OATS Reporting Technical Specifications

December 11, 2006

Memo

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To: ☒ Senior Management
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From: Paul J. McKenney
Assistant Director, OATS Operations, Market Regulation

Date: December 11, 2006

Re: OATS Reporting Technical Specifications, December 11, 2006

Enclosed is the latest edition of the *OATS Reporting Technical Specifications*, dated December 11, 2006. This document was originally published March 9, 1998, for member firms and third parties developing systems to report to the Order Audit Trail System^{SM} (OATS^{SM}). Updated editions were published June 30, 1998, November 30, 1998, May 4, 1999, July 29, 1999, June 29, 2000, October 9, 2000, March 7, 2001, October 29, 2001, April 8, 2002, July 15, 2002, October 14, 2002, December 16, 2002, April 14, 2003, July 28, 2003, September 29, 2003, March 29, 2004, June 14, 2004, October 4, 2004, February 14, 2005, April 25, 2005, June 21, 2005, September 12, 2005, November 11, 2005, May 30, 2006 and November 13, 2006 to provide clarification regarding the requirements.

This document is available on the OATS Web Pages. All updates to this and other documentation regarding OATS will be posted to the OATS Web Pages available via the NASD Web Site at *www.nasd.com/oats*.

The changes described in the December 11, 2006 edition of the *OATS Reporting Technical Specifications* contain technical enhancements which are required to support OTC equity security reporting to OATS. These changes will be available in the OATS Production environment on June 11, 2007 and available in the OATS Certificate Test environment on April 30, 2007.

Chapter	Change
Throughout	Updated all references to NASDAQ Market Center to NASDAQ Stock Market LLC ("NASDAQ Exchange").
Throughout	Updated the title of the Route/NMC Matching process to: NASDAQ Route Matching
Chapter 4	Scenarios 4.4.12 and 4.4.24 Updated scenarios to reflect changes resulting from NASDAQ systems integration to the Single Book.
Chapter 6	**6.5 Unmatched NASDAQ Route Report Data** Updated the match criteria as a result of the NASDAQ systems integration to the Single Book.
Appendix A	Add the following permitted values for **Desk Handling Code(s)** and **Special Handling Code(s)**: ** Please note: The general code of 'PEG' has been replaced with more specific Peg indicators.

Appendix A (continued):

ISO   Intermarket Sweep Order—An order that meets the definition of "Intermarket Sweep Order" under Rule 600(b)(30) of Regulation NMS.**

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.

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 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.

F7   Strict Scale

F8   Try to Scale

F9   Stay on Bidside

FA   No Cross—The broker executing this trade is forbidden from taking the other side of the trade. Opposite of OK to Cross.

FB   OK to Cross—The broker executing this trade is allowed to take the other side of the trade. Opposite of No Cross.

FC   Call First—Refer to client before trading.

FD   Percent of Volume—The sender does not want to be all of the volume.

	FH	Reinstate on System 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.
	FI	Institutions Only—Broker is restricted to dealing with other buy side firms.
	FJ	Reinstate on Trading Halt—If trading in this instrument is halted, reinstate this order when/if trading resumes, subject to time in force limitations.
	FK	Cancel on Trading Halt—If trading in this instrument is halted, cancel this order and do not reinstate it when/if trading resumes.
	FL	Last Peg
	FM	Mid-price Peg
	FN	Non-negotiable
	FO	Opening Peg
	FP	Market Peg
	FQ	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 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 selling.
	Fb	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
		**ISO (Intermarket Sweep Order) will become available upon implementation of Reg NMS.

Appendix A	Added the following permitted values for **Desk Type Code**:
	
	    'SW' - Swaps
	    'EC' - Equity Capital Markets
	    'CR' - Central Risk Books	

Appendix A	Added the following permitted values for **Destination Code**:
	'A' - Non-Member Affiliate
	'XA' - American Stock and Option Exchange (AMEX)
	'XB' - Boston Stock Exchange
	'XC' - National Stock Exchange
	'XF' - Non-US Exchange
	'XI' - International Securities Exchange
	'XM' - Chicago Stock Exchange
	'XN' - New York Stock Exchange
	'XO' - Bourse de Montreal
	'XP' - NYSE/Arca Exchange
	'XQ' - NASDAQ Exchange **
	'XT' - Toronto Stock Exchange
	'XV' - TSX Venture Exchange
	'XW'- Chicago Board Options Exchange
	'XX' - Philadelphia Stock Exchange
	Removed the following value:
	'U' – NASDAQ Market Center **
	** Please note: The Destination Code which represents a Route to the NASDAQ Exchange has been changed from 'U' to 'XQ'.
Appendix A	Added the following permitted values for **Market Center ID**:
	'I' - International Securities Exchange
	'N'- New York Stock Exchange
	'O'- Bourse de Montreal **
	'W'- Chicago Board Options Exchange
	** Please note: The Market Center ID which represents Bourse de Montreal has been changed from 'N' to 'O'.
Appendix A	Added the following permitted value for **Member Type Code**:
	'A' - Non-Member Affiliate
Appendix A	Added the following permitted value for **Reporting Exception Code**:
	'F' – Reported on Form T pursuant to NASD Trade Reporting Rules
	Removed the following values from **Reporting Exception Code**:
	'C' – Odd lot customer cross execution
	'O' – Odd lot execution from proprietary account

Appendix B	Updated the definition of the following error code:
	2029 - Issue is not reportable to OATS OATS distinguishes between orders rejected because the issue is not reportable to OATS (i.e. it is a valid CQS symbol) and the issue is not valid in any market (i.e., it is not a recognized issue symbol for the order event date). For instance, the symbol 'IBM' will be rejected with the reason "Issue is not reportable to OATS," whereas the symbol 'XX' will be rejected with the reason "Issue symbol invalid for Order Event Date."
Appendix B	Updated the definition of the following error code: **2125 - Missing or Invalid Account Type Code** Required if the Received Method Code is 'E' (Electronic) or 'N' (Non-Electronic), the Member Type Code is 'M' (Member), 'N' (Non-Member), 'A' (Non-Member Affiliate), or 'C' (ECN) and the ECN Flag is blank. If provided, Account Type Code must be one of the following values: 'R' (retail), 'W' (wholesale), 'P' (proprietary), 'E' (employee), or 'C' (combined).
Appendix B	Updated the definition of the following error code: **2147 –Invalid First Special Handling Code** If provided, the First Special Handling Code must be one of the following values: 'FOK' (fill or kill), 'AON' (all or none), 'NH' (not held), 'IOC' (immediate or cancel), 'MAO' (market at open), 'MAC' (market at close), 'MTL' (market to limit), 'MOO' (market on open), 'MOC' (market on close), 'OVD' (over the day), 'SCL' (scale), 'WRK' (work), MQT (minimum quantity), 'RSV' (reserved size order), 'TS' (trailing stop), 'LOC' (limit on close), 'IO' (imbalance only), 'LOO' (limit on open), 'E.W' (exchange for physical transaction), 'S.W' (stop stock transaction), 'CNH' (cash not held), 'ADD' (add-on order), 'TMO' (time order), 'DIR' (directed order), 'OPT' (options related transaction), 'ISO' (intermarket sweep), or 'F0' (stay on offside), 'F3' (go along), 'F5' (held), 'F6' (participate don't initiate), 'F7', (strict scale), 'F8' (try to scale), 'F9' (stay on bidside), 'FA' (no cross), 'FB' (ok to cross), 'FC' (call first), 'FD' (percent of volume), 'FH' (reinstate on system failure), 'FI' (institutions only), 'FJ' (reinstate on trading halt), 'FK' (cancel on trading halt), 'FL' (last peg), 'FM' (mid-price peg), 'FN' (non-negotiable), 'FO' (opening peg), 'FP' (market peg), 'FQ' (cancel on system failure), 'FR' (primary peg), 'FS' (suspend), 'FT' (fixed peg to local BBO at time of order), 'FW' (peg to VWAP), 'FX' (trade along), 'FY' (try to stop), 'FZ' (cancel if not best), 'Fb' (strict limit), 'Fc' (ignore price validity checks), 'Fd' (peg to limit price), 'Fe' (work to target strategy). **This definition applies to all Special Handling Codes and Desk Special Handling Codes.** *Please note:* **'ISO' (Intermarket Sweep Order) will become available upon implementation of Reg NMS.**

Appendix B	Updated the definition of the following error code:
	2153 - Routing Firm MPID must be a non-member firm for the Member Type Code 'N' or 'A' If the Member Type Code is 'N' or 'A', the Routing Firm MPID must be blank or contain a non-NASD or non-NASDAQ MPID for the Event Timestamp.
Appendix B	Updated the definition of the following error code:
	2154 - Routing Firm MPID must be blank for this Member Type Code and Account Type Code For the New Order Report, Cancel Replace Report, Combined Order/Route Report and Combined Order/Execution Report, if the Member Type Code is 'M', 'N' or 'A' and the Account Type Code is 'R', 'E', or 'C', the Routing Firm MPID must not be populated. If the Member Type Code is 'M' and the Account Type Code is 'P, the Routing Firm MPID must not be populated.
Appendix B	Updated the definition of the following error code:
	2156 - Missing or invalid Market Center ID Required on all Execution Reports and Combined Order/Execution Reports. Valid values are 'A' (AMEX), 'B' (Boston Stock Exchange), 'DB' (NASD/BSE TRF), 'C' (National), 'DC' (NASD/NSX TRF), 'D' (ADF), 'I' (International Securities Exchange), 'L' (NASD/NASDAQ TRF), 'M' (Chicago Stock Exchange), 'N' (New York Stock Exchange), 'O' (Bourse de Montreal), 'P' (NYSE/Arca Exchange), 'Q' (NASDAQ Exchange), 'T' (Toronto Stock Exchange), 'V' (TSX Venture Exchange), 'W' (Chicago Board Options Exchange) or 'X' (Philadelphia Stock Exchange).
Appendix B	Updated the definition of the following error code:
	2159 - Missing or Invalid Member Type Code Required on all New Orders, Cancel/Replace Reports, Combined Order/Route Reports, and Combined Order/Execution Reports. Valid values are: 'C' (ECN), 'M' (Member Firm), 'N' (Non-Member Firm), 'A' (Non-Member Affiliate) or 'E' (Non-Reporting Member).
Appendix B	Updated the definition of the following error code:
	2161 - Missing or invalid Destination Code Required on all Route Reports and Combined Order/Route Reports. Valid values are: 'E' (ECN), 'M' (Member Firm), 'N' (Non-Member Firm), 'A' (Non-Member Affiliate), 'XA' (AMEX), 'XB' (Boston Stock Exchange), 'XC' (National Stock Exchange), 'XF' (Non-US Exchange), 'XI' (International Securities Exchange), 'XM (Chicago Stock Exchange), 'XN (New York Stock Exchange), 'XO' (Bourse de Montreal), 'XP' (NYSE/Arca Exchange), 'XQ' (NASDAQ Exchange), 'XT' (Toronto Stock Exchange), 'XV' (TSX Venture Exchange), 'XW' (Chicago Board Options Exchange) or 'XX' (Philadelphia Stock Exchange).

Appendix B	Updated the definition of the following error code:
	2207 - Invalid Reporting Exception Code
	Must be provided if the execution is not required to be reported to an NASD Trade 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;
	account;
	S- ECN convertible debt execution;
	R- Riskless principal transaction;
	A- Agency Average Price Transaction;
	T- Agency Post Trade Allocation;
	F- Reported on Form T pursuant to NASD Trade Reporting Rules.
Appendix B	Updated the definition of the following error code:
	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) and the Destination Code is 'M', 'E' or 'XQ'.
Appendix B	Updated the definition of the following error code:
	2508 - Missing or invalid Desk Type Code
	Desk Type Code must be one of the following values: 'T' (Trading), 'PR' (Proprietary), 'S' (Sales), 'IS' (Institutional), 'PT' (Program Trading), 'IN' (International), 'AR' (Arbitrage), 'A' (Agency), 'D' (Derivatives), 'PF' (Preferred Trading), 'B' (Block Trading), 'C' (Convertible Desk), 'TR' (Treasury), 'SW' (Swaps), 'EC' (Equity Capital), 'CR' (Central Risk Books), or 'O' (Other).
Appendix B	Updated the definition of the following error code:
	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) and the Destination Code is 'M', 'E' or 'XQ'.
Appendix C	Updated the Data Type (Length) of **Destination Code** to Alphanumeric (2).
Appendix C	Updated allowable values for the following fields:
	Desk Special Handling Code(s)
	Desk Type Code
	Destination Code
	Market Center ID
	Member Type Code
	Reporting Exception Code
	Special Handling Code(s)
Appendix C	Updated the title, description and match criteria for the **NASDAQ Route Matching** process.

Appendix D	Added the following definition:
	OATS Reportable Securities
	Equity securities listed on the NASDAQ Stock Market and OTC equity securities as defined in NASD Rule 6951. 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.

To obtain the latest information or answers to questions about OATS and the *OATS Reporting Technical Specifications*, contact NASD 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. NASD Business Support is available Monday through Friday from 8:00 a.m. until 6:00 p.m., Eastern Time. NASD 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 *www.nasd.com/oats*.

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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 Nasdaq-listed equity securities 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 NASD's surveillance activities.

NASD Rules 6950 through 6958 (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 NASD. (For a summary of rule requirements, see Section 1.1.)

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

| **Member Firm Records Reportable Order Event Records** | **Member Firm Assembles Records into Files** | **Member Firm Transmits Files** | **NASD Computer Systems** |
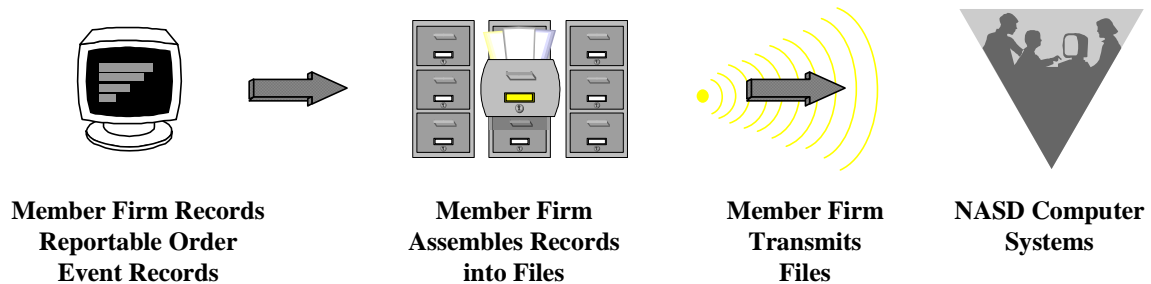
The *OATS Reporting Technical Specifications* provide member firms with a resource for understanding their responsibilities to comply with NASD Rules 6950 through 6958 and describe the requirements for reporting order data to OATS, including detailed information about system access and the required data elements. The *OATS Reporting Technical Specifications* also inform member firms about the procedures for implementing OATS, including registering with NASD and testing the interface between their systems and the systems at NASD.

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 NASD. 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 NASD 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 NASD member firms must supply OATS information to NASD.*
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 NASD Rules 6950 through 6958 and the* OATS Reporting Technical Specifications.

1.1   Rule Overview

NASD Rule 6950 - Order Audit Trail System

Rule 6950 is simply a place marker for the Order Audit Trail System Rules.

NASD Rule 6951 - Definitions

Rule 6951 lays out specific definitions of terms used for the purposes of Rules 6950-6958. Terms not specifically defined shall have the same meaning as those defined in the By-Laws and Rules of the Association.

NASD Rule 6952 - Applicability

Rule 6952 applies the OATS Rules to all members of the NASD in conjunction with the requirements of the By-Laws and Rules of the Association. Further, the rule requirements apply to all orders for OATS reportable securities whether they are executed or not.

NASD Rule 6953 - Synchronization of Member Business Clocks

Rule 6953 requires any NASD member firm that records order, transaction or related data required under the By-Laws and Rules of the Association 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 three seconds 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.

NASD Rule 6954 - Recording of Order Information

Rule 6954 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 (Routing 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.

NASD Rule 6955 - Order Data Transmission Requirements

All required order data must be transmitted to NASD in electronic format. Data may be transmitted electronically via FTP, IFT, email, NASD 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 NASD's OATS Rules.

NASD Rule 6956- 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 2110.

