMSSCCC
35	Branch/ Sequence Number	Alphanumeric (20)	С	Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes.
				Must be provided when a trade is executed by the member and reported to a FINRA transaction reporting system. Must be unique within the firm within the day except in instances involving an agency cross where one side of the cross is comprised of multiple orders. Each of the orders on the same side of market involved in the single agency cross execution may share the same branch sequence number.
36	Execution Quantity	Numeric (11)	M	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one (1).
37		Alphanumeric (12)	M	Values: Any alphanumeric not containing a delimiter.
38	ID Reporting	Alphanumeric (1)	С	Values: 'P', 'M', 'R', 'A', 'T' or 'F'.
36	Exception Code	Aiphanumeric (1)		values. F, M, K, A, I of F.
	Exception code			Must be provided if the execution is not required to be reported to a FINRA transaction reporting system.
39	Market Center ID	Alphanumeric (2)	С	Values: 'A', 'B', 'C', 'D', 'DN', 'F', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'W', 'X' or 'Y'. Case sensitive.
40	Member Type Code	Alphanumeric (1)	M	Values: 'A', 'C', 'E', 'M', or 'N'. Case sensitive.
41	ECN Flag	Alphanumeric (1)	С	Value: 'Y'. Case sensitive.
				D 1104 1 W 1 TON
42	Execution Price	Numeric (18,8)	M	Required if the submitting organization is an ECN.  Must be the same price that is reported to the applicable
42	Execution Fince	Numeric (18,8)	IVI	transaction reporting association for trade reporting purposes.
43	Capacity Code	Alphanumeric (1)	M	Values: 'A', 'P', 'R'. Case sensitive.
				Must equal 'R' if the reporting exception code is 'R'. Must equal 'A' if the reporting exception code is 'A' or 'T'. Must equal 'P' if the reporting exception code is 'P'.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
44	Shares Quantity	Numeric (11)	M	Values: Any integer greater than zero. A fractional share order of less than one (1) share must be rounded up to one (1).
				For reserved size orders, must be the sum of displayed size and reserved size.
45	Information Barrier ID	Alphanumeric (12)	С	Value: Any alphanumeric not containing a delimiter.
46	Desk Received Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC  Required for orders that are fully routed to a desk on the same day the order was received.
47	Desk Type Code	Alphanumeric (12)	С	Values: 'A', 'AR', 'B', 'C', 'CR', 'D', 'EC', 'IN', 'IS', 'O', 'PF', 'PR', 'PT', 'S', 'SW', 'T', or 'TR'.  Required for orders that are fully transmitted to an internal
				desk or department the same day the firm received the order.
48	Desk Special Handling Code	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
49	Desk Special Handling Code 2	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
50	Desk Special Handling Code 3	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
51	Desk Special Handling Code 4	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
52	Desk Special Handling Code 5	Alphanumeric (3)	С	Refer to First Special Handling Code for list of values.
53	TMO Trigger Timestamp	Numeric (17)	С	Format: YYYYMMDDHHMMSSCCC  Required for orders with any Special Handling Code of 'TMO'.
54	Negotiated Trade Flag	Alphanumeric (1)	С	Value: 'Y'. Case sensitive.  Must be populated when an order is the result of a negotiated trade between two members where both members, for OATS purposes, are considered to have executed the trade and must submit an Execution Report to OATS.  The flag should be set to Y when a member is required to report a new order and execution as the result of an
55	Order Origination Code	Alphanumeric (1)	M	incoming negotiation that results in a trade.  Values: 'F' or 'W'.
56	Rejected ROE ID	Numeric (15)	С	Must be blank when Rejected ROE Resubmit Flag is blank.

### APPENDIX C —ORDER REPORT FORMATS

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
57	End of Record	(1 or 2)	M	Values: LF (Line Feed), or CR/LF (Carriage Return/Line
	Marker			Feed)

## **FORE Status Report**

The FORE Status report is supplied by OATS to the data sending location following validation of the FORE. If a FORE file contains more than one FORE (header/trailer combination), each FORE will be treated as a separate submission and will receive its own FORE Status report. FORE Status reports use the same delimiter as the original FORE and consist of a header record, zero or more exception reasons, and then a trailer to indicate end of submission. The format of each file component follows.