NASD Rule 6957- Effective Dates

OATS Rules became effective:
- 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 June 11, 2007 for all orders in Nasdaq–listed equity securities and OTC equity securities

NASD Rule 6958- Exemption to the Order Recording and Data Transmission Requirements

Rule 6958 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 Nasdaq Stock Market 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.

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. The most basic technical requirement is that member firms create a Reportable Order Event record (ROE) for each reportable event that occurs. (See Section 5—Data Reporting Formats.) Reportable Order Events must be packaged into one or more Firm Order Report files (FOREs) and submitted to NASD on a daily basis; more than one type of ROE may be packaged into a single FORE. FOREs **do not** need to be transmitted to NASD on a real-time basis. Firms can transmit these files via File Transfer Protocol (FTP), Internet File Transfer (IFT), e-mail, or the OATS Web interface. Member firms in Canada may now exchange information about orders received in OATS reportable securities with OATS via FTP, IFT, E-mail or the OATS Web interface. Member firms based outside the United States and Canada must submit OATS information and make corrections to their files and records via a U.S.- or Canadian-based entity. (See Section 3—System Access.) Firms must retain the data in order to respond to regulatory inquiries. (See Section 8.4—Data Retention Requirements.)

NASD generates feedback about the status of FORE files within one hour of their submission. OSOs that transmit FORE files via FTP or IFT can retrieve the status of their FOREs via FTP or IFT and firms that transmit FORE files via e-mail will receive a return e-mail containing the status of their FOREs. (For more information, see Section 7—Feedback and Corrections). Member firms can also use the OATS Web interface to perform administrative functions, obtain feedback regarding order event rejections, get reporting statistics, correct erroneous record information, repair rejected records, and view system announcements.

For an overview of OATS reporting technical requirements and information flow, see Figure 1-2.

Figure 1-2. Overview of OATS Reporting Technical Requirements and Information Flow
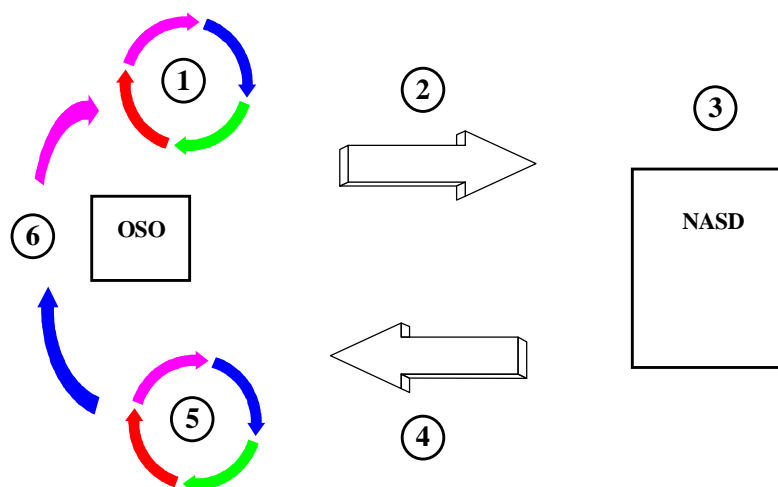
1. Order Sending Organizations (OSOs) generate Reportable Order Events records (ROEs) and package them in Firm Order Report files (FOREs). They could also enter the ROEs directly into the OATS Web Site.

2. The OSO transmits the FOREs to NASD using FTP, IFT, e-mail, or the Web.

3. NASD validates the FOREs and ROEs.

4. NASD generates FORE status within one hour. It is available via the original method of transmission or the Web. (NOTE: For files submitted via FTP or IFT, firms must "pull" status from NASD. NASD will not "push" information to OSOs via FTP or IFT.) Firms may obtain additional feedback, including ROE rejections and reporting statistics, via the Web, FTP 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 NASD. 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 NASD 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. NASD Business and Technology Support Services can be reached via fax, e-mail, or the World Wide 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-NASD	800-321-NASD
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2. Clock Synchronization

NASD Rule 6953 requires member firms that record order, transaction, or related data required by the By-Laws or other rules of NASD 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 three seconds 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 three-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

For example, if the time provider's clock is accurate to within one second of the NIST standard, the maximum allowable drift for any computer system or mechanical clock is two seconds.

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 three seconds 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 3 seconds. 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.

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

For additional information about clock synchronization and the requirements of Rule 6953, see the OATS Frequently Asked Questions (FAQs) available on the NASD Web Site (*http://www.nasd.com/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. Firms based outside the United States and Canada **must** submit OATS information via a U.S. or Canadian-based provider. Firms outside of the U.S. and Canada will not have access to any of the transport options described in this section.)

The goal of NASD 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

NASD supports two network interfaces: a private frame-relay 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.

Figure 3-1. Network Options

E-mail, Web and IFT   **FTP and Web**
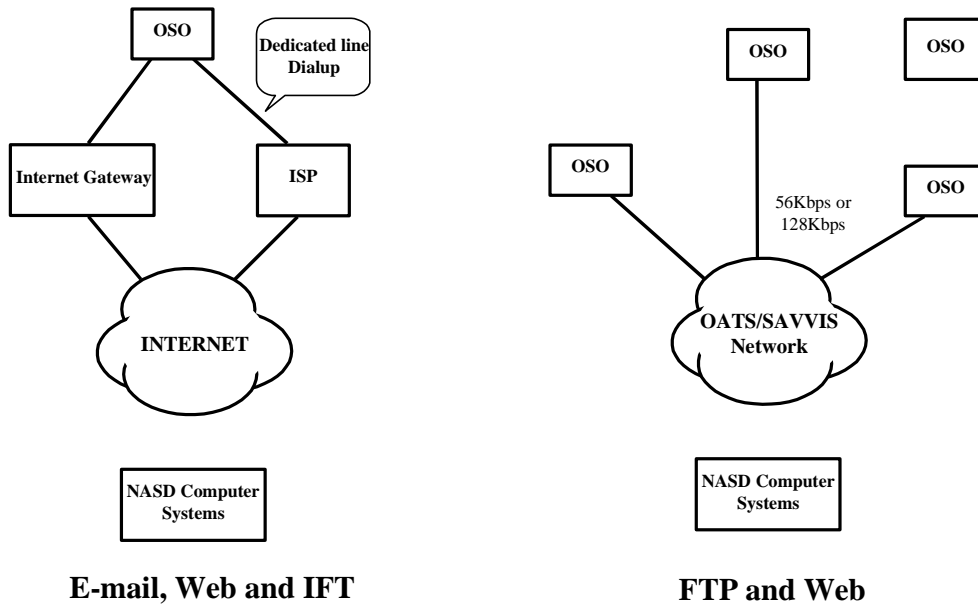
3.1.1   OATS/SAVVIS network

NASD has contracted with SAVVIS to create a private dedicated network to connect any OSO to NASD 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 FTP file submission/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 (800-486-9999) for details of this contractual arrangement.

3.1.2   Internet Access

Internet users can obtain access to NASD through the Internet via e-mail, IFT or the World Wide 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

NASD provides four mechanisms for OSOs to submit files to NASD: FTP via the OATS/SAVVIS network, e-mail attachment via the Internet using SMTP mail protocol, IFT via the Internet SecureTransport ™ client and server software, and Web interface via a standard browser interface. If the submission is via FTP, it is sent using the FTP *put* command. If the submission is via e-mail, firms must create an e-mail message with no required text in the body, attach the Firm Order Report (FORE) file, and send the message. If the submission is via IFT, the file is sent using the SecureTransport ™ software. If the submission is via Web interface, it is sent by typing the ROE data directly into the Web page. Information submitted to OATS via the Web interface will be returned to the firm via the Web interface for data retention purposes. Detailed procedures for sending FORE files via each of these methods are provided in the *OATS Subscriber Manual.*

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: FORE submission
IFT: FORE submission
e-mail: FORE submission
Web: Original ROE entry, ROE corrections and
            repairs, administrative information

Order Sending Organization

NASD Computer Systems

FTP: FORE Status, ROE rejections, Announcements
IFT: FORE Status, ROE rejections, Announcements
e-mail: FORE Status
Web: FORE Status, ROE rejections, Statistics,
            Announcements, Unmatched Execution Reports,
            Unmatched NASDAQ 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.

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

Access Method	FTP	IFT	E-mail	Web
Network	OATS/ SAVVIS	Internet	Internet	OATS or Internet
File & Resubmitted Rejections Submission	✓	✓	✓	
File Status	✓	✓	✓	✓
Interactive ROE entry				✓
ROE Rejections	✓	✓		✓
Interactive ROE Repair				✓
Report Statistics				✓
Web Announcements				✓
FTP/IFT Announcements	✓	✓		
Account Maintenance				✓
Unmatched Execution, NASDAQ Route and Interfirm Route Reports				✓

The specifications for each access method is described below:

- **FTP**—FTP is only available via the OATS/SAVVIS network; it is not available via the Internet. Firms must use a version of FTP software that is

compatible with RFC 959. Firms should use US ASCII code and binary mode for transmission. Because only the firms that are on the OATS/SAVVIS network have access to NASD via FTP, there is no encryption; security is managed with user IDs and passwords. (Security is described in more detail below.) For all files transmitted to NASD via FTP, there is a file size limit of 4MB; however, there is no specific limit on the number of ROEs that can be in a single file.

Organizations must contact the Sales Department at SAVVIS directly via phone (800-486-9999) 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.

- **E-mail**— E-mail submissions may be made via the Internet. Firms must use Microsoft Outlook Express 5.0, Microsoft Outlook Express 6.0, Netscape Communicator 4.72 (128-bit encrypted, non-export versions) or Netscape Communicator 7.2. Also, firms must attach an US ASCII text file of ROEs to an e-mail message. No text is required in the e-mail message. An OSO that transmits files for several other firms must submit a separate message for each firm. Each of these attachments should have a unique name, because the returned e-mail containing the status of the submission will use the attachment name in the subject of the e-mail. For all files transmitted to NASD via e-mail, there is a file size limit of 1.5MB.

  NOTE: When an OATS Subscriber sends an e-mail to Test or Production that exceeds the 1.5MB limit, the sender will receive the following notification via e-mail "Your e-mail was rejected because the attached file exceeded 1.5MB in size as outlined in the *OATS Subscriber Manual* and the *OATS Reporting Technical Specifications Manual*." When this occurs, the attached FOREfile will NOT be saved by OATS and will NOT be processed.

  This file size may be lower if the Internet Service Provider (ISP) providing access has a smaller limitation on the size of e-mail transmissions. There is no specific limit on the number of ROEs that can be in the attachment. Security is managed using S/MIME (Secure/Multipurpose Internet Mail Extensions) encryption. Additional details required for e-mail submissions are in the *OATS Subscriber Manual*. (Security is described in more detail below.) NOTE: In order to provide adequate security for the S/MIME encoding, a non-export version of the mail client must be utilized. OATS intends to test and certify Microsoft and Netscape mail clients. UNIX mail clients are not supported. Other mail clients may work and will require certification, but NASD will not be obligated to correct software to enable connection with mail clients other than Microsoft or Netscape.

- **Web**—Web access to the OATS system is available via NASD OATS/SAVVIS network and the Internet. The OATS Web interface will be optimized for Microsoft Internet Explorer 5.0, Netscape Communicator 4.72 (the suite of tools comprising the Navigator browser and Messenger mail client, among other tools), and HTML 3.2. Security is managed using SSL

(Secure Sockets Layer) encryption, server-side certificates, and user IDs and passwords. NOTE: A non-export version of the supported Web browsers (Internet Explorer 5.0 and Netscape Communicator 4.72) 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. Web access will not be allowed from locations outside the United States and Canada.

- **Internet File Transfer (IFT)** —IFT is available via the Internet using the SecureTransport ™ software from Tumbleweed Communications. Firms must use either the Windows client or UNIX client version. Because the client software provides built in security, access is granted with user IDs and passwords. For all files transmitted to NASD via IFT there is a file size limit of 4MB; however, there is no specific limit on the number of ROEs that can be in a single file.

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

Table 3-2. Summary of Transport Specifications

FTP	IFT	E-mail	Web
4MB file size limit - RFC 959 compatible - No encryption - Binary mode - US ASCII code - OATS/SAVVIS network only	4MB file size limit - US ASCII code - Internet - SecureTransport ™ client software from - No encryption	- Microsoft Outlook Express 5.0, Microsoft Outlook Express 6.0, Netscape Communicator 4.72 (128-bit encrypted, non-export versions) or Netscape Communicator 7.2 1.5 MB file size limit* - S/MIME encryption - SMTP protocol - US ASCII code - Internet	- Microsoft Internet Explorer 5.0, Microsoft Outlook Express 6.0, or Netscape Communicator 4.72 (128-bit encrypted, non-export versions) - SSL encryption - Server-side certificates - HTML 3.2 or higher - Cookies - Internet or private network

*Or lower as specified by an Internet Service Provider.

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://oatstest.nasd.com	https://oats.nasd.com
FTP – SAVVIS	oatstest-ftp.nasd.com	oats-ftp.nasd.com
IFT	iftcert.nasd.com	ift.nasd.com
E-mail via Internet	testoatsfiles@nasd.com	oatsfiles@nasd.com
E-mail for requesting the OATS Certificate	testoatskey@nasd.com	oatskey@nasd.com

3.2.2   IP Addresses for FTP Transmission

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

3.3   Access to OATS Information

3.3.1   OATS Feedback

Feedback items include information conveyed from NASD 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 from NASD via FTP and IFT must be "pulled" from OATS. OATS will not "push" any information to member firms via FTP and IFT. Full procedures for obtaining feedback from OATS are in the *OATS Subscriber Manual*.

- **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 or IFT, FORE Status would be retrieved from the OATS FTP and IFT servers, and if the FORE were submitted via e-mail, a return e-mail message containing the FORE Status would automatically be sent to the originator. In all cases, FORE Status can be viewed on the Web interface.

- **ROE Rejections—**Failure of any ROE to pass validation rules as described in Appendix C will result in a rejection of that ROE. 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, 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 at their firm.

   NOTE: All repaired ROEs must have the ROE Resubmit Flag set to 'Y'.

- **Reporting Statistics**—Reporting statistics are available via the Web interface. These statistics will include counts of the number of received order events and rejects by the type of event, number of resubmissions as well as the number of late reports. These statistics are available on a daily basis, but they will not be posted until processing for all files has completed.

- **Unmatched Execution Reports**—Execution or Combined Order/Execution Reports that have passed OATS validation checks but after two days do not match to an NASD Trade Reporting System trade record are considered to be unmatched. Unmatched Execution and Combined Order/Execution Reports may be viewed or downloaded via the Web interface. More information about the conditions causing order data to be considered unmatched is in Appendix C, "Order Report Formats."

- **Unmatched NASDAQ Route Reports**—Route or Combined Order/Route Reports that have passed OATS validation checks but after two days do not match to a related NASDAQ Exchange order record are considered to be unmatched. Unmatched Route and Combined Order/Route Reports may be viewed or downloaded via the Web interface.

- **Unmatched Interfirm Route Report- Orders Routed** – Route or Combined Order/Route Reports routed to another member firm or ECN that have passed OATS validation checks but do not link to a corresponding New, Cancel Replace, Combined Order/Execution or Combined Order/Route Report are considered to be unmatched. Unmatched Route and Combined Order/Route Reports may be viewed or downloaded via the Web interface.

- **Unmatched Interfirm Route Report - Orders Received** – Route or Combined Order/Route Reports received by another member firm or ECN that have passed OATS validation checks but do not link to a corresponding New, Cancel Replace, Combined Order/Execution or Combined Order/Route Report are considered to be unmatched. Unmatched Route and Combined Order/Route Reports may be viewed or downloaded via 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/IFT Announcements-** This information is available via FTP and/or IFT. FTP/IFT users will receive OATS Announcements in a text file located in a folder titled "message". Refer to Figures 3-3. and 3-5. for Information Flow.
- **Account Maintenance**—This information is available only via the Web interface. OSOs will perform their own account maintenance. An OATS

Administrator is able to update contact information and request that users or passwords be changed, added, or deleted. Additional details about account maintenance are available in the *OATS Subscriber Manual*. **(NOTE: Please keep contact information current)**

3.4 Security

Submissions to NASD require a valid user ID and password combination. OSOs will 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 required to designate those OSO's who will transmit on their behalf.

The additional security options for each type of access mechanism are discussed below. All information exchanges using these access mechanisms will use the same security features.

3.4.1   FTP

OSOs are required to log on to NASD's FTP server using a supplied user ID and password that corresponds with an FTP User account type. 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 via FTP.

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. An OSO that transmits files for several firms must submit a separate FORE for each firm. 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.

Files sent via FTP are NOT encrypted and can only be sent via the OATS/SAVVIS network. Each file must have a unique name so that all firms may access only their own file and record status information. NASD will not test for unique external file names on FTP submission. FORE files sent to OATS may not have filename extensions of *.status* or *.rejects*, and may not contain colons or spaces.

3.4.2   E-mail

File submissions sent via e-mail must contain a valid user ID and password and must be encrypted using S/MIME. To provide adequate security, a non-export version of the Microsoft or Netscape e-mail client is required. An OSO that submits files via e-mail must obtain NASD's certificate via a non-encrypted e-mail request. This certificate is used by the S/MIME encryption engine in the e-mail client. Annually, each OSO that submits files via e-mail is required to refresh NASD's certificate by requesting a new certificate. E-mail users can obtain their own certificates and can sign their e-mail messages prior to submission, but NASD will not examine the signature. FORE files sent to OATS may not have filename extensions of *.status* or *.rejects*, and may not contain

colons or spaces. Additional details of e-mail submissions are included in the *OATS Subscriber Manual*.

3.4.3   Web Interface

All Web interfaces use SSL encryption with server-side certificates obtained from Verisign, Inc. The formats and Web page designs are presented in the *OATS Subscriber Manual*. 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.

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

3.4.4   Internet File Transfer (IFT)

The OATS user ID and password that corresponds with an IFT User account type is part of the SecureTransport™ client software profile set up and is automatically used during transmission. 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 via IFT.

An OSO will only be required to select the files that will be transmitted during that session. An OSO that transmits files for several firms must submit a separate FORE for each firm. 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.

Files sent via IFT are NOT encrypted and can only be sent via the SecureTransport™ client software. Each file must have a unique name so that all firms may access only their own file and record status information. NASD will not test for unique external file names on IFT submission. FORE files sent to OATS may not have filename extensions of *.status* or *.rejects*, and may not contain colons or spaces.

3.5 Data Flow Examples

Figure 3-3., Figure 3-4., and Figure 3-5. depict a typical exchange of OATS information between an OSO and NASD. Figure 3-3. depicts an FTP interface FORE file submission, and Figure 3-4. depicts an e-mail FORE file submission. Figure 3-5 depicts an IFT FORE file submission. 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 NASD 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. Details about transmitting files via each method and receiving feedback from OATS is contained in the *OATS Subscriber Manual*.)

Figure 3-3. Typical OATS Information Flow Via FTP

OSO	NASD

At end of day or at time chosen by OSO

At time chosen by NASD

(Before 4AM)

- Collect information on order events
- Package into FORE file
- Connect to NASD's FTP server
- Logon with <userid>/<password>
- `bin`
- `put <filename>`

①

- Generate announcement
- Post `<YYYYMMDDHH24MISS>.message`

ⓐ

If rejected, correct error(s) and resubmit

- Receive file
- Examine the submission
- Generate status for each FORE in the file
- Post as `filename.status` or `filename.status-n`

②

- Connect to NASD's FTP server
- Logon with <userid>/<password>
- `bin`
- `cd status`
- For single FORE submissions: `get filename.status`
- For multiple FORE submissions: `get filename.status-n` or `mget *`

③

(Within 1 hour)

- Process ROEs in the file
- Generate ROE rejections (if any)
- Post as `YYYYMMDD.reject` or `YYYYMMDD.reject-n`

④

- Connect to NASD's FTP server
- Logon with <userid>/<password>
- `bin`
- `cd rejects`
- `get YYYYMMDD.reject` or `get YYYYMMDD.reject-n` or `mget *`

⑤ (Within 24 hours after end of reporting period)

- Connect to NASD's FTP server
- Logon with <userid>/<password>
- `bin`
- `cd message`
- `mget YYYYMMDD*`

ⓑ

Figure 3-4. Typical OATS Information Flow Via E-mail

OSO	NASD

• Refresh the OATS Certificate once annually within the e-mail client

At end of day or at time chosen by OSO

(Before 4AM)

1
• Collect information on order events
• Package into FORE file
• Attach the FORE to an e-mail message
• Encrypt (and sign, if necessary) the e-mail message
• Send e-mail message to OATS

2
• Receive File
• Examine the submission
• Generate status for each FORE in the file
• Attach <filename>.status to an e-mail message
• Send e-mail message to submitter

If rejected, correct error(s) and resubmit

• Receive FORE status e-mail message from OATS

(Within 1 hour)

3

4
• Process ROEs in the file
• Generate ROE rejections (if any)
• Post rejections to Web database

5
• Connect to OATS' Web server
• Logon with <userid>/<password>
• Navigate to rejections
• Examine each rejection
• Make repair, mark for submission
• Repeat until all rejections are repaired
• Submit all repaired rejections to NASD
(NASD will create FORE file and submit)

(Within 24 hours after end of reporting period)

Figure 3-5. Typical OATS Information Flow Via IFT

OSO	NASD

At end of day or at time chosen by OSO

At time chosen by NASD

(Before 4AM)

- Collect information on order events
- Package into FORE file
- Connect to NASD via SecureTransport client software
- Transmit files using client software

1

- Generate accouncement
- Post <YYYYMMDDHH24MISS>.message

a

If rejected, correct error(s) and resubmit

- Receive file
- Examine the submission
- Generate status for each FORE in the file
- Post as `filename.status` or `filename.status-n`

2

(Within 1 hour)

- Connect to NASD using SecureTransport client software
- Download status from Status folder

3

- Process ROEs in the file
- Generate ROE rejections (if any)
- Post as `YYYYMMDD.reject` or `YYYYMMDD.reject-n`

4

- Connect to NASD using SecureTransport client software
- Download rejections from Rejection folder

5 (Within 24 hours after end of reporting period)

- Connet to NASD using Secure Transport client software
- Download messages from message folder

b

3.6 Registration Process

Members that are subject to the OATS Rules must register for OATS by completing a Subscriber Initiation and Registration Form (SIRF). This form is available on the NASD OATS Web Pages on NASD's Web Site (*www.nasd.com/oats*). Firms and third parties that will be reporting must download this registration form and submit it to NASD at least 10 business days before their scheduled reporting date. Firms that will be using one or more third parties to report OATS data should ensure that all third parties register with OATS.

The SIRF requires firms and third parties to identify organizations reporting on their behalf, and the transport method(s) that they will use for reporting, including file transfer protocol (FTP), Internet File Transfer (IFT), the web interface or e-mail.

Any firm or third party that intends to submit data directly to OATS that has not completed the registration form should immediately contact NASD Business and Technology Support Services for assistance with obtaining and completing the form. Firms that fail to complete and return the registration form will not be able to report OATS data to NASD; failure to report order information by the specified OATS implementation date is in violation of NASD Rules 6955 and 2110.

NASD will provide to registered organizations information about receiving a user ID and password and specific dates to begin reporting production data.

The *OATS Subscriber Manual*, which describes procedures for transmitting data to OATS, performing self-administration, and using the OATS Web interface, is available on the OATS Web Pages on NASD's Web Site: *http://www.nasd.com/oats.*

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

The mission of OATS is to establish and maintain the complete life cycle of an order. To achieve this mission, 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 other entity, and link the order to a trade as reported to an NASD Trade Reporting System. NOTE: In order to accomplish this objective, **all times reported must be in Eastern Military (24 hour clock) Time**.

4.1.1   Reporting Order Events to OATS

NASD Rule 6951(i) defines "orders" subject to OATS reporting as "any oral, written, or electronic instruction to effect a transaction in an equity security listed on the Nasdaq Stock Market 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 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." Orders involving 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 under this definition.. As the definition suggests, a member is not required to report orders originated by the trading desk in the normal course of market making activity. OATS rules require an ECN to report every order it receives for an OATS reportable security, including without limitation convertible securities (e.g., convertible bonds), even if the order is placed by a non-member or a market maker in the security. For example, if a market maker in Oracle placed an order with an ECN for shares of Oracle, the ECN would be required to report to OATS receipt of the order.

Firms must record and report each event in the life cycle of an order, from receipt or origination of the order through execution or cancellation.

Table 4-1 lists the reportable order events and their associated report formats. Each format is fully defined in Appendix C.

Table 4-1. Summary of Reportable Order Events

Order Report Type	Event Type	Report Description	Rule
New Order Report [1]	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.	6954(b)
	Receipt by Desk or Department Within a Firm	Records the full receipt of an order at a desk or department within a member firm on the same day.	6954(c)
	Order Cancellation	Records the cancellation of the order when the order is received and fully canceled on the same day.	6954(d)
Route Report	Order Transmittal/Route to Another Member/ECN, Non-Member or the NASDAQ Exchange	Records the routing of an order to another member firm, ECN, non-member or the NASDAQ Exchange for handling or execution.	6954(c)
Desk Report	Receipt by Desk or Department Within a Firm	Records the receipt of a full or partial order at a desk or department within a member firm.	6954(c)
Execution Report	Order Execution	Records the full or partial execution of an order.	6954(d)
Cancel Report	Order Cancellation	Records the full or partial cancellation of an order.	6954(d)
Cancel/Replace Report	Order Modification	Records the modification of an order.	6954(d)
Combined Order/Execution Report [2]	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.	6954(b), 6954(d)
	Receipt by Desk or Department Within a Firm	Records the full receipt of an order at a desk or department within a member firm on the same day.	6954(c)
Combined Order/Route Report [3]	Order Receipt or Origination and Order Transmittal/Route to Another Member/ECN, Non-Member or the NASDAQ 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.	6954(b), 6954(c)
	Receipt by Desk or Department Within a Firm	Records the full receipt of an order at a desk or department within a member firm and the route of the order on the same day.	6954(c)
	Order Cancellation	Records the cancellation of the order when the order is received and fully canceled on the same day.	6954(d)

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[1]The New Order Report includes fields for cancellation and desk information.

[2]The Combined Order/Execution Report includes fields for desk information.

[3]The Combined Order/Route Report includes fields for desk information.

4.2 Event Types

4.2.1   Order Receipt or Origination

When an NASD member originates or receives an order in an OATS reportable security, the member has an obligation to record and report certain information to OATS regarding that order. Member firms must assign an alphanumeric identifier (order identifier) to each received order. The order identifier may be a Branch Sequence Number or another identifier that is meaningful to the firm. Order identifiers must be unique to the firm within an OATS Business Day[4]. The order identifier, along with the order received date and time, and the firm's market participant identifier (MPID) allow OATS to link order events, therefore, members must include the order identifier on all reports related to the original order.

Members must also report the 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. All order receipt times must be taken from business clocks that are synchronized to within three seconds of the NIST standard. (See Chapter 2-Clock Synchronization.)

As mentioned previously, OATS uses the individual order events submitted by members to build a lifecycle of each order from its origination through its final resolution, including routes between member firms. To facilitate this lifecycle process, members are required to include certain codes on their new order events to help OATS identify the method of receipt and whether the order came from another member. Retail customers are considered non-members for the purposes of OATS. Members receiving electronic orders from other OATS reporting member firms are required to report to OATS the identity of the order sending member and an identifier used by the order sending member and passed to the receiving member during the order routing process.

4.2.2   Receipt by Desk or Department Within a Firm

When an NASD member originates or receives an order and then subsequently transmits that order to another desk or department within the member, the member is required to record and report certain information to OATS regarding that intra-firm transmittal. Information required to be reported to OATS includes the time of receipt by the desk or department if different than the time of receipt at the firm, the nature of the desk receiving the order, the number of shares transmitted and any special handling codes associated with the intra-firm transmittal. The nature of the desk must be reported using a unique code as specified by NASD. Types of desks include the trading desk, the sales desk and the arbitrage desk. The trading desk is interpreted as a place within the firm where an order can be executed, either automatically or with the assistance of traders. Finally, members must report to OATS any special handling codes that are communicated by the receiving department to the trading or other department, such as

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[4]An OATS 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.

"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. For example, a Sales Desk may receive a Not Held order, but transmit smaller pieces of that order to its Trading Desk as Held orders.

4.2.3   Order Transmittal/Route to another Member/ECN, Non-Member or the NASDAQ Exchange

When an NASD member receives and transmits an order to another member or entity for handling or execution; then, for OATS purposes, the order has been routed. For instance, if a non-market maker receives an order from a customer and transmits the order to a market maker, ECN or the NASDAQ Exchange (formerly known as the NASDAQ Market Center) for execution, the order has been "routed" to that entity. Some orders are transmitted to entities or exchanges that are not NASD member firms; such orders are considered "routed" to non-members. An order that is transferred between two valid MPIDs within the same firm is also considered routed.

Firms that transmit orders through non-member routing and trading systems are not considered, for OATS purposes, to be routing the orders to the trading system; instead firms are considered to be routing the orders to the member or non-member firm 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 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.

4.2.3.1   *Order Routing to NASD Member Broker/Dealers and ECNs*

When an NASD member receives or originates an order and transmits it to another member or ECN for handling or execution, then the order has been routed to that member or ECN. Each time an order is routed, both the routing and receiving firms have reporting responsibilities to OATS. The routing firm must report, among other elements, the MPID of the firm to which the order was routed, the date and time the transmission occurred (in Eastern Time), and an indication of whether the order was transmitted electronically, manually, or via a Smart Router.

If the transmission occurred electronically or via a Smart Router, the routing firm must pass a routed order identifier to the receiving firm or ECN. This may be the same order identifier reported to OATS when the order was received, or it may be another number assigned when the order was routed to the other firm, such as a Branch Sequence Number.

The receiving firm or ECN must assign its own order identifier to the order. In its report to OATS, the firm or ECN will include, among other elements, its own order identifier, the routed order identifier received from the routing firm and MPID of the routing firm, and an indication that the order was received electronically. This will allow OATS to make the connection between the two orders. It is important that the routed order

identifier of the routing firm be reported by the receiving firm in exactly the same format as received.

If the transmission occurred manually, such as over the telephone, the routing firm is not required to pass its routed order identifier to the receiving firm. The receiving firm must still assign its own order identifier to the order but is not required to report the routing firm's routed order identifier. Rather, it will report, among other elements, its own order identifier, the routing firm's MPID, and an indication that the order was received manually.

4.2.3.2   *Order Routing to the NASDAQ Exchange*

When a member firm enters an order into the NASDAQ Exchange the order is considered routed. The routing firm must report, among other elements, the fact that the order was routed to the NASDAQ Exchange, and the date and time the route occurred. If the order was routed electronically or via a Smart Router, the routing firm must include a routed order identifier when submitting the order to the NASDAQ Exchange. If the order was routed manually, such as through a NWII Workstation, the routing firm is not required to include a routed order identifier when submitting the order to the NASDAQ Exchange.

4.2.3.3   *Order Routing to a Non-Member*

When a member firm routes an order to a non-member exchange or broker/dealer[5], the routing member must report, among other elements, its own order identifier, the date and time the route occurred, and an indication that it routed the order to a non-member. Also, the routing firm may report the MPID of the non-member exchange or broker/dealer to the extent one exists.

4.2.4   Order Modification

Since each order must have a unique identifier in OATS, customer-initiated modifications to an order typically must be reported as a cancellation with replacement. This requires that the modified order be assigned a new order identifier. The time of the modification, as reported to OATS, should reflect the time the customer instruction was received by the member and not the time of any system acknowledgement or acceptance of the modification. Some types of order modifications are handled in a different manner, as discussed below:

- A reduction in quantity is reported as partial cancellation rather than a cancellation with replacement.

- ECNs are not required to report price changes for pegged orders (i.e., orders with limit prices that are derived from a designated market condition); however, the ECN must indicate to OATS the fact that an order is pegged.

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[5] Non-member electronic order routing and trading systems are not covered under this requirement. Orders are routed **through** or **via** such entities, not **to** them; therefore, the fact that they receive an order from a member firm is not reportable to OATS. Rather, a reportable event occurs when a member firm transmits an order or receives an order through or via a non-member electronic order routing or trading system.