### **FORE Status Header**

Seq. #	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#ST#'—identifies a header record for a Status Report.
2	Version Description	Alphanumeric (16)	M	'OATS D1999-01'—identifies the current version of the format specification.
3	Generation Date	Date (8)	M	Date of file generation. Format: YYYYMMDD
4	Firm FORE ID	Alphanumeric (20)	M	An identifier, unique for an OSO for a Generation Date, for each FORE submission.
5	FORE Status	Alphanumeric (1)	M	Values: 'A' or 'R',
6	Record Count	Numeric (8)	С	Total number of order entry records in the file as reported by the OSO. NOTE: This does not include the header and the trailer.
7	Calculated Record Count	Numeric (8)	M	Total number of order entry records in the file as calculated by OATS. NOTE: This does not include the header and the trailer.
8	FORE Received Timestamp	Numeric (14)	M	The date and time that the FORE was received by OATS.
9	FORE Validated Timestamp	Numeric (14)	M	The date and time that the FORE validation was performed by OATS.
10	Reporting OSO ID	Alphanumeric (8)	С	The OSO ID assigned to the third party that is authorized to report on a firm's behalf, in addition to the Transmitting OSO.
11	User ID	Alphanumeric (20)	M	The User ID assigned to identify the user in OATS.
12	Password Life	Numeric (4)	С	Remaining life in the password used by this User ID. Note: this will only be supplied when the value is less than 10 days.
13	Order Receiving Firm MPID	Alphanumeric (4)	M	The Receiving Firm MPID for which the ROEs in the FORE were reported.
14	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **Status Exception Record**

Seq.	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#SE#' —identifies a status event record.
	Code			
2	Exception Type	Alphanumeric (1)	M	Values: 'E' or 'W'.
	Code			
3	Exception Code	Numeric (4)	M	Specifies the exception that occurred.
4	Exception Code	Alphanumeric (80)	M	Text description of the exception.
	Description			
5	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

# **Status Trailer Record**

Seq.	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#SR#' —identifies a status trailer record.
2	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

## **ROE** Rejections File

ROE rejection information may be retrieved via FTP, SFTP, IFT, or downloaded via the web. Once Syntax and Semantics processing is complete for a FORE, rejections are available to users to view and download via the web. In addition, a rejection file for each FORE transmitted via FTP, SFTP or IFT will be created, including FOREs with zero rejections, and will be named as follows:

Syntax\_<FirmFOREID>\_<FOREGenerationDate>\_<OATSProcessingDate>-<Sequence#>.reject

Example: Syntax\_FORE12345\_20110310\_20110311-1.reject

Once Context processing is complete, rejections are available to users to view and download via the web. In addition, a rejection file for all context rejections for ROEs originally transmitted via FTP, SFTP or IFT will be created, including a rejection file with zero rejections, and will be named as follows:

Context\_<OATSProcessingDate>-<Sequence#>.reject Example: Context\_20110311-1.reject

ROE rejection files with an original submission method of FTP, SFTP, or IFT are available ONLY to the OSO that originally submitted the ROE. OSOs must designate a recipient to receive rejections. ROE rejections are available via the web to all firms, Transmitting OSOs and Reporting OSOs.

Each rejection record can contain up to 5 rejection reasons. If 6 or more rejection reasons exist for a single FORE, the rejection reasons will continue in the next record; for example, 15 rejection reasons would result in 3 records. (NOTE: A list of all possible rejection reasons and their descriptions is available in Appendix B, Error Messages.)

The rejection file maximum size is 25MB. If a rejection file maximum size is exceeded, then another rejection file will be created with the same name and incremented sequence number. Rejection files are comma-delimited and consist of a header record, zero or more rejection description records, and a trailer to indicate the end of the file. Rejection description records contain the numeric reason for the rejection and the original content of the ROE. OATS will auto-populate the Rejected ROE Resubmit Flag with 'Y' and will auto-populate the Rejected ROE ID with a unique identifier which should be sent back to OATS when the ROE is repaired. The Rejected ROE ID will be used to reconcile rejections and repairs, therefore the value of the Rejected ROE ID must be equal to the value which was auto-populated by OATS. The format of each file component follows.

#### **ROE Rejection Header**

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#RH#'—identifies a header record for the ROE Rejections
	Code			file.
2	Version	Alphanumeric (16)	M	'OATS D1999-01'—identifies the current version of the
	Description			format specification.
3	Generation Date	Date (8)	M	Date of file generation. Format: YYYYMMDD
4	OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the OSO by OATS.
5	Sequence	Numeric (4)	M	Sequence number of the files generated for the Generation
	Number			Date.

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
6	Last File	Alphanumeric (1)	M	Indication of the last file in the FORE file for the
				Generation Date; 'Y' (indicates last file), 'N' (indicates not last file).
7	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

# **ROE Rejection Description Record**

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#RD#'—identifies a rejected ROE description record.
2	Reason 1	Numeric (4)	M	Numeric error number indicating reason for rejection.
3	Reason 2	Numeric (4)	C	Numeric error number indicating reason for rejection.
4	Reason 3	Numeric (4)	C	Numeric error number indicating reason for rejection.
5	Reason 4	Numeric (4)	C	Numeric error number indicating reason for rejection.
6	Reason 5	Numeric (4)	C	Numeric error number indicating reason for rejection.
7	Continuation	Alphanumeric (1)	M	Indicates that this description record in the continuation of a previous description record; 'N' indicates not a continuation, 'Y' indicates a continuation.
8	Firm FORE ID	Alphanumeric (20)	M	FORE ID from the originally submitted FORE.
9	Rejection Text	Alphanumeric (350)	M	Text of the originally submitted ROE (delimiters changed to commas if required). The Rejected ROE Resubmit Flag will be set to 'Y' and the Rejected ROE ID will be populated with an OATS assigned identifier.
10	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **ROE Rejection Trailer Record**

Seq.	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#RT#'—identifies a trailer record for Rejected ROEs.
2	Record Count	Numeric (8)	M	Total number of rejection description records in the file. NOTE: This does not include the header and trailer.
3	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

### **Unmatched Execution Reports**

Match eligible Execution and Combined Order/Execution reports that did not link to trades reported to a FINRA transaction reporting system may be retrieved via FTP, SFTP, IFT and the OATS Web interface within three business days of the processing date of the original FORE.

For FTP, SFTP, or IFT files, if there are no unmatched executions on a given day for an OSO, an unmatched execution file will be generated, but will consist only of a header and trailer. This "empty" file may be retrieved via FTP, SFTP, or IFT but may not be viewed or downloaded via the Web. Each unmatched record will contain one unmatched reason.

Each Unmatched Execution Report file may contain a maximum of 10,000 ROE records. If there are more than 10,000 Unmatched Execution Report records, they may be downloaded from the Web in groups of 10,000 or less. ROEs in Unmatched Execution Report files are sorted first by Order Receiving Firm MPID, and then by Branch/Sequence Number.

The Unmatched Execution Report file is comma-delimited and includes a header, one or more Unmatched Execution Report description records, and a trailer. The format of each file component follows.

### **Unmatched Execution Report File Header**

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#UH#'—identifies a header record for Unmatched
	Code			Execution ROEs.
2	Version	Alphanumeric (16)	M	'OATS D1999-01'—identifies the current version of the
	Description			format specification.
3	Generation Date	Date (8)	M	Date of file generation. Format: YYYYMMDD
4	OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the OSO by OATS.
5	Sequence	Numeric (4)	M	Sequence number of the files generated for the generation
	Number			date.
6	Last File	Alphanumeric (1)	M	Indication of the last file for the generation date. (Y
				indicates last file, N indicates not last file)
7	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

### **Unmatched Execution Report Description Record**

Seq.#	Name	Data Type (Length)	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	'#UD#'—identifies an Unmatched Execution ROE
			description record.
2	Unmatched Reason	Numeric (4)	Unmatched reason identifier.
3	Firm FORE ID	Alphanumeric (20)	FORE ID of original submitted FORE.
4	Order Receiving Firm MPID	Alphanumeric (4)	Data provided by firm.
5	Branch Sequence Number	Alphanumeric (20)	Data provided by firm.
6	Issue Symbol ID	Alphanumeric (14)	Data provided by firm.
7	Execution Timestamp	Numeric (17)	Data provided by firm.
8	Execution Quantity	Numeric (11)	Data provided by firm.
9	Firm ROE ID	Alphanumeric (12)	Data provided by firm.
10	Order Receiving Firm Order ID	Alphanumeric (40)	Data provided by firm.
11	Order Event Type	Alphanumeric (2)	Data provided by firm.