- Firms are not required to report as a modification or cancellation to OATS the cancellation of a route. For example, if the member routes an order to an ECN, but does not receive an execution, and decides instead to route the order to another market center, the firm would report the first route to the ECN and then another route to the second market center. No OATS report would be required to reflect that the firm sent a cancellation message to the ECN for the original 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. If the order was modified by a trader or trading software after being routed to a non-member that has no OATS reporting obligations, then the modifications must be reported by the member.

Reports that require correction or deletion for reasons not described above (i.e., firm-generated errors), and unrelated to customer-initiated changes, must be corrected or deleted via correction and deletion reports, described in Section 6—Feedback and Corrections.

4.2.5   Order Execution

When an NASD 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. The member must report full or partial executions (fills) of an order. In the case of one or more partial executions, the member must indicate the quantity of remaining shares. If the order is routed from one member to another, only the firm that executes the order should report the execution information to OATS.

In addition, the member must identify the national securities exchange or facility operated by a registered securities association to which the associated trade was reported. For any trade reported to an NASD Trade Reporting System, OATS will attempt to match the execution information reported to OATS to the trade report. In order to match the NASD Trade Reporting System trade report, OATS requires the member to report a Branch Sequence Number. The Branch Sequence number is used to link an OATS execution to the NASD Trade Reporting System trade report. A Branch Sequence Number is not required when a member indicates that a trade report was not required to be submitted to an NASD Trade Reporting System.

NOTE: When a firm sends an order to another exchange for further handling or execution, NASD considers the order routed. In these cases, the member must submit order route information and not order execution information to OATS.

4.2.6   Order Cancellation

When an NASD member originates or receives an order, and the firm or the customer subsequently cancels the order during the course of the day or cancels the order after the date of receipt, the member is required to record and report certain information to OATS regarding the cancellation. The member firm must report the type of cancellation to OATS. If the entire share quantity is being canceled, the full cancellation of the order must be reported. If less than the entire share quantity of the order is being canceled, the

partial cancellation of the order must be reported along with the remaining leaves quantity.

In addition, OATS also requires that member firms indicate who has requested the cancellation of the order (i.e., the firm or the customer). 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.

The time of cancellation, as reported to OATS, must reflect the time the customer instruction was received by the firm and not the time of any system acknowledgement or acceptance.

NOTE: 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. NASD is able to determine that the order has expired based on the time in force as reported by the firm to OATS.

- 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.

    o If a firm cancels the routing of an order to the NASDAQ Exchange, the firm should not submit cancel information to OATS since the cancel would be reflected by the NASDAQ Exchange.

- Correcting an Error—Firms that erroneously submit a report to OATS should correct the error by using a Correction Report and should not submit cancel information to OATS. The Correction Report shows that the order remains live, but was corrected for OATS reporting purposes by the firm. In this instance submitting cancel information would be inappropriate since the customer has not canceled the order.

4.3 Order Report Types

This section describes the order reports and data elements for each reportable event to be sent to OATS by member firms. Only business-oriented data elements are listed. The complete definition of report formats and data elements is contained in Appendix C.

Firms and ECNs must assign an alphanumeric identifier (order identifier), which may be up to 20 characters in length, to each received order. The order identifier may be a Branch Sequence Number or another identifier that is meaningful to the firm. Order identifiers must be unique for the firm within a day[6]. The order identifier, the order received date and time, and the firm's market participant identifier (MPID) allow OATS to uniquely identify the order across the entire market.

Beginning with Phase III, additional fields were added to the New Order, Combined Order/Route, and Combined Order/Execution Reports to be used to report receipt of an entire order by another department within a firm on the same day the order is received or originated. Orders that are partially received by another department within a firm must be reported using a separate Desk Report.

4.3.1   New Order Report

The New Order Report provides the details of an order received by a member firm or ECN. The order may originate from a customer, another member or non-member firm, or a department within a firm. The information reported on the New Order Report is from the perspective of the receiving firm and not necessarily from the perspective of the firm that initially received the order. For instance, if a market maker received an order from a non-market maker, the market maker's New Order Report would contain order details provided by the non-market maker, not the original customer. Thus, the market maker would not be required to determine if the customer were executing a program or index arbitrage trade.

NASD OATS Rules require any firm subject to order reporting to submit a New Order Report whenever it receives or originates an order in an OATS reportable security. The information required varies slightly depending upon whether the order is received directly from a customer, initiated within the firm, or received from another member. A definition for each field is provided in Appendix A. Specific instructions for the data elements required under these circumstances are provided in Appendix C. The New Order Report can also be used to report cancellation of an order that was received and fully canceled on the same day as well as the receipt of the full shares quantity by a desk or department within a firm.

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[6] If a firm chooses to populate the time in the Order Receiving Firm Order Received Date field (see Appendix C), then it may reuse an Order ID provided that the Order ID is used at least a second later.

Major data elements included on the New Order report are:

New Order Report
Order Receiving Firm MPID
Order Receiving Firm 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
Limit Price
Limit Order Display Indicator
Stop Price
Time in Force Code
Expiration Date
Expiration Time
Do Not Reduce/Do Not Increase Code
First Special Handling Code
Second Special Handling Code
Third Special Handling Code
Fourth Special Handling Code
Fifth Special Handling Code
Receiving Terminal ID
Receiving Department ID
Originating Department ID
Account Type Code
Program Trading Code
Arbitrage Code
Member Type Code
ECN Flag
Order Cancel Timestamp
Canceled by Flag
Received by Desk ID
Desk Received Timestamp
Desk Type Code
Desk Special Handling Code 1
Desk Special Handling Code 2
Desk Special Handling Code 3
Desk Special Handling Code 4
Desk Special Handling Code 5
TMO Trigger Timestamp

The Order Receiving Firm MPID, the Order Receiving Firm Order Received Date, and the Order Receiving Firm Order ID identify an order in OATS. In the New Order Report, firms must use the following criteria to identify orders received from other firms:

- If a firm or ECN receives an order electronically from another OATS reporting member firm, both the Routing Firm MPID and the Routed Order ID must be reported.

- If a firm or ECN receives an order manually from another OATS reporting member firm, only the Routing Firm MPID must be reported.

- If a firm or ECN receives an order either electronically or manually from a non-member broker/dealer or exchange, the MPID of the non-member may be reported as the Routing Firm MPID along with the Routed Order ID to the extent either exists and is provided.

- If a firm or ECN receives a retail customer order (the Account Type Code is 'R'), the Member Type Code should be 'N' to indicate non-member.

- If a firm or ECN receives an order either electronically or manually from a member that does not meet the definition of OATS Reporting Member pursuant to NASD Rule 6951(n), only the Routing Firm MPID must be reported. The Member Type code should be 'E' to indicate a non-reporting member.

Any order event reported to OATS that does not link to a New Order Report that exists in OATS will be rejected. For example, if you begin transmitting to OATS on March 1, 2006, and you submit an Execution Report for an order that was received February 15, 2006, the Execution Report will be rejected because no New Order Report for the order exists in OATS.

NOTE: When reporting a fractional share order of less than one (1) share to the OATS system, the "Reporting Member" or its "Reporting Agent" should round the "Shares Quantity" up to one (1) instead of down to zero (0); otherwise, the order event(s) will be rejected for invalid shares quantity.

4.3.2   Route Report

Whenever a member transmits an order to another member, ECN, non-member, or the NASDAQ Exchange for handling or execution, the routing member must send a Route Report. A member that receives a routed order must send a corresponding New Order Report (as described above). The Route Report captures the date and time that the order was routed, the MPID of the member or ECN to which the order was routed, and the number of shares routed. In addition, the routing firm must specify the method by which the order was routed to another member as well as the destination type. Major data elements included on the Route Report are:

Route Report
Order Receiving Firm MPID
Order Receiving Firm Order Received Date
Order Receiving Firm Order ID
Routed Order ID
Issue Symbol ID
Sent to Firm MPID
Order Sent Timestamp
Routed Shares Quantity

Routing Method Code
Bunched Order Indicator
Destination Code

For orders routed electronically between two OATS reporting member firms, the routing firm must pass a Routed Order ID to the receiving firm. This may be the same Order ID reported to OATS when the order was received, or it may be another Order ID assigned when the order was routed, such as a Branch Sequence Number.

If an order is routed to the same destination within the same second, the Routed Order ID passed to the receiving firm must be different for each route having the same shares quantity. This will prevent the records from being rejected by OATS as duplicates and will remove ambiguity when OATS links the Route Report from the routing firm to the New Order Report from the receiving firm. The requirements for passing the Routed Order ID to the receiving firm include:

- If a firm routes an order electronically or via a Smart Router to another OATS reporting member or to an ECN, the routing firm must provide the Routed Order ID to the receiving firm.

- If a firm routes an order electronically or via a Smart Router to the NASDAQ Exchange, the routing firm must provide a Routed Order ID using the Order ID field in the NASDAQ Exchange input format. (See Section 4.2.3.2 for additional information about routing to the NASDAQ Exchange.)

- If a firm routes an order manually to another member, an ECN, or the NASDAQ Exchange, the routing firm is not required to pass the Routed Order ID to the receiving firm or system.

- If a firm routes an order to a non-member, the routing firm may report the MPID of the non-member to the extent one exists, as well as, the Routed Order ID to the extent one is provided to the non-member.

If the firm combines orders, such that the total shares quantity routed represents more than one order, the routing firm must indicate that the order was bunched. Each order bunched must be reported on a separate routing report. For example, if two orders were bunched and routed to another firm, two routing reports must be sent to OATS, each identifying the order as bunched. Because the receiving firm is not aware the order is bunched, it responds by sending a single New Order Report to OATS. **The Routed Shares Quantity must equal the total number of shares routed in the bunched order.**

NOTE: When reporting the route of a fractional share order of less than one (1) share to the OATS system, the "Reporting Member" or its "Reporting Agent" should round the "Routed Shares Quantity" up to one (1) instead of down to zero (0); otherwise, the order event(s) will be rejected for invalid Routed Shares Quantity.

When a firm splits and routes an order to more than one firm, the firm routing the split order must send a Route Report for each partial quantity routed, even if the partial quantities were sent to the same firm. For example, if a 1,000-share order were split and routed to two separate firms, two Route Reports would need to be submitted to OATS.

In order to link any Route Reports to the related New Order Report, members must include the unique order identifier of the original New Order on the Route Report.

4.3.3   Desk Report

The Desk Report records the movement of an order between desks or departments within a firm. Identification of the department that first receives or originates an order is captured as part of the New Order Report. Subsequent stops of an order, including its transfer to the trading desk for execution, must be captured in a Desk Report and sent to OATS. For example, an order received by the Sales Desk and routed to the Index/Arbitrage Desk would result in a Desk Report, as would an order received by the Sales Desk and transferred to the Trading Desk. Firms must use the New Order, Combined Order/Route, or Combined Order/Execution Report to report the receipt of the full shares quantity of an order by another desk or department within a firm.

The Desk Report identifies the desk or department that received the order and the date and time of receipt. Major data elements included on the Desk Report are:

Desk Report
Order Receiving Firm MPID
Order Receiving Firm Order Received Date
Order Receiving Firm Order ID
Received by Desk ID
Issue Symbol ID
Desk Received Timestamp
Desk Shares Quantity
Desk Type Code
Desk Special Handling Code 1
Desk Special Handling Code 2
Desk Special Handling Code 3
Desk Special Handling Code 4
Desk Special Handling Code 5

In order to link any Desk Reports to the related New Order Report, members must include the unique order identifier of the original New Order on the Desk Report.

4.3.4   Execution Report

The purpose of the Execution Report is to report full or partial executions (fills) of an order and to indicate the quantity of remaining shares, in the case of one or more partial executions. In the case of an order that has been routed to another firm, only the firm executing the order must report the execution to OATS. For example, if a non-market maker routes an order to a market maker, only the market maker must report the execution to OATS.

Each execution of an order will result in a separate Execution Report. For example, if a 1,000-share order had two 500-share executions, two Execution Reports would be created and sent to OATS. Major data elements included on the Execution Report are:

Execution Report
Order Receiving Firm MPID
Order Receiving Firm Order Received Date
Order Receiving Firm Order ID
Execution Timestamp
Branch Sequence Number
Execution Quantity
Trader Terminal ID
Reporting Exception Code
Issue Symbol ID
Execution Type Indicator
Leaves Quantity
Market Center ID
Execution Price
Capacity Code

NOTE: When reporting a fractional share order execution of less than one (1) share to the OATS system, the "Reporting Member" or its "Reporting Agent" should round the "Execution Quantity" up to one (1) instead of down to zero (0); otherwise, the order event(s) will be rejected for invalid execution quantity.

To allow OATS to link orders to executions, NASD rules require firms to report a Branch Sequence Number in trade reports to an NASD Trade Reporting System. This number must identify the order (or group of orders, in the case of bunched execution/reporting) associated with the execution.

Because the Branch Sequence Number entered into an NASD Trade Reporting System and the Order ID reported to OATS may not be the same, both identifiers must be reported to OATS on the Execution Report to establish the link between the order and the trade. When possible, the Branch Sequence Number reported to an NASD Trade Reporting System should be the same as the Order ID reported to OATS. It is important to note the following points:

- Trade reports to an NASD Trade Reporting System must include a Branch Sequence Number to identify the executed order.

- If two orders in the same issue symbol are executed within the same second and are trade reported as two separate and distinct trades to an NASD Trade Reporting System, different branch sequence numbers must be used for each execution in order to allow OATS to match each OATS Execution Report to the correct trade report in the applicable NASD trade reporting system. Two orders that are crossed against each other (i.e. an agency cross), however, may utilize the same branch sequence on both OATS Execution Reports since they are being matched to the same agency cross transaction report submitted to an NASD Trade Reporting System.

- All trade reports to an NASD Trade Reporting System involving OATS reportable events require the entry of the execution date and time to the second.

There are a few exceptions when the Execution Report will not contain the Branch Sequence Number. For example, there are some types of executions that do not result in a

report to an NASD Trade Reporting System, such as orders originated in one department of a member firm that are executed from the proprietary account of another department of the same member firm. Members should note that if the Branch Sequence Number is not recorded in the Execution Report, a Reporting Exception Code must be supplied.

In order to link any Execution Reports to the related New Order Report, members must include the unique order identifier of the original New Order on the Execution Report.

4.3.5   Cancel Report

The Cancel Report is used to record the full or partial cancellation of an order. Firms must use the New Order or Combined Order/Route Report to report the full cancellation of an order on the same day as it was received.

The Cancel Report must be used for orders that are modified during the course of the day and subsequently canceled, or canceled in full after the date of receipt. In addition, the Cancel Report must be used to report a partial cancellation of an order, such as a reduction in the share quantity, also known as "Cancel with Leaves," or to report the cancellation of all remaining shares of an order. In these circumstances, if the entire share quantity of the order is being canceled, the Cancel Type Flag should reflect a full cancellation. If less than the entire share quantity of the order is being canceled, the Cancel Type Flag should reflect a partial cancellation.

When the customer cancels an order that was routed, the firm that originally received the order must send a report of cancellation to OATS (via the Cancel, New Order, or Combined Order/Route Reports, as appropriate) and communicate the cancellation to the firm to which the order was routed. The receiving firm must also send a report of cancellation to OATS. If the introducing firm is merely canceling the Route, not the order, and the order remains live, no report of cancellation is required. If a request for modification cannot be honored because the order had already been executed, a report of cancellation may be submitted to reflect the customer's instructions, but is not required. Major data elements included on the Cancel Report are:

Cancel Report
Order Receiving Firm MPID
Order Receiving Firm Order Received Date
Order Receiving Firm Order ID
Issue Symbol ID
Order Cancel Timestamp
Cancel Type Flag
Cancel Quantity
Cancel Leaves Quantity
Canceled By Flag

NOTE: When reporting the cancel of a fractional share order of less than one (1) share to the OATS system, the "Reporting Member" or its "Reporting Agent" should round the "Cancel Quantity" up to one (1) instead of down to zero (0); otherwise, the order event(s) will be rejected for invalid cancel quantity.

In order to link any Cancel Reports to the related Cancel Order Report, members must include the unique order identifier of the original New Order on the Cancel Report.

4.3.6 Cancel/Replace Report

The Cancel/Replace Report is used for all modifications to an order, including changes to limit or stop prices, quantity, time in force, or special handling codes. The Cancel/Replace Report should not be used to change the side or issue symbol of an order; rather, the order should be canceled and a New Order Report issued. (If a previously submitted order contains inaccurate information, firms should use correction and deletion reports instead of Cancel/Replace or Cancel Reports. See Section 6—Feedback and Corrections.) All modifications made by a customer to the terms of the order must be recorded and provided to OATS via a Cancel/Replace Report. The only exception is a reduction in quantity, which may also be reported on the Cancel Report as a Cancel with Leaves Quantity.

The Cancel/Replace Report contains the Order ID of the original order that was modified, the Order ID of the replacement order, and all required information for the replacement order. The replacement order must have a unique Order ID for the firm within the day. If the replaced order represents an order routed from another firm, the Routing Firm MPID must be identified. If the order was received electronically, the Routed Order ID is also required. If a request for modification cannot be honored because the order had already been executed, a Cancel/Replace Report may be submitted to reflect the customer's instructions, but is not required. Major data elements included on the Cancel/Replace Report are:

Cancel/Replace Report
Order Receiving Firm MPID
Replaced Order Received Date
Replaced Firm Order ID
Order Receiving Firm 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
Limit Price
Limit Order Display Indicator
Stop Price
Time in Force Code
Expiration Date
Expiration Time
Do Not Reduce/Do Not Increase Code
First Special Handling Code
Second Special Handling Code
Third Special Handling Code
Fourth Special Handling Code
Fifth Special Handling Code
Receiving Terminal ID
Receiving Department ID

Originating Department ID
Account Type Code
Program Trading Code
Arbitrage Code
Member Type Code
ECN Flag
TMO Trigger Timestamp

The Order Receiving Firm MPID, the Order Receiving Firm Order Received Date, and the Order Receiving Firm Order ID identify an order in OATS. In the Cancel/Replace Report, firms must use the following criteria to identify orders received from other firms:

- If a firm or ECN receives an order electronically from another OATS reporting member firm, both the Routing Firm MPID and the Routed Order ID must be reported.

- If a firm or ECN receives an order manually from another OATS reporting member firm, only the Routing Firm MPID must be reported.

- If a firm or ECN receives an order either electronically or manually from a non-member broker/dealer or exchange, the MPID of the non-member may be reported as the Routing Firm MPID along with the Routed Order ID to the extent either exists and is provided.

- If a firm or ECN receives a retail customer order (the Account Type Code is 'R'), the Member Type Code should be 'N' to indicate non-member.

- If a firm or ECN receives an order either electronically or manually from a member that does not meet the definition of OATS Reporting Member pursuant to NASD Rule 6951(n), only the Routing Firm MPID must be reported. The Member Type code should be 'E' to indicate a non-reporting member.

NOTE: When reporting a fractional share order of less than one (1) share to the OATS system, the "Reporting Member" or its "Reporting Agent" should round the "Shares Quantity" up to one (1) instead of down to zero (0); otherwise, the order event(s) will be rejected for invalid shares quantity.

4.3.7 Combined Order/Execution Report

The Combined Order/Execution Report must be used for orders received and fully executed in one trade on the same day[7] (see New Order and Execution reports for complete list of rules). For example, if a firm receives and immediately executes an order, the firm must create a combined report that reflects the details of both events in one report. If a limit day order were received and fully executed by one trade in the same day, the firm must report both events to OATS in the combined report. The Combined Order/Execution can also be used to report the receipt of the full shares quantity of an

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[7] There is an exception for members that use different OSOs to transmit the New Order information and the Execution information. In these instances, a separate New Order Report and Execution Report may be submitted.

order by another desk or department within a firm. Major data elements included on the
Combined/Order Execution Report are:

Combined Order/Execution Report
Order Receiving Firm MPID
Order Receiving Firm 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
Limit Price
Limit Order Display Indicator
Stop Price
Time in Force Code
Expiration Date
Expiration Time
Do Not Reduce/Do Not Increase Code
First Special Handling Code
Second Special Handling Code
Third Special Handling Code
Fourth Special Handling Code
Fifth Special Handling Code
Receiving Terminal ID
Receiving Department ID
Originating Department ID
Account Type Code
Program Trading Code
Arbitrage Code
Execution Timestamp
Branch Sequence Number
Execution Quantity
Trader Terminal ID
Reporting Exception Code
Market Center ID
Member Type Code
ECN Flag
Execution Price
Capacity Code
Order Shares Quantity
Received by Desk ID
Desk Received Timestamp
Desk Type Code
Desk Special Handling Code 1
Desk Special Handling Code 2
Desk Special Handling Code 3
Desk Special Handling Code 4
Desk Special Handling Code 5
TMO Trigger Timestamp

The Order Receiving Firm MPID, the Order Receiving Firm Order Received Date, and the Order Receiving Firm Order ID identify an order in OATS. In the Combined Order/Execution Report, firms must use the following criteria to identify orders received from other firms:

- If a firm or ECN receives an order electronically from another OATS reporting member firm, both the Routing Firm MPID and the Routed Order ID must be reported.

- If a firm or ECN receives an order manually from another OATS reporting member firm, only the Routing Firm MPID must be reported.

- If a firm or ECN receives an order either electronically or manually from a non-member broker/dealer or exchange, the MPID of the non-member may be reported as the Routing Firm MPID along with the Routed Order ID to the extent either exists and is provided.

- If a firm or ECN receives a retail customer order (the Account Type Code is 'R'), the Member Type Code should be 'N' to indicate non-member.

- If a firm or ECN receives an order either electronically or manually from a member that does not meet the definition of OATS Reporting Member pursuant to NASD Rule 6951(n), only the Routing Firm MPID must be reported. The Member Type code should be 'E' to indicate a non-reporting member.

NOTE: When reporting a fractional share order execution of less than one (1) share to the OATS system, the "Reporting Member" or its "Reporting Agent" should round the "Execution Quantity" up to one (1) instead of down to zero (0); otherwise, the order event(s) will be rejected for invalid execution quantity.

4.3.8   Combined Order/Route Report

The Combined Order/Route Report must be used for orders received and fully routed in the same day[8] (see New Order and Route reports for complete list of rules). For example, if a firm receives and immediately routes an order, the firm must construct a combined report that reflected the details of both events in one report. If a limit day order were received and fully routed in the same day, the firm must report both events to OATS in the combined report. The Combined Order/Route Report can also be used to report cancellation of an order that was received, fully routed, and fully canceled on the same day as well as the receipt of the full shares quantity by a desk or department within a firm.

Major data elements included on the Combined/Order Route Report are:

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[8] There is an exception for members that use different OSOs to transmit the New Order information and the Route information. In these instances, a separate New Order Report and Route Report may be submitted.

Combined Order/Route Report
Record Type
Order Event Type Code
Action Type Code
Firm ROE ID
Correction/ Deletion Timestamp
Rejected ROE Resubmit Flag
Order Receiving Firm MPID
Order Receiving Firm 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
Limit Price
Limit Order Display Indicator
Stop Price
Time in Force Code
Expiration Date
Expiration Time
Do Not Reduce/Do Not Increase Code
First Special Handling Code
Second Special Handling Code
Third Special Handling Code
Fourth Special Handling Code
Fifth Special Handling Code
Receiving Terminal ID
Receiving Department ID
Originating Department ID
Account Type Code
Program Trading Code
Arbitrage Code
Sent To Routed Order ID
Sent to Firm MPID
Order Sent Timestamp
Routed Shares Quantity
Routing Method Code
Bunched Order Indicator
Member Type Code
Destination Code
ECN Flag
Order Cancel Timestamp
Canceled By Flag
Order Shares Quantity
Received by Desk ID
Desk Received Timestamp
Desk Type Code
Desk Special Handling Code 1
Desk Special Handling Code 2
Desk Special Handling Code 3

Desk Special Handling Code 4
Desk Special Handling Code 5
TMO Trigger Timestamp

The Order Receiving Firm MPID, the Order Receiving Firm Order Received Date, and the Order Receiving Firm Order ID identify an order in OATS. In the Combined Order/Route Report, firms must use the following criteria to identify orders received from other firms:

- If a firm or ECN receives an order electronically from another OATS reporting member firm, both the Routing Firm MPID and the Routed Order ID must be reported.

- If a firm or ECN receives an order manually from another OATS reporting member firm, only the Routing Firm MPID must be reported.

- If a firm or ECN receives an order either electronically or manually from a non-member broker/dealer or exchange, the MPID of the non-member may be reported as the Routing Firm MPID along with the Routed Order ID to the extent either exists and is provided.

- If a firm or ECN receives a retail customer order (the Account Type Code is 'R'), the Member Type Code should be 'N' to indicate non-member.

- If a firm or ECN receives an order either electronically or manually from a member that does not meet the definition of OATS Reporting Member pursuant to NASD Rule 6951(n), only the Routing Firm MPID must be reported. The Member Type code should be 'E' to indicate a non-reporting member.

NOTE: When reporting a fractional share order route of less than one (1) share to the OATS system, the "Reporting Member" or its "Reporting Agent" should round the "Routed Shares Quantity" up to one (1) instead of down to zero (0); otherwise, the order event(s) will be rejected for invalid routed shares quantity.

4.4 Order Reporting Scenarios

This section provides a representative sample of order reporting scenarios that exist within the Nasdaq trading environment. It defines and illustrates representative scenarios and their reporting requirements. (For clarification about the effect of the capacity that firms are acting in, refer to Section 4.4—Capacity Scenarios.) NOTE: OATS is not a real-time system. Some order information, such as timestamps, must be recorded real-time, but order events occurring during one OATS Business Day are only required to be submitted to OATS by 04:00:00 Eastern Time the next calendar day or be considered late. Thus, the representations in the scenarios do not reflect the actual time when OATS reports are required to be submitted. They are only intended to illustrate which reports must be generated in response to order events.

Each scenario is accompanied by an event listing that presents some key data elements required by OATS from member firms. While the event listings illustrate key points in each scenario, they are not exhaustive. The purpose of the event listings is to provide examples of some common scenarios, not to present all possible market events.

The scenarios frequently refer to the entry of a Branch Sequence Number into both an NASD Trade Reporting System and the Execution Report to OATS. OATS uses this number for matching orders to NASD Trade Reporting System reports. The Branch Sequence Number is an eight-character alphanumeric value that will be entered into the Branch Sequence Number field in an NASD Trade Reporting System. (Although it is not a requirement, whenever possible the Order ID reported to OATS should be used as the Branch Sequence Number reported to an NASD Trade Reporting System.) Additionally, the scenarios illustrate the submission of NASD Trade Reporting System reports. The presence of NASD Trade Reporting System reports in an illustration refers to the submission of clearing reports and/or media reports to an NASD Trade Reporting System that include the Branch Sequence Number.

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 an NASD Trade 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 enables the matching of an NASD Trade Reporting System reported trade to each OATS reported order.

Figure 4-1. Order Execution
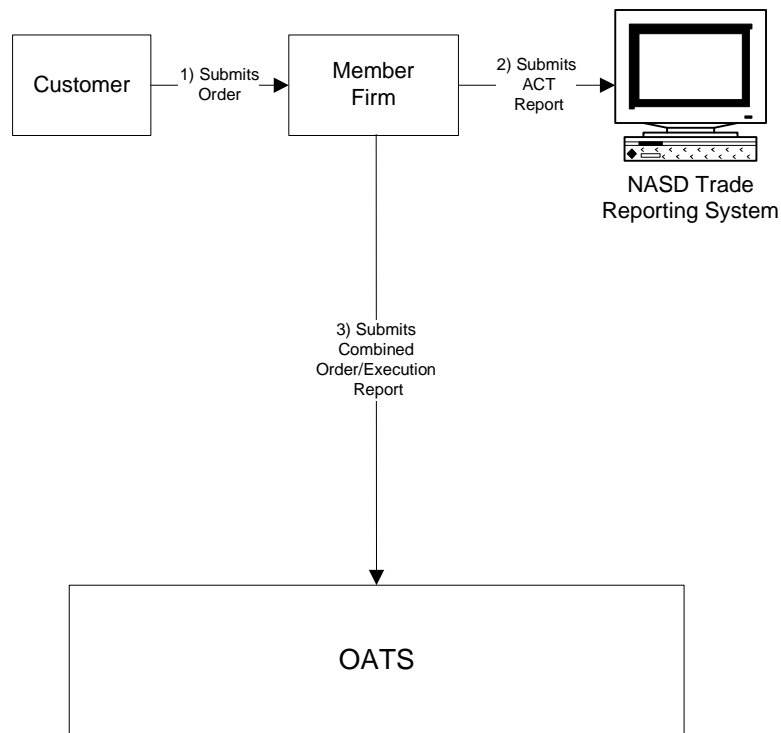
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department 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. If, however, the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

4. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-2. Order Execution, Event Listing

Ref	Event	Event Details
1	Customer submits order to Member Firm.	Market sell order for 2,000 shares of ORCL.
2	Member Firm fills order internally and submits an NASD Trade Reporting System Report.	Member fills order for 2,000 shares of ORCL and submits an NASD Trade Reporting System Report. The NASD Trade Reporting System Report includes Branch Sequence Number ABC123.
3	Member Firm submits Combined Order/Execution Report to OATS.	Combined Order/Execution sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102102800 Branch Sequence Num: ABC123 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.2   Agency Customer Cross Execution

This scenario illustrates the reporting requirements to OATS of a member firm that fills two customer orders via an agency customer cross. 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 execution of the order.

Furthermore, this scenario illustrates the following:

1. The member firm is required to send a Combined Order/Execution Report for each order.

2. When reporting to an NASD Trade 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 each Combined Order/Execution Report. The Branch Sequence Number enables the matching of an NASD Trade Reporting System reported trade to each OATS reported order.

Figure 4-2. Agency Customer Cross Execution
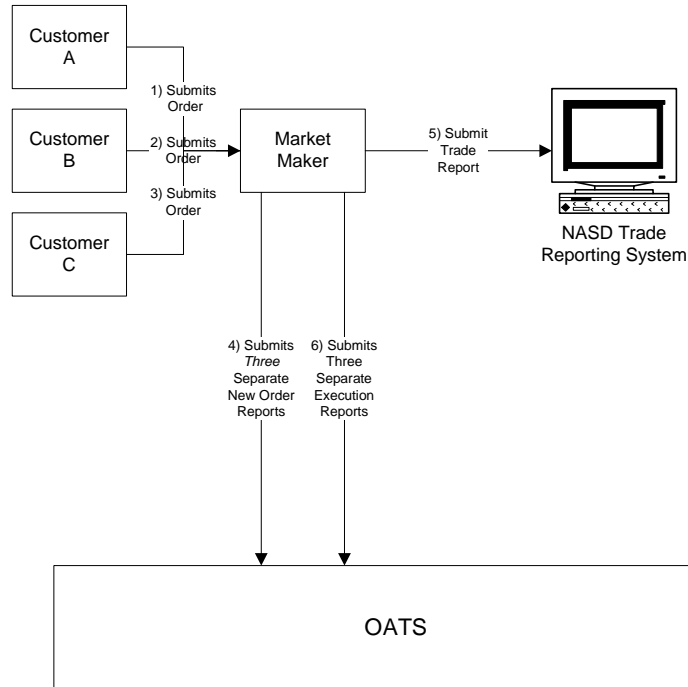
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department 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 trade is reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-3. Agency Customer Cross Execution, Event Listing

Ref	Event	Event Details
1	Customer A submits order to Member Firm.	Market sell order for 2,000 shares of ORCL.
2	Customer B submits order to Member Firm.	Market buy order for 2,000 shares of ORCL.
3	Member Firm submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number ABC123.
4	Member Firm submits two Combined Order/Execution Reports to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102103355 Execution Quantity: 2000 Branch Sequence Number: ABC123 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: A Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Order Received Timestamp: 20030102102530 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: B Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102103355 Branch Sequence Number: ABC123 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: A

4.4.3   Bunched Order Execution

This scenario illustrates the reporting requirements to OATS of a member firm that executes a trade whereby its orders are bunched for execution. In this scenario, the member firm is required to report the following events to OATS:

1. The receipt of each 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 each order that is bunched as part of the trade.

2. When reporting to an NASD Trade Reporting System, the member firm is required to submit a Branch Sequence Number for the bunched order. The member firm also submits this Branch Sequence Number to OATS on each Execution Report. The Branch Sequence Number enables the matching of an NASD Trade Reporting System reported trade to each OATS reported order.