Seq.#	Name	Data Type (Length)	Permissible Values and Instructions
_	Code		
12	Action Type Code	Alphanumeric (1)	Data provided by firm.
13	Correction/ Deletion Timestamp	Numeric (17)	Data provided by firm.
14	Rejected ROE Resubmit Flag	Alphanumeric (1)	Data provided by firm.
15	Order Receiving Firm Order Received Date	Numeric (17)	Data provided by firm.
16	Trader Terminal ID	Alphanumeric (12)	Data provided by firm.
17	Reporting Exception Code	Alphanumeric (1)	Data provided by firm.
18	Execution Type Indicator	Alphanumeric (1)	Data provided by firm.
19	Leaves Quantity	Numeric (11)	Data provided by firm.
20	Market Center ID	Alphanumeric (2)	Data provided by firm.
21	Execution Price	Numeric (18,8)	Data provided by firm.
22	Capacity Code	Alphanumeric (1)	Data provided by firm.
23	End of Record Marker	(1 or 2)	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **Unmatched Execution Report Trailer Record**

Seq.#	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#UT#'—identifies a trailer record for Unmatched
	Code			Execution ROEs.
2	Record Count	Numeric (8)	M	Total number of unmatched execution description records
				in the file. NOTE: This does not include the header and
				trailer.
3	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

### **Unmatched Exchange Route Reports**

Match eligible Route and Combined Order/Route Reports that did not link to an order submitted to a national securities exchange may be retrieved via FTP, SFTP, IFT and the OATS Web interface within three business days of the processing date of the original FORE.

For FTP, SFTP, or IFT files, if there are no unmatched exchange routes on a given day for an OSO, an unmatched Exchange route file will be generated, but will consist only of a header and trailer. This "empty" file may be retrieved via FTP, SFTP, or IFT but may not be viewed or downloaded via the Web. Each unmatched record will contain one unmatched reason.

Each Unmatched Exchange Route Report file may contain a maximum of 10,000 ROE records. If there are more than 10,000 Unmatched Exchange Route Report records, they may be downloaded from the Web in groups of 10,000 or less. ROEs in Unmatched Exchange Route Report files are sorted first by Order Receiving Firm MPID, and then by Routed Order ID.

The Unmatched Exchange Route Report file is comma-delimited and includes a header, one or more Unmatched Exchange Route Report description records, and a trailer. The format of each file component follows.

### **Unmatched Exchange Route Report File Header**

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#EH#'—identifies a header record for Unmatched Route
	Code			ROEs.
2	Version	Alphanumeric (16)	M	'OATS D1999-01'—identifies the current version of the
	Description			format specification.
3	Generation Date	Date (8)	M	Date of file generation. Format: YYYYMMDD
4	OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the OSO by OATS.
5	Sequence	Numeric (4)	M	Sequence number of the files generated for the generation
	Number			date.
6	Last File	Alphanumeric (1)	M	Indication of the last file for the generation date. (Y
				indicates last file, N indicates not last file)
7	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

### **Unmatched Exchange Route Report Description Record**

О 4	NT	D. 4. T (T 41.)	D
Seq. #	Name	<b>71</b> \ 0 /	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	'#ED#'—identifies an Unmatched Route ROE description
			record.
2	Unmatched Reason	Numeric (4)	Unmatched reason identifier.
3	Firm FORE ID	Alphanumeric (20)	FORE ID of original submitted FORE.
4	Order Receiving Firm MPID	Alphanumeric (4)	Data provided by firm.
5	Routed Order ID	Alphanumeric (40)	Data provided by firm.
6	Issue Symbol ID	Alphanumeric (14)	Data provided by firm.
7	Order Sent	Numeric (17)	Data provided by firm.
	Timestamp		
8	Routed Shares	Numeric (11)	Data provided by firm.
	Quantity		
9	Firm ROE ID	Alphanumeric (12)	Data provided by firm.
10	Order Receiving Firm	Alphanumeric (40)	Data provided by firm.
	Order ID		

Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
11	Order Event Type Code	Alphanumeric (2)	Data provided by firm.
12	Sent to Firm MPID	Alphanumeric (4)	Data provided by firm.
13	Action Type Code	Alphanumeric (1)	Data provided by firm.
14	Correction/ Deletion Timestamp	Numeric (17)	Data provided by firm.
15	Rejected ROE Resubmit Flag	Alphanumeric (1)	Data provided by firm.
16	Order Receiving Firm Order Received Date	Numeric (17)	Data provided by firm.
17	Routing Method Code	Alphanumeric (1)	Data provided by firm.
18	Special Routing Condition	Alphanumeric (1)	Data provided by firm.
19	Sent To Routed Order ID	Alphanumeric (40)	Data provided by firm
20	Destination Code	Alphanumeric (2)	Data provided by firm.
21	Exchange Participant ID	Alphanumeric (8)	Data provided by firm.
22	Connection ID	Alphanumeric (12)	Data provided by firm
23	End of Record Marker	(1 or 2)	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **Unmatched Exchange Route Report Trailer Record**