Figure 4-3. Bunched Order Execution
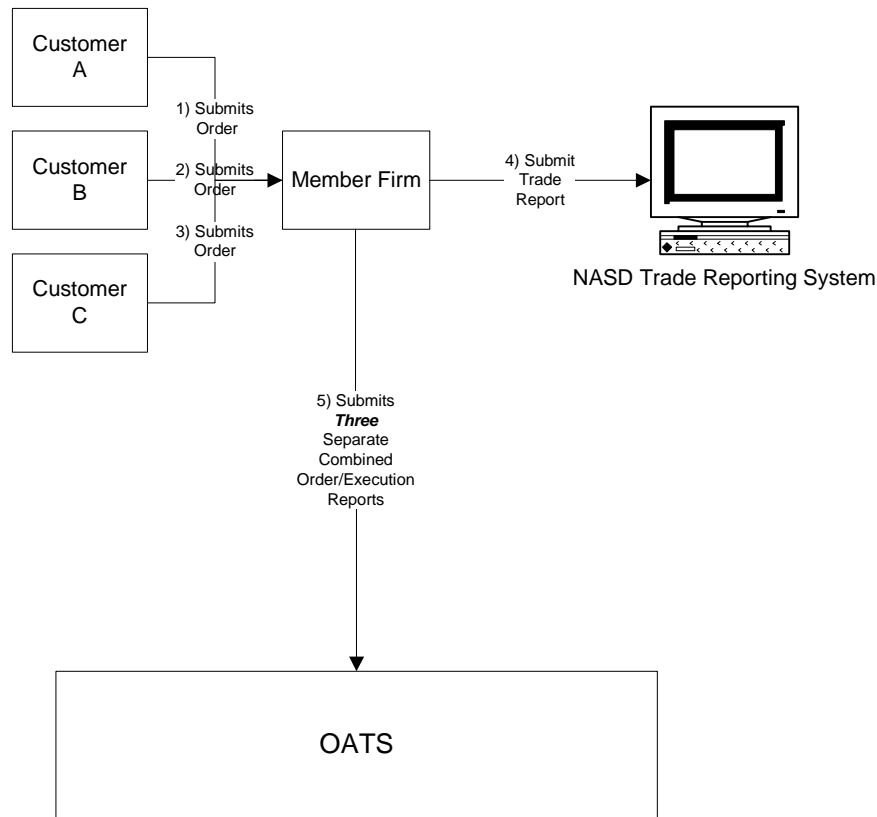
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

2. The member firm receives each order and fully executes each order in a single trade on the same day; otherwise, separate New Order and Execution reports must be used.

3. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

4. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-4. Bunched Order Execution, Event Listing

Ref	Event	Event Details
1	Customer A submits order to Member Firm.	Market sell order for 2,000 shares of ORCL.
2	Customer B submits order to Member Firm.	Market sell order for 3,000 shares of ORCL.
3	Customer C submits order to Member Firm.	Market sell order for 4,000 shares of ORCL.
4	Member Firm submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number ABC123.
5	Member Firm submits three Combined Order/Execution Reports to OATS.	Combined Order/Execution Report sample data includes:

Report 1:

Order Receiving Firm MPID:	MM01
Order Received Date:	20030102000000
Order Receiving Firm Order ID:	ABC123
Order Received Timestamp:	20030102105500
Received Method Code:	E
Issue Symbol ID:	ORCL
Buy/Sell Code:	SL
Shares Quantity:	2000
Account Type Code:	R
Member Type Code:	N
ECN Flag:	
Desk Timestamp:	
Received by Desk ID:	
Desk Type Code:	
Execution Timestamp:	20030102110500
Branch Sequence Number:	ABC123
Execution Quantity:	2000
Trader Terminal ID:	TERM00392
Market Center ID:	L
Execution Price:	11.04
Capacity Code:	P

Order Receiving Firm MPID:	MM01
Order Received Date:	20030102000000
Order Receiving Firm Order ID:	DEF456
Order Received Timestamp:	0030102105700
Received Method Code:	E
Issue Symbol ID:	ORCL
Buy/Sell Code:	SL
Shares Quantity:	3000
Account Type Code:	R
Member Type Code:	N
ECN Flag:	
Desk Timestamp:	
Received by Desk ID:	
Desk Type Code:	
Execution Timestamp:	20030102110500
Branch Sequence Number:	ABC123
Execution Quantity:	3000
Trader Terminal ID:	TERM00392
Market Center ID:	L
Execution Price:	11.04
Capacity Code:	P

Order Receiving Firm MPID:	MM01
Order Received Date:	20030102000000
Order Receiving Firm Order ID:	GHI789
Order Received Timestamp:	20030102115900
Received Method Code:	E
Issue Symbol ID:	ORCL

Ref	Event	Event Details	
		Buy/Sell Code:	SL
		Shares Quantity:	4000
		Account Type Code:	R
		Member Type Code:	N
		ECN Flag:	
		Desk Timestamp:	
		Received by Desk ID:	
		Desk Type Code:	
		Order Receiving Firm MPID:	MM01
		Order Received Date:	20030102000000
		Order Receiving Firm Order ID:	GHI789
		Execution Timestamp:	20030102110500
		Branch Sequence Number:	ABC123
		Execution Quantity:	4000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	11.04
		Capacity Code:	P

4.4.4   Order Execution via an ECN

This scenario illustrates the reporting requirements to OATS when a member firm executes an order via an ECN. In this scenario, the ECN matches the order from Member Firm 1 with the 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 the ECN.

The ECN 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. The ECN is required to report all orders received, even if an order is for a member firm's proprietary account.

2. The ECN 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.

3. When reporting to an NASD Trade Reporting System, the ECN will be required to submit a Branch Sequence Number for each trade report. The ECN will also submit these Branch Sequence Numbers to OATS via the Execution Reports. The Branch Sequence Number enables the matching of an NASD Trade Reporting System trade to an OATS reported order.

4. In this scenario, Member Firm 2 will not be required to report anything to OATS because it is trading for its own account in the ordinary course of market making. However, the ECN must report receipt of the firm's order to OATS.

Figure 4-4. Order Execution via an ECN
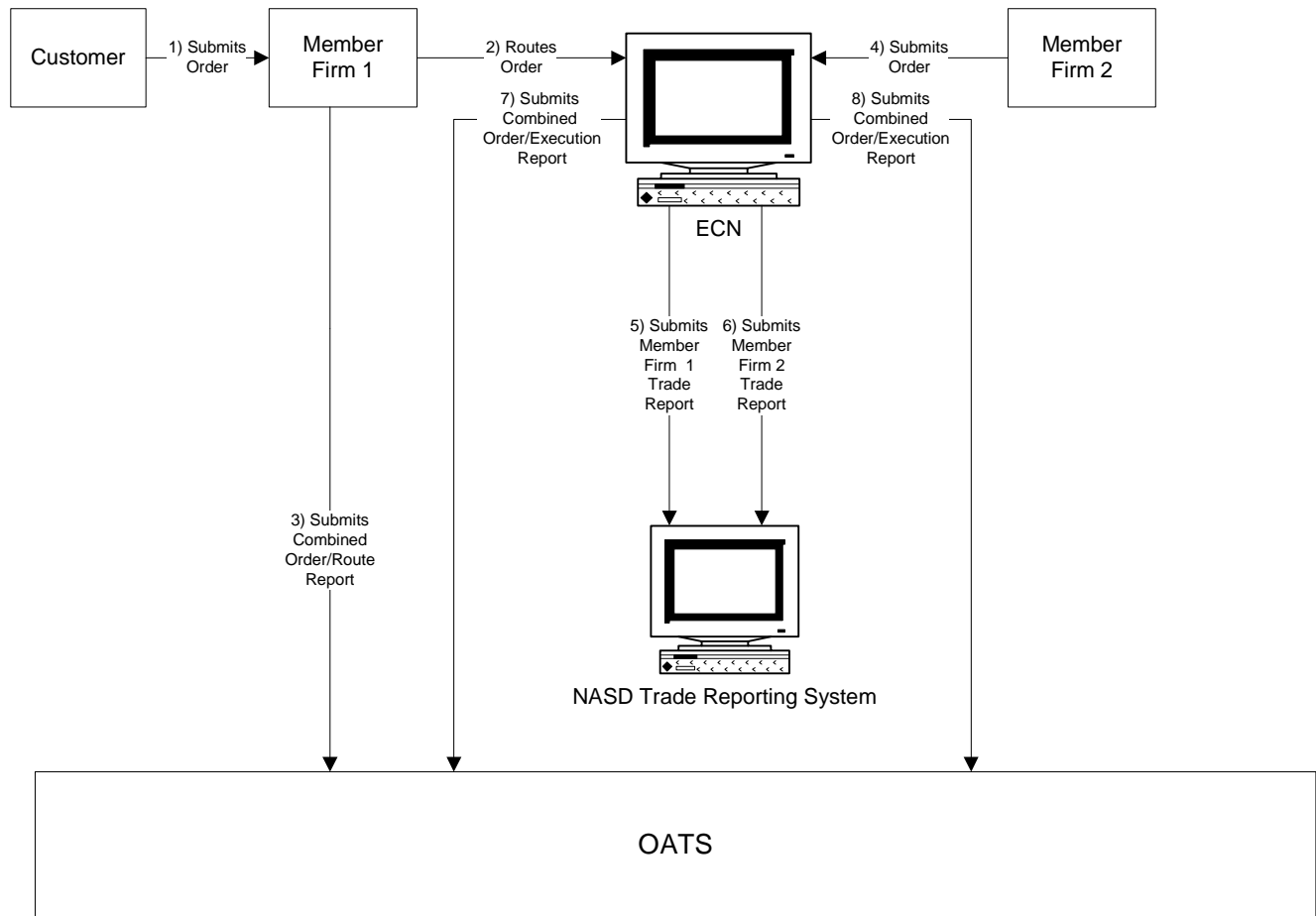
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

2. Member Firm 1 and Member Firm 2 both received and fully routed the order to the ECN on the same day; otherwise, separate New Order and Route Reports must be used.

3. The ECN 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 on an agency basis. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

5. The trades are reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-5. Order Execution via an ECN, Event Listing

Ref	Event	Event Details
1	Customer submits order to Member Firm 1.	Market sell order for 2,000 shares of ORCL.
2	Member Firm 1 routes customer's order to the ECN.	Market sell order for 2,000 shares of ORCL.
3	Member Firm 1 submits Combined Order/Route Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102105855 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: ECN1 Sent to Routed Order ID: ABC123 Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: E
4	Member Firm 2 submits an order to the ECN to increase its position in ORCL.	Market buy order for 2,000 shares of ORCL.
5	ECN executes the order and submits an NASD Trade Reporting System report (Member Firm 1 side).	Report includes Branch Sequence Number DEF456.
6	ECN executes the order and submits an NASD Trade Reporting System report (Member Firm 2 side).	Report includes Branch Sequence Number JKL123.
7	ECN submits Combined Order/Execution Report to OATS (Member Firm 1 side).	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: ECN1 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Routing Firm MPID: FIRM Routed Order ID: ABC123 Order Received Timestamp: 20030102110100 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Code: M ECN Flag: Y Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102110300 Branch Sequence Number: DEF456 Execution Quantity: 2000 Trader Terminal ID: TERM1 Market Center ID: L

Ref	Event	Event Details	
		Execution Price:	11.04
		Capacity Code:	A
8	ECN submits Combined Order/Execution Report to OATS (Member Firm 2 side).	Combined Order/Execution Report sample data includes:	
		Order Receiving Firm MPID:	ECN1
		Order Received Date:	20030102000000
		Order Receiving Firm Order ID:	JKL123
		Routing Firm MPID:	MM01
		Routed Order ID:	XYZ789
		Order Received Timestamp:	20030102110200
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	B
		Shares Quantity:	2000
		Account Type Code:	W
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Received by Desk ID:	
		Desk Type Code:	
		Execution Timestamp:	20030102110300
		Branch Sequence Number:	JKL123
		Execution Quantity:	2000
		Trader Terminal ID:	TERM01
		Market Center ID:	L
		Execution Price:	11.04
		Capacity Code:	A

4.4.5 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. The receipt of the order by the Trading Desk.

3. The execution of the order.

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

Furthermore, in this scenario, when reporting to an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-5. Desk Transmittal and Subsequent Execution
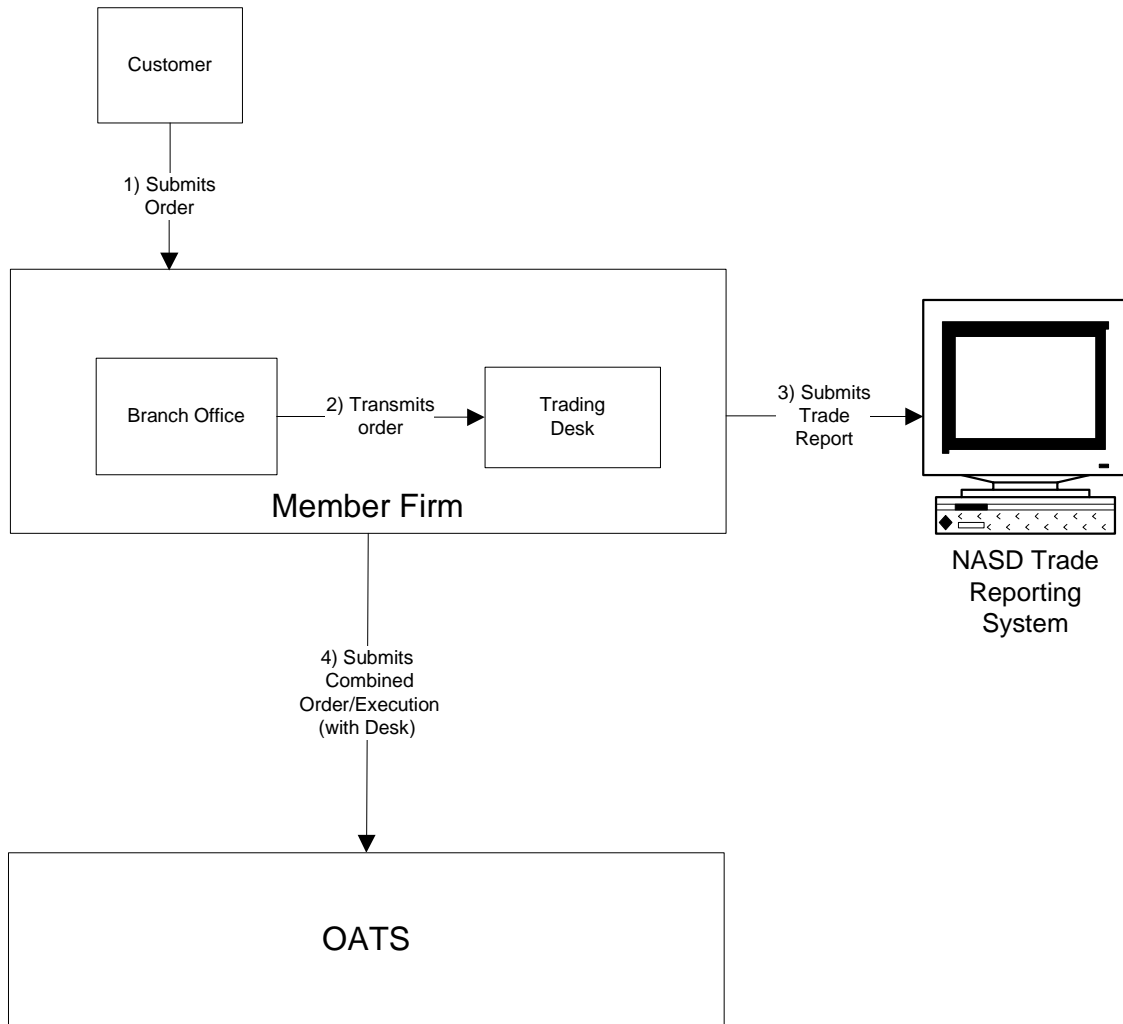
This scenario includes the following assumptions:

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. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

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 NASD/NASDAQ Trade Reporting Facility.