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#ET#'—identifies a trailer record for Unmatched Route ROEs.
2	Record Count	Numeric (8)	M	Total number of unmatched execution description records in the file. NOTE: This does not include the header and trailer.
3	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

### **Unmatched Interfirm Route Report - Orders Routed**

Unmatched Interfirm Routes – Orders Routed represent match eligible Route and Combined Order/Route Reports that did not link to a corresponding New, Cancel/Replace, Combined Order/Execution or Combined Order/Route Report. Unmatched Infirm Routes – Orders Routed may be retrieved via FTP, SFTP, IFT and the OATS Web interface within three business days of the processing date of the original FORE.

For FTP, SFTP, or IFT files, if there are no unmatched Interfirm routes on a given day for an OSO, an unmatched Interfirm route file will be generated, but will consist only of a header and trailer. This "empty" file may be retrieved via FTP, SFTP, or IFT but may not be viewed or downloaded via the Web. Each unmatched record will contain one unmatched reason.

Each Unmatched Interfirm Route Report – Orders Routed file may contain a maximum of 10,000 ROE records. If there are more than 10,000 Unmatched Route or Combined Order/Route Report records, they may be downloaded from the Web in groups of 10,000 or less. ROEs in Unmatched Interfirm Route Report – Orders Routed files are sorted first by Order Receiving Firm MPID, and then by Routed Order ID.

The Unmatched Interfirm Route Report – Orders Routed file is comma-delimited and includes a header, one or more Unmatched Interfirm Route Report description records, and a trailer. The format of each file component follows.

## **Unmatched Interfirm Route Report – Orders Routed File Header**

Seq.#	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OH#'—identifies a header record for Unmatched Route
	Code			ROEs.
2	Version	Alphanumeric (16)	M	'OATS D1999-01'—identifies the current version of the
	Description			format specification.
3	Generation Date	Date (8)	M	Date of file generation. Format: YYYYMMDD
4	OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the OSO by OATS.
5	Sequence	Numeric (4)	M	Sequence number of the files generated for the generation
	Number			date.
6	Last File	Alphanumeric (1)	M	Indication of the last file for the generation date. (Y
				indicates last file, N indicates not last file)
7	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

### **Unmatched Interfirm Route Report – Orders Routed Description Record**

		_	
Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	'#OD#'—identifies an Unmatched Route ROE description
			record.
2	Unmatched Reason	Numeric (4)	Unmatched reason identifier.
3	Firm FORE ID	Alphanumeric (20)	FORE ID the original submitted FORE.
4	Order Receiving Firm	Alphanumeric (4)	Data provided by firm.
	MPID		
5	Routed Order ID	Alphanumeric (40)	Data provided by firm.
6	Issue Symbol ID	Alphanumeric (14)	Data provided by firm.
7	Order Sent	Numeric (17)	Data provided by firm.
	Timestamp		
8	Routed Shares	Numeric (11)	Data provided by firm.

Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
	Quantity		
9	Firm ROE ID	Alphanumeric (12)	Data provided by firm.
10	Order Receiving Firm	Alphanumeric (40)	Data provided by firm.
	Order ID		
11	Order Event Type	Alphanumeric (2)	Data provided by firm.
	Code		
12	Sent to Firm MPID	Alphanumeric (4)	Data provided by firm.
13	Action Type Code	Alphanumeric (1)	Data provided by firm.
14	Correction/ Deletion	Numeric (17)	Data provided by firm.
	Timestamp		
15	Rejected ROE	Alphanumeric (1)	Data provided by firm.
	Resubmit Flag		
16	Order Receiving Firm	Numeric (17)	Data provided by firm.
	Order Received Date		
17	Routing Method Code   Alphanumeric (1)		Data provided by firm.
18	Special Routing	Alphanumeric (1)	Data provided by firm.
	Condition		
19	Sent To Routed Order	Alphanumeric (40)	Data provided by firm
	ID		
20	Destination Code	Alphanumeric (2)	Data provided by firm.
21	Connection ID	Alphanumeric (12)	Data provided by firm.
22	End of Record	(1 or 2)	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker		Feed).