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

Ref	Event	Event Details
1	Branch Office receives an order from a customer.	Market sell order for 2,000 shares of ORCL.
2	Trading Desk receives order from the Branch Office.	Trading Desk receives order and order is filled from the proprietary account.
3	Member Firm submits an NASD Trade Reporting System report.	Report includes Branch Sequence Number ABCD1234.
4	Member firm submits a Combined Order/Execution (with Desk) Report to OATS.	Combined Order/Execution (with Desk) Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102102355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Receiving Terminal ID: TERM01 Account Type Code: R Member Type Code: N ECN Flag: Desk Received Timestamp: 20030102102356 Received By Desk ID: TradingDesk Desk Type Code: T Execution Timestamp: 20030102103359 Branch Sequence Number: ABCD1234 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.6   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 receipt of each piece of the order by the Trading Desk.

3. The execution of the order by the Member Firm.

Furthermore, this scenario illustrates the following details:

1. A Desk Report must be submitted to OATS when another department, including the Trading Desk receives the order from the Sales Desk.

2. When reporting to an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-6. Partial Desk Transmittal and Subsequent Execution
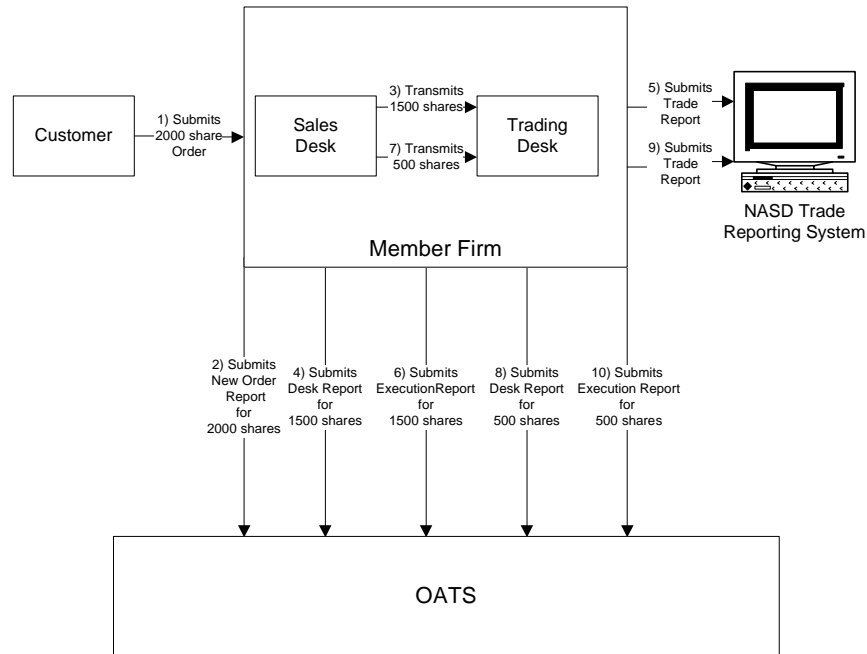
This scenario includes the following assumptions:

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

2. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

3. The trades are reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-7. Partial Desk Transmittal and Subsequent Execution, Event Listing

Ref	Event	Event Details
1	Customer submits order to Member Firm.	Market sell order for 2,000 shares of ORCL.
2	Member Firm submits a New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20050102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20050102102355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code:
3	Trading Desk receives order from Sales Desk.	Trading Desk receives 1,500 shares from the Sales Desk.
4	Member Firm submits Desk Report to OATS.	Desk Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Desk Shares Quantity: 1500 Issue Symbol ID: ORCL Received By Desk ID: TradingDesk Desk Type Code: T Desk Received Timestamp: 20050102102356
5	Member Firm executes order and submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number ABC123.
6	Member Firm submits Execution Report to OATS.	Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20050102000000 Order Receiving Firm Order ID: ABC123 Execution Timestamp: 20050102102757 Branch Sequence Number: ABC123 Execution Type Indicator: P Execution Quantity: 1500 Trader Terminal ID: TERM00392 Issue Symbol ID: ORCL Market Center ID: L Execution Price: 11.04 Capacity Code: P
7	Trading Desk receives order from Sales Desk.	Trading Desk receives 500 shares from the Sales Desk.
8	Member Firm submits Desk Report to OATS.	Desk Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20050102000000 Order Receiving Firm Order ID: ABC123 Desk Shares Quantity: 500 Issue Symbol ID: ORCL Received By Desk ID: TradingDesk Desk Type Code: T Desk Received Timestamp: 20030102102358
9	Member Firm executes order and an NASD Trade Reporting System Report.	Report includes Branch Sequence Number ABC456.
10	Member Firm submits Execution Report to OATS.	Execution Report sample data includes: Order Receiving Firm MPID: MM01

		Order Received Date:	20050102000000
		Order Receiving Firm Order ID:	ABC123
		Execution Timestamp:	20050102102759
		Branch Sequence Number:	ABC456
		Execution Type Indicator:	P
		Execution Quantity:	500
		Trader Terminal ID:	TERM00392
		Issue Symbol ID:	ORCL
		Market Center ID:	L
		Execution Price:	11.04
		Capacity Code:	P

4.4.7   Partial Desk Transmittals to Trading Desk for Further Handling

This scenario illustrates the reporting requirements to OATS when an order is received by one desk and routed in pieces to the trading desk for further handling. In this scenario, the Sales Desk received the order as Not Held, but transmitted pieces of the order to the Trading Desk as Held orders. In addition, the trading desk routes part of an order to another market center for execution, and executes the remaining pieces of the order as principal. This scenario illustrates that Member Firm 1 would be required to report the following when an order is received:

1. The receipt of the order from the customer.

2. The receipt of each piece of the order by 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 the scenario, the order is routed electronically to another member (Member Firm 2). Therefore, the 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.

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 an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-7. Partial Desk Transmittals to Trading Desk for Further Handling
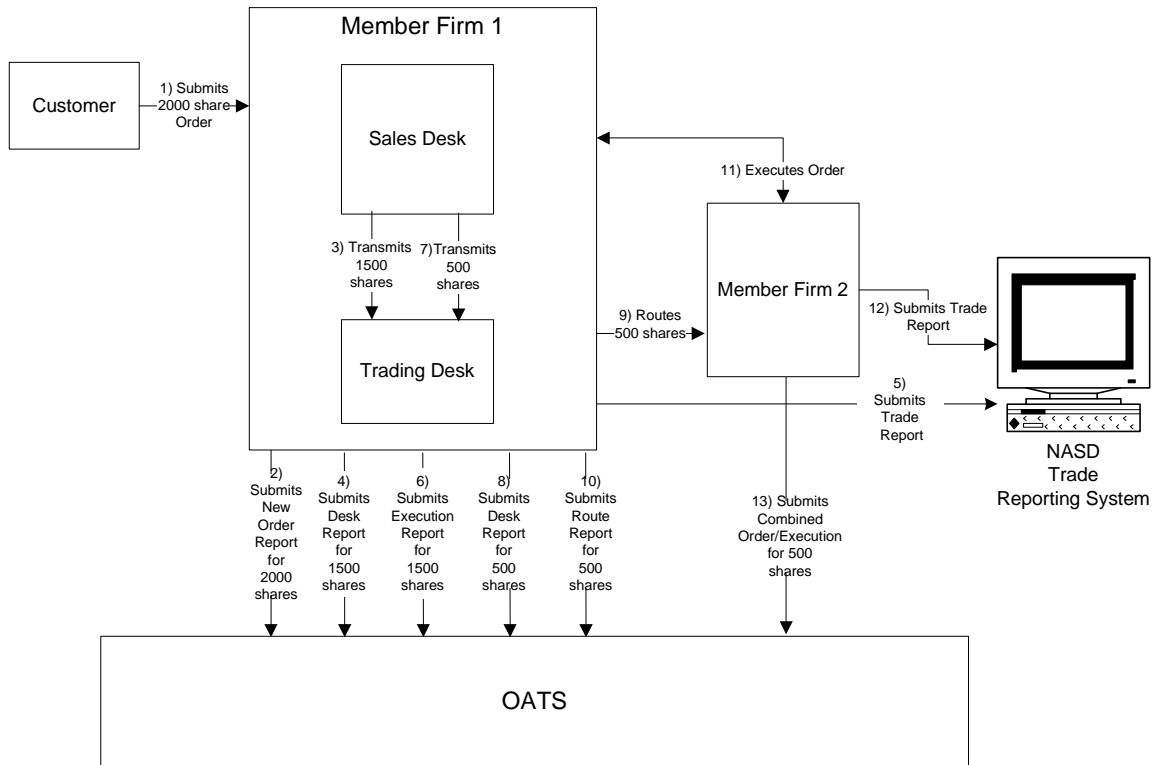
This scenario includes the following assumptions:

1. The transmission time between the Sales Desk 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. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

4. The partial execution by Member 1 on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

5. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-17. Partial Desk Transmittals to Trading Desk for Further Handling

Ref	Event	Event Details
1	Sales Desk receives an order from a customer.	Market sell order for 2,000 shares of ORCL.
2	Member Firm 1 submits a New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102102355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Receiving Terminal: TERM01 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Special Handling Code 1: NH
3	Trading Desk receives part of the order from the Sales Desk.	The Sales Desk transmits 1,500 shares of ORCL to the Trading Desk.
4	Member Firm 1 submits Desk Report to OATS.	Desk Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Issue Symbol ID: ORCL Shares Quantity: 1500 Desk Received Timestamp: 20030102102400 Received By Desk ID: TradingDesk Desk Type Code: T Desk Special Handling Code 1:
5	Member Firm 1 executes 1500 shares of the order internally and submits an NASD Trade Reporting System Report.	The NASD Trade Reporting System report includes Branch Sequence ID of ABCD1224.
6	Member Firm 1 submits Execution Report to OATS.	Execution Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Execution Timestamp: 20030102102500 Branch Sequence Number: ABCD1224 Execution Quantity: 1500 Trader Terminal ID: TERM00300 Issue Symbol ID: ORCL Market Center ID: L Execution Type Indicator: P Execution Price: 11.04 Capacity Code: P
7	Trading Desk receives the remaining shares of the order from the Sales Desk.	The Sales Desk transmits 500 shares of ORCL to the Trading Desk.
8	Member Firm 1 submits Desk Report to OATS.	Desk Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Issue Symbol ID: ORCL Shares Quantity: 500 Desk Received Timestamp: 20030102102530

Ref	Event	Event Details
		Received By Desk ID: TradingDesk Desk Type Code: T Desk Special Handling Code 1:
9	Member Firm 1 routes the partial shares quantity to the Member Firm 2.	Member Firm 1 electronically routes 500 shares of ORCL to Member Firm 2.
10	Member Firm 1 submits a Route Report to OATS.	Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Sent to Firm MPID: MM01 Routed Order ID: ABCD1234 Issue Symbol ID: ORCL Order Sent Timestamp: 20030102102535 Routed Shares Quantity: 500 Routing Method Code: E Bunched Order Indicator: Destination Code: M
11	Member Firm 1 executes the order with Member Firm 2.	
12	Member Firm 2 submits an NASD Trade Reporting System Report.	The NASD Trade Reporting SystemReport includes Branch Sequence ID of DEFG4568.
13	Member Firm 2 submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEFG4568 Routing Firm MPID: FIRM Routed Order ID: ABCD1234 Order Received Timestamp: 20030102102535 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 500 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102102540 Branch Sequence Number: DEFG4568 Execution Quantity: 500 Trader Terminal ID: TERM00392 Issue Symbol ID: ORCL Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.8   Bunched Desk Transmittal

This scenario illustrates the reporting requirements to OATS of a member when a Registered Representative receives multiple orders and bunches the order before transmitting them to the trading desk. In this scenario, the member is required to report the following events to OATS:

1. The receipt of multiple orders from the customer.

2. The receipt of each order by the Trading Desk.

The order receipt time would be the time the registered representative received the order from the customer.

Furthermore, this scenario illustrates the following additional details:

1. The member will be required to send a New Order (with Desk) Report for each order that is bunched as part of the transmission to the Trading Desk.

Figure 4-8. Bunched Desk Transmittal
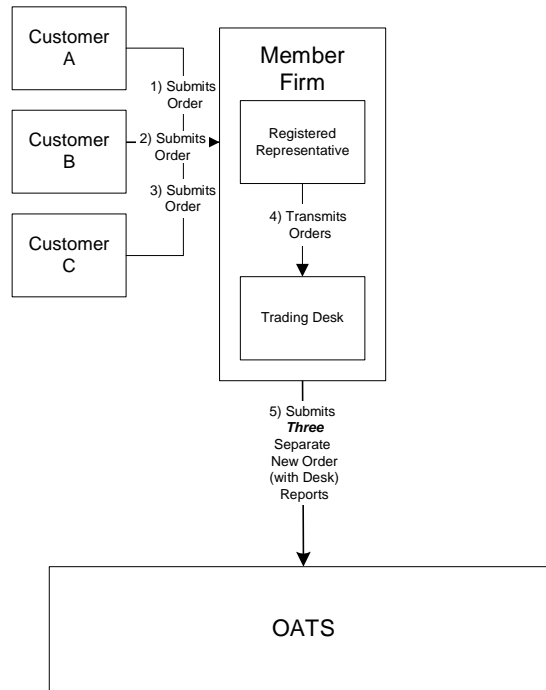
This scenario includes the following assumptions:

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

2. The Registered Representative received and fully transmitted each order to the Trading Desk within the same day; otherwise, separate New and Desk Reports must be used.

Table 4-8. Bunched Desk Transmittal

Ref	Event	Event Details
1	Registered representative receives an order from a customer.	Market sell order for 1,000 shares of ORCL.
2	Registered representative receives an order from a customer.	Market sell order for 500 shares of ORCL.
3	Registered representative receives an order from a customer.	Market sell order for 300 shares of ORCL.
4	Trading Desk receives each order from the registered representative.	Registered representative transmits all orders to Trading Desk.
5	Member Firm submits three New Order (with Desk) Reports to OATS.	New Order (with Desk) sample report data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102102355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 1000 Receiving Terminal ID: TERM01 Account Type Code: R Member Type Code: N ECN Flag: Desk Received Timestamp: 20030102102358 Received By Desk ID: TradingDesk Desk Type Code: T Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEFG4567 Order Received Timestamp: 20030102102356 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 500 Receiving Terminal ID: TERM01 Account Type Code: R Member Type Code: N ECN Flag: Desk Received Timestamp: 20030102102358 Received By Desk ID: TradingDesk Desk Type Code: T Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: HIJK8901 Order Received Timestamp: 20030102102357 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 300 Receiving Terminal ID: TERM01 Account Type Code: R Member Type Code: N ECN Flag: Desk Received Timestamp: 20030102102358 Received By Desk ID: TradingDesk Desk Type Code: T

4.4.9   Order Routing and Subsequent Execution

If a firm's trading department does not make a market in a particular issue, the firm may direct its order flow to another firm. This scenario illustrates the reporting requirements to OATS when a customer's order is routed to a market maker on an agency basis and subsequently executed by the 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 a market maker.

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

1. The receipt of the order from the member firm.

2. The execution of the order.

Furthermore, this scenario illustrates the following details:

1. If this order were routed electronically, the market maker (order receiving firm) would be required to capture the Routed Order ID and Firm MPID of the member firm (routing firm) and report this information on its Combined Order/Execution Report to OATS. If this order had been routed via telephone, the market maker would only be required to capture the Firm MPID of the member firm.