# $\ \, Unmatched \ \, Interfirm \ \, Route \ \, Report-Orders \ \, Routed \ \, Trailer \ \, Record$

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OT#'—identifies a trailer record for Unmatched Route
	Code			ROEs.
2	Record Count	Numeric (8)		Total number of unmatched route and combined order/route description records in the file. NOTE: This does not include the header and trailer.
3	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

### **Unmatched Interfirm Route Report – Orders Received**

Unmatched Interfirm Routes – Orders Received represents match eligible Route and Combined Order/Route Reports that did not link to a corresponding New, Cancel/Replace, Combined Order/Execution or Combined Order/Route Report. Unmatched Infirm Routes – Orders Received identifies firms named on the unmatched Routes as the Sent to MPID. This data may be viewed and downloaded via the OATS Web interface within three business days of the processing date of the original FORE.

For FTP, SFTP, or IFT files, if there are no unmatched Interfirm routes on a given day for an OSO, an unmatched Interfirm route file will be generated, but will consist only of a header and trailer. This "empty" file may be retrieved via FTP, SFTP, or IFT but may not be viewed or downloaded via the Web. Each unmatched record will contain one unmatched reason.

Each Unmatched Interfirm Route Report – Orders Received file may contain a maximum of 10,000 ROE records. If there are more than 10,000 Unmatched Route or Combined Order/Route Report records, they may be downloaded from the Web in groups of 10,000 or less. ROEs in Unmatched Interfirm Route Report – Orders Received files are sorted first by Order Receiving Firm MPID, and then by Routed Order ID.

The Unmatched Interfirm Route Report – Orders Received file is comma-delimited and includes a header, one or more description records, and a trailer. The format of each file component follows.

## **Unmatched Interfirm Route Report – Orders Received File Header**

			01 4012 210001 04 2 110 2204401	
Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#IH#'—identifies a header record for Unmatched Route
	Code			ROEs.
2	Version	Alphanumeric (16)	M	'OATS D1999-01'—identifies the current version of the
	Description			format specification.
3	Generation	Date (8)	M	Date of file generation. Format: YYYYMMDD
	Date			
4	Sequence	Numeric (4)	M	Sequence number of the files generated for the generation
	Number			date.
5	Last File	Alphanumeric (1)	M	Indication of the last file for the generation date. (Y
				indicates last file, N indicates not last file)
6	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

### **Unmatched Interfirm Route Report – Orders Received Description Record**

Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	'#ID#'—identifies an Unmatched Route ROE description
			record.
2	Unmatched Reason	Numeric (4)	Unmatched reason identifier.
3	Order Receiving Firm MPID	Alphanumeric (4)	Data provided by routing firm.
4	Routed Order ID	Alphanumeric (40)	Data provided by routing firm.
5	Issue Symbol ID	Alphanumeric (14)	Data provided by routing firm.
6	Order Sent Timestamp	Numeric (17)	Data provided by routing firm.
7	Routed Shares	Numeric (11)	Data provided by routing firm.

Seq.#	Name	Data Type (Length)	Permissible Values and Instructions
	Quantity		
8	Sent to Firm MPID	Alphanumeric (4)	Data provided by routing firm.
9	Connection ID	Alphanumeric (12)	Data provided by routing firm.
10	End of Record	(1 or 2)	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker		Feed).

# **Unmatched Interfirm Route Report – Orders Received Trailer Record**

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#IT#'—identifies a trailer record for Unmatched Route
	Code			ROEs.
2	Record Count	Numeric (8)	M	Total number of unmatched route and combined order/route description records in the file. NOTE: This does not include the header and trailer.
3	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

### **Out of Sequence Events**

On a daily basis, OATS provides a summary and list of events where the event timestamp reported on the Route, Desk, Execution or Cancel report is prior to the Order Received timestamp reported on the originating event.

**Route** – Order sent timestamp reported on the Route report is prior to the order received timestamp reported on the originating event.

**Desk** – Desk received timestamp reported on the Desk report is prior to the order received timestamp reported on the originating event.

**Execution** – Execution timestamp reported on the Execution report is prior to the order received timestamp reported on the originating event.

**Cancel** – Order cancel timestamp reported on the Cancel report is prior to the order received timestamp reported on the originating event.

**Cancel/Replace** - Order cancel timestamp reported on the Cancel/Replace report is prior to the order received timestamp reported on the originating event.

Out of Sequence information is available to download via the OATS Web interface.

### **Out of Sequence Events File Header**

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#QS#'—identifies a header record for Out of Sequence
	Code			Events.
2	Version	Alphanumeric (16)	M	'OATS D1999-01'—identifies the current version of the
	Description			format specification.
3	Generation	Date (8)	M	Date of file generation. Format: YYYYMMDD
	Date			
4	Sequence	Numeric (4)	M	Sequence number of the files generated for the generation
	Number			date.
5	Last File	Alphanumeric (1)	M	Indication of the last file for the generation date. (Y
				indicates last file, N indicates not last file)
6	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

### **Out of Sequence Event Description Record**

	1	-	
Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	'#QD#'—identifies an Out of Sequence Event.
2	Out of Sequence Reason	Numeric (4)	Out of Sequence reason identifier.
3	Order Receiving Firm MPID	Alphanumeric (4)	Data provided by firm.
4	Order Receiving Firm Order Received Date	Numeric (17)	Data provided by firm.
5	Order Receiving Firm Order ID	Alphanumeric (40)	Data provided by firm.
6	Issue Symbol ID	Alphanumeric (14)	Data provided by firm.
7	Originating Event Type Code	Alphanumeric (2)	Data from originating event provided by firm.
8	Originating Event Timestamp	Numeric (17)	Data from originating event provided by firm.

Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
9	Subsequent Event Type Code	Alphanumeric (2)	Data from subsequent event provided by firm.
10	Subsequent Event Timestamp	Numeric (17)	Data from subsequent event provided by firm.
11	End of Record Marker	(1 or 2)	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

# **Out of Sequence Event Trailer Record**

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#QT#'—identifies a trailer record for Out of Sequence
	Code			Events.
2	Record Count	Numeric (8)	M	Total number of Out of Sequence events in the file.
				NOTE: This does not include the header and trailer.
3	End of Record	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line
	Marker			Feed).

### APPENDIX C —ORDER REPORT FORMATS

### **OATS REPORTING TECHNICAL SPECIFICATIONS**

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# APPENDIX D — GLOSSARY

**ADF** Alternative Display Facility was established by NASD as a member

alternative to NASDAQ for the display of quotations and orders. Transactions executed through the ADF are reported to TRACS.

**Branch Sequence Number**  An alphanumeric identifier that firms will use when reporting orders and trades to OATS and a FINRA transaction reporting system. OATS

will use this identifier to match Execution and Combined

Order/Execution reports to trades reported to a FINRA transaction

reporting system.

**Context Error** If a ROE is rejected because of a context error, its syntax is correct, but

there is a problem with the record in relation to other records. An Execution, Route, Desk, or Cancel, or Cancel/Replace Report will be rejected as a context error if it does not link to an existing order in OATS. Reasons an order might not exist in OATS include the

following: the New Order Report was submitted and rejected because of a syntax error; the order was received before the firm began reporting to OATS, and because the New Order Report was not yet submitted.

**Desk Report** Firms submit a Desk Report to OATS when an order is received by a

desk or department within the member firm.

**Electronic Order** An order that was captured by a member in an internal or external

electronic order routing or execution system. An order that is not captured in an electronic order routing or execution system is a manual

order.

**Expired Order** An open order that has exceeded its Time in Force.

FINRA transaction reporting system

Any system to which a member may report a transaction pursuant to FINRA transaction reporting rules. Such systems include the

ENTRY A MAGE TERE A DELETIME A MAGE A COMPRE

FINRA/NYSE TRF, ADF, FINRA/NASDAQ TRF and OTC Reporting

Facility. Refer to Appendix A for the list of FINRA transaction

reporting systems.

Firm Order Report (FORE)

One or more Reportable Order Event (ROE) records preceded by a header and followed by a trailer that are submitted by an OSO to OATS. Multiple order event types may be represented in a single FORE. A separate FORE must be submitted for each Order Receiving Firm MPID that is subject to OATS reporting; multiple FOREs can be combined in

a single file.

Firm Order Report (FORE) File

One or more FOREs (header/trailer pairs) submitted in a file by an OSO to OATS. When multiple FOREs are sent in a single file, OATS treats each header/trailer combination as a separate submission. There is no limit to the number of FOREs that may be in the file nor to the number of ROEs that can be in a single FORE; however, each file is limited to a maximum uncompressed file size of 25MB.

**FORE Status** Indicates whether the FORE was accepted or rejected and identifies

errors or warnings.

**Full Duplicate** Two or more identical ROEs. OATS will accept the first record and

reject all subsequent identical records.

**Key Duplicate** Key duplicates occur when two or more orders contain the same OATS

> Order ID but have different order details. Key duplicates have a rejection type of "Context." All records with key duplications are rejected unless the key duplication occurs over different reporting days. If the duplication occurs over more than one reporting day, the ROEs submitted on the first reporting day will be retained, while all ROEs received on subsequent reporting days with the duplicate OATS Order

ID will be rejected.

**Manual Order** An order captured by a member other than in an electronic order routing

or execution system. Also called a manual order.

**Market Participant Identifier (MPID)** 

The four character symbol assigned to a member firm by NASDAQ.

**OATS Business Day** For purposes of OATS reporting, a business day begins the second after

> the close of Normal Market Hours on one market day and ends at the close of Normal Market Hours on the next market day. For example, Wednesday's OATS Business Day begins at 16:00:01 Eastern Time on Tuesday and ends at 16:00:00 Eastern Time on Wednesday. Any events

> occurring during this time period must be reported to OATS by 08:00:00 Eastern Time on Thursday. Also called the OATS Processing

Date.

**OATS Order Identifier** 

The three fields that comprise the OATS Order Identifier are Firm Order

ID, Order Receiving Firm MPID, and Order Received Date.

**OATS Reportable** 

All NMS stocks and OTC equity securities as defined in FINRA Rule Securities

7410. Initial public offerings (IPOs), secondary offerings, Direct Participation programs (DPPs), "restricted securities", as defined by SEC Rule 144(a)(3) under the Securities Act of 1933, and any securities

designated in the PORTAL Market are not reportable to OATS.

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# OATS Reporting Day

The time period during which an order event must be reported to OATS or be marked late. Events occurring during an OATS Business Day must be submitted to OATS by 08:00:00 Eastern Time the next calendar day.

#### **Order**

Any oral, written, or electronic instruction to effect a transaction in an OATS Reportable security that is received by a member from another person for handling or execution, or that is originated by a department of a member for execution by the same or another member, other than any such instruction to effect a proprietary transaction originated by a trading desk in the ordinary course of a member's market making activities.

# Order Receiving Firm

The member firm that receives an oral, written, or electronic instruction to effect a transaction in an OATS reportable security. The instruction may originate from a customer, another firm, or another department within the firm. (NOTE: Orders to effect a proprietary transaction originated by a trading desk in the ordinary course of a member's market making activities are not subject to OATS reporting.)

### **Order Routing Firm**

An FINRA member firm that transmits an order to another market center for handling or execution.

# Order Sending Organization (OSO)

A FINRA member firm or a non-member entity that transmits order data to OATS on its own behalf, through another firm or entity, or on behalf of other firms or entities. The following distinction is made between the functions an OSO performs, though it may perform both functions simultaneously:

- Transmitting OSO—packages FORE files and physically transfers order data to OATS via FTP, SFTP, IFT, or the Web interface.
- Reporting OSO—authorized to view the Order Receiving Firm's
  data; for example, the Reporting OSO may be a clearing firm that
  reports on behalf of the Order Receiving Firm and is authorized to
  view that firm's data and correct rejected Reportable Order Events.

# Reportable Order Event record (ROE)

A record representing an event in the lifecycle of an order (e.g., order receipt, order cancellation, or order execution) that a firm is required to report to OATS.

### **Reporting Member**

A member that meets the definition of a Reporting Member pursuant to FINRA Rule 7410.

**Reserve Size Order** An order for which a customer has authorized the public display of part

of the full size of the order with the remainder held in reserve on an undisplayed basis to be displayed in whole or in part as the displayed

part is executed.

**ROE Rejection** Identifies a rejected ROE and reasons for rejection. ROE Rejections

may be retrieved via FTP, SFTP, IFT or the OATS Web interface.

**Syntax Error** An incorrect field value or format within one ROE. Common syntax

rejection reasons include missing mandatory fields, invalid fields, and invalid field combinations (invalid symbols and MPIDs are syntax

rejections).