2. Only the market maker is required to report the execution to OATS because it executed the order.

3. When reporting to an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-9. Order Routing and Subsequent Execution
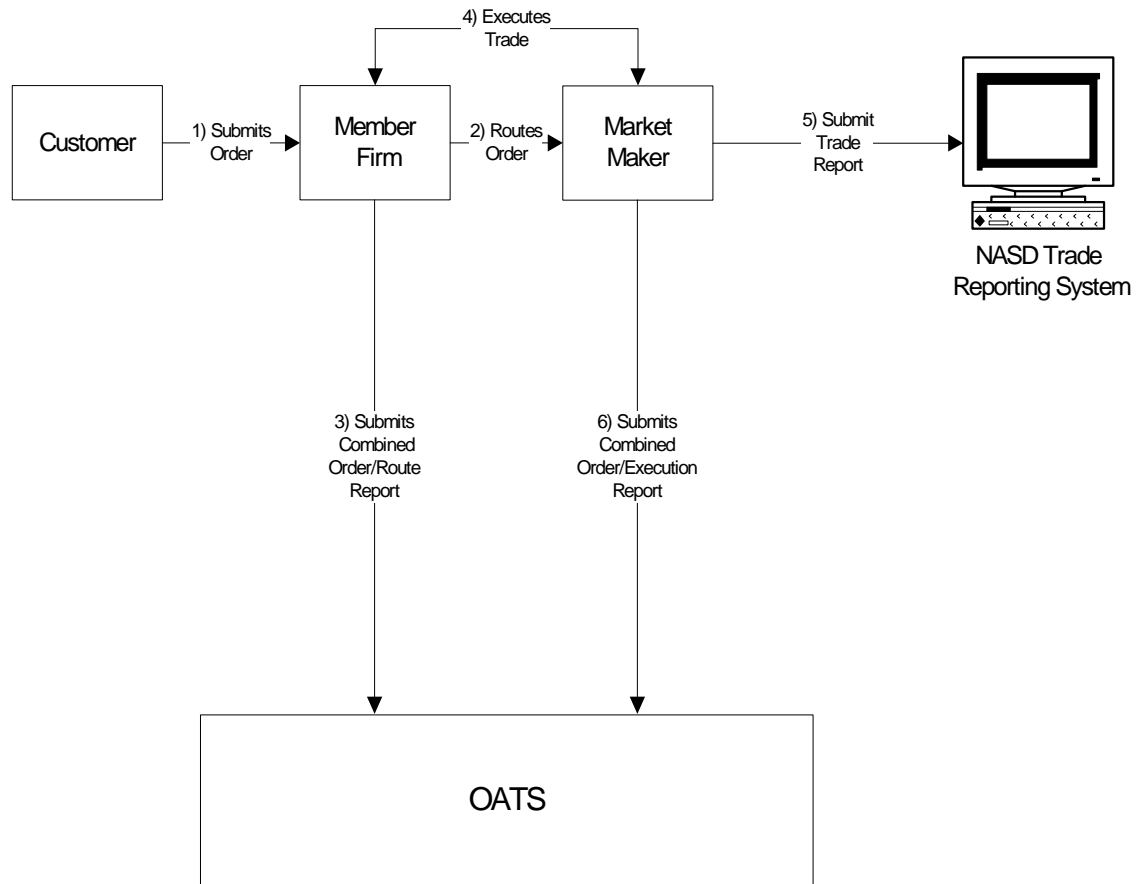
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

2. The 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 market maker 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 on an agency basis. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

5. The order is executed by the market maker on a principal basis. If, however, the market maker executed the order on a riskless principal basis, then the capacity code should be populated with "R".

6. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-9. Electronically Routed Orders: Order Routing And Subsequent Execution,
Event Listing

Ref	Event	Event Details
1	Customer submits order to Member Firm.	Market sell order for 2,000 shares of ORCL.
2	Member Firm electronically routes order to Market Maker.	Routed sell order for 2,000 shares of ORCL.
3	Member Firm submits Combined Order/Route Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: ABC123 Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M
4	Member Firm and Market Maker execute trade.	Trade fills customer order ABC123.
5	Market Maker submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number DEF456.
6	Market Maker submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Routing Firm MPID: FIRM Routed Order ID: ABC123 Order Received Timestamp: 20030102110015 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 2003010211020 Branch Sequence Number: DEF456 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

Table 4-10. Manually Routed Orders: Order Routing And Subsequent Execution, Event Listing

Ref	Event	Event Details
1	Customer submits order to Member Firm.	Market sell order for 2,000 shares of ORCL.
2	Member Firm manually routes order to Market Maker.	Routed sell order for 2,000 shares of ORCL.
3	Member Firm submits Combined Order/Route Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102105755 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 2000 Routing Method Code: N Bunched Order Indicator: Destination Code: M
4	Non-Market maker and Market Maker execute trade.	Trade fills customer order ABC123.
5	Market Maker submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number DEF456.
6	Market Maker submits a Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Routing Firm MPID: FIRM Routed Order ID: Order Received Timestamp: 20030102110017 Received Method Code: N Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Flag: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102110025 Branch Sequence Number: DEF456 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.10 Split Order Routing and Subsequent Execution

This scenario illustrates the reporting requirements to OATS when a firm routes the order to two different market makers. 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 market maker.

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

1. The receipt of the order from the market maker.

2. The execution of the order.

Furthermore, this scenario illustrates the following details:

1. Each market maker 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 market maker 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 an NASD Trade Reporting System, each market maker will be required to submit a Branch Sequence Number. Each market maker will also submit this Branch Sequence Number to OATS on the Execution Report. The Branch Sequence Number enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-10. Split Order Routing and Subsequent Execution
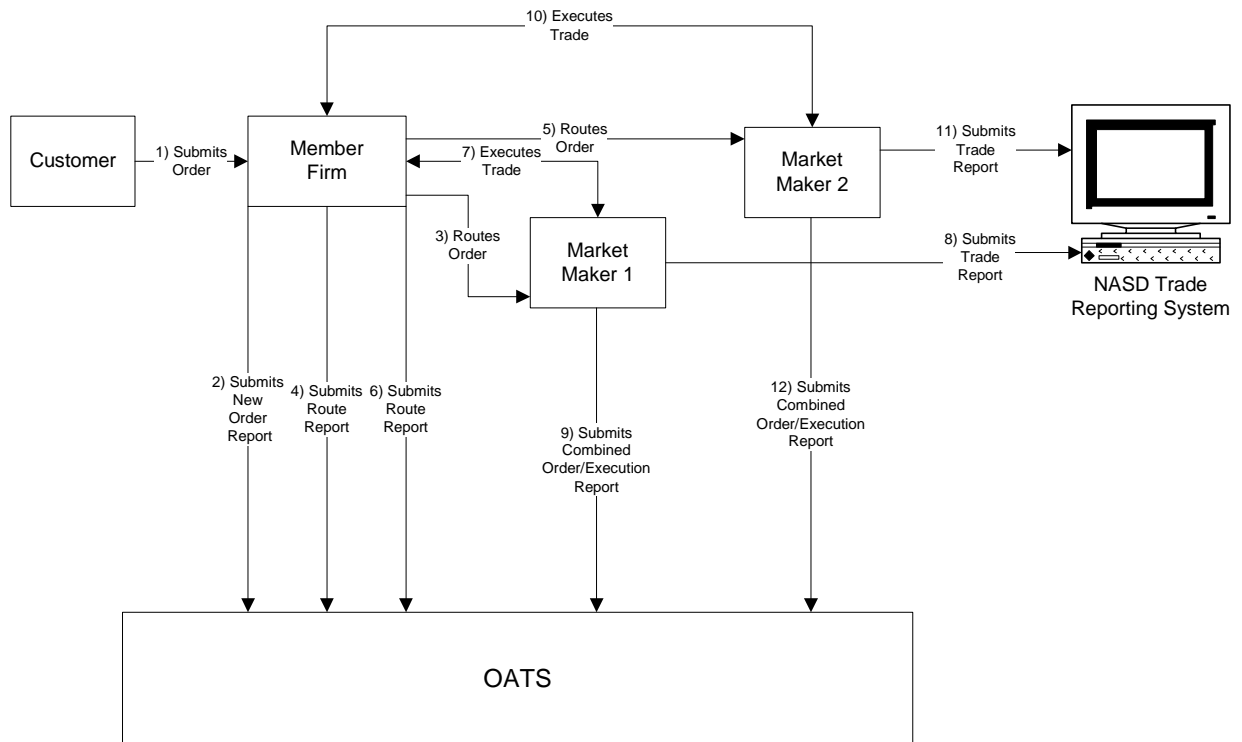
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

2. Both market makers 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 on an agency basis. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

4. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

5. The trades are reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-11. Split Order Routing and Subsequent Execution, Event Listing

Ref	Event	Event Details
1	Customer submits order to Member.	Limit sell order for 10,000 shares of ORCL.
2	Member Firm submits New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Account Type Code: R Shares Quantity: 10000 Limit Price: 23 Time in Force Code: GTC First Special Handling Code: NH Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code:
3	Member Firm routes order to Market Maker 1.	Market sell order for 5,000 shares of ORCL routed to Market Maker 1.
4	Member Firm submits Route Report to OATS.	Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Sent to Firm MPID: MM01 Routed Order ID: ABC123 Issue Symbol ID: ORCL Order Sent Timestamp: 20030102102500 Routed Shares Quantity: 5000 Routing Method Code: E Bunched Order Indicator: Destination Code: M
5	Member Firm routes balance of order to Market Maker 2.	Market sell order for 5,000 shares of ORCL routed to Market Maker 2.
6	Member Firm submits Route Report to OATS.	Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Sent to Firm MPID: MM02 Routed Order ID: ABC123 Issue Symbol ID: ORCL Order Sent Timestamp: 20030102102545 Routed Shares Quantity: 5000 Routing Method Code: E Bunched Order Indicator: Destination Code: M
7	Market Maker 1 executes a trade with Member Firm that partially fills the order.	A trade is executed for 5,000 shares. Trade partially fills customer order ABC123 and fills DEF456.
8	Market Maker 1 submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number DEF456.
9	Market Maker 1 submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456

Ref	Event	Event Details
		Routing Firm MPID: FIRM Routed Order ID: ABC123 Order Received Timestamp: 20030102102500 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 5000 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102102700 Branch Sequence Number: DEF456 Execution Quantity: 5000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P
10	Market Maker 2 executes a trade with Member Firm that partially fills the order.	A trade is executed for 5,000 shares. Trade fills customer order ABC123 and fills JKL789.
11	Market Maker 2 submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number JKL789.
12	Market Maker 2 submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM02 Order Received Date: 20030102000000 Order Receiving Firm Order ID: JKL789 Routing Firm MPID: FIRM Routed Order ID: ABC123 Order Received Timestamp: 20030102102545 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 5000 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102102715 Branch Sequence Number: JKL789 Execution Quantity: 5000 Trader Terminal ID: TERMA100 Market Center ID: L Execution Price: 11.05 Capacity Code: P

4.4.11 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 an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to an OATS reported order.

Figure 4-11. Bunched Routing
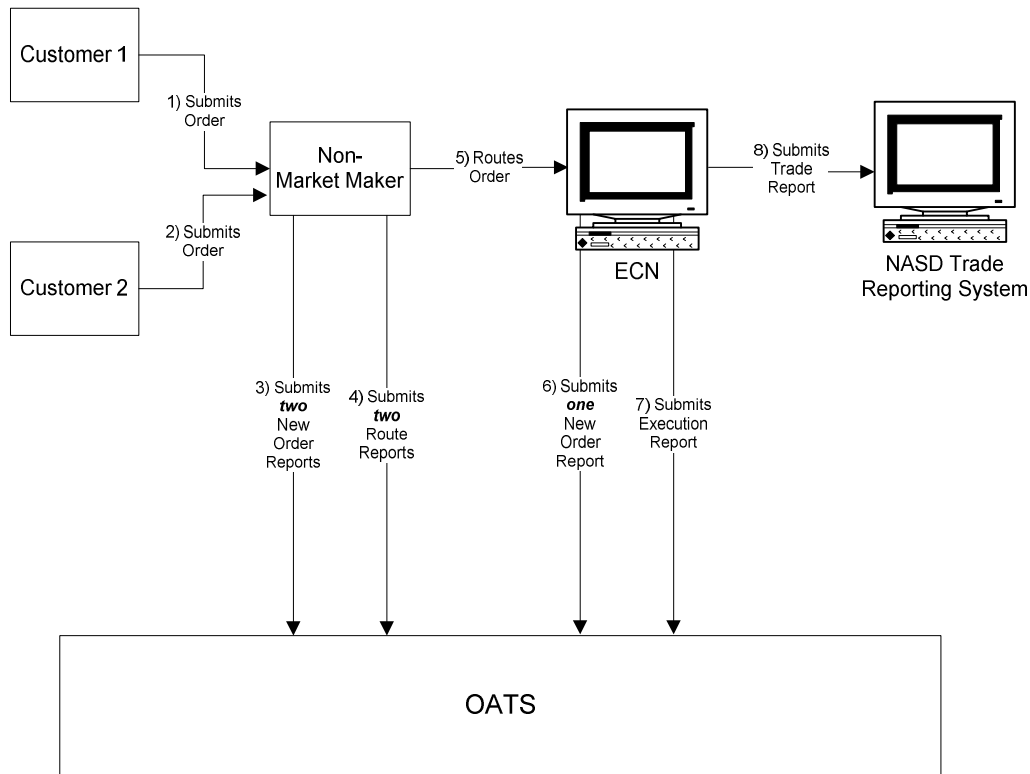
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a 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. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

5. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

6. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-12. Bunched Routing, Event Listing (Manual Method), Event Listing

Ref	Event	Event Details
1	Customer 1 submits order.	Market sell order for 2,000 shares of ORCL.
2	Customer 2 submits order.	Market sell order for 3,000 shares of ORCL.
3	Member Firm routes customers' orders to Market Maker.	Market sell order for 5,000 shares of ORCL.
4	Member Firm submits two Combined Order/Route Reports to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FRM1 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102105355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: S Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 5000 Routing Method Code: N Bunched Order Indicator: Y Destination Code: M Order Receiving Firm MPID: FRM1 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Order Received Timestamp: 20030102105455 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 3000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 5000 Routing Method Code: N Bunched Order Indicator: Y Destination Code: M
5	Market Maker and Member Firm execute trade.	Trade fills order GHI789 and customer orders ABC123 and DEF456.
6	Market Maker submits an NASD Trade Reporting System report.	Report includes Branch Sequence Number GHI789.
7	Market Maker submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000

		Order Receiving Firm Order ID:	GHI789
		Routing Firm MPID:	FRM1
		Routed Order ID:	
		Order Received Timestamp:	20030102110100
		Received Method Code:	N
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Account Type Code:	W
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Received by Desk ID:	
		Desk Type Code:	
		Order Receiving Firm MPID:	MM01
		Order Received Date:	20030102000000
		Order Receiving Firm Order ID:	GHI789
		Execution Timestamp:	20030102110355
		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:	11.04
		Capacity Code:	P

Table 4-13. Bunched Routing, Event Listing (Electronic Method), Event Listing

Ref	Event	Event Details
1	Customer 1 submits order.	Market sell order for 2,000 shares of ORCL.
2	Customer 2 submits order.	Market sell order for 3,000 shares of ORCL.
3	Member Firm routes customers' orders to Market Maker.	Market sell order for 5,000 shares of ORCL.
4	Member Firm submits two Combined Order/Route Reports to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FRM1 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102105355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: S Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: ZYX987 Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 5000 Routing Method Code: E Bunched Order Indicator: Y Destination Code: M Order Receiving Firm MPID: FRM1 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Order Received Timestamp: 20030102105455 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 3000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: ZYX987 Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 5000 Routing Method Code: E Bunched Order Indicator: Y Destination Code: M
5	Market Maker and Member Firm execute trade.	Trade fills order GHI789 and customer orders ABC123 and DEF456.
6	Market Maker submits an NASD Trade Reporting System report.	Report includes Branch Sequence Number GHI789.
7	Market Maker submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000

		Order Receiving Firm Order ID:	GHI789
		Routing Firm MPID:	FRM1
		Routed Order ID:	ZYX987
		Order Received Timestamp:	20030102110100
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Account Type Code:	W
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Received by Desk ID:	
		Desk Type Code:	
		Execution Timestamp:	20030102110355
		Branch Sequence Number:	GHI789
		Execution Quantity:	5000
		Trader Terminal ID:	7851125
		Market Center ID:	L
		Execution Price:	11.04
		Capacity Code:	P

4.4.12 Order Routing to the NASDAQ Exchange

This scenario illustrates the reporting requirements to OATS when a firm routes an order to the NASDAQ 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 NASDAQ Exchange.

Furthermore, this scenario illustrates the following details:

1. On the Route Report, the member enters a Destination Code of the NASDAQ Exchange ('XQ'), a Routed Order ID, and the Routing Method Code.

NOTE: If the firm routes the order electronically to the NASDAQ Exchange, the routing firm must provide the Routed Order ID using the Order ID field in the NASDAQ Exchange input format. 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.

If the order is routed manually, the routing firm is not required to pass its Routed Order ID to the NASDAQ Exchange.

For additional information, refer to OATS Report article titled <u>OATS Route Matching to the NASDAQ Single Book,</u> which is available at http://www.nasd.com/oatsreport.

Figure 4-12. Order Routing to the NASDAQ Exchange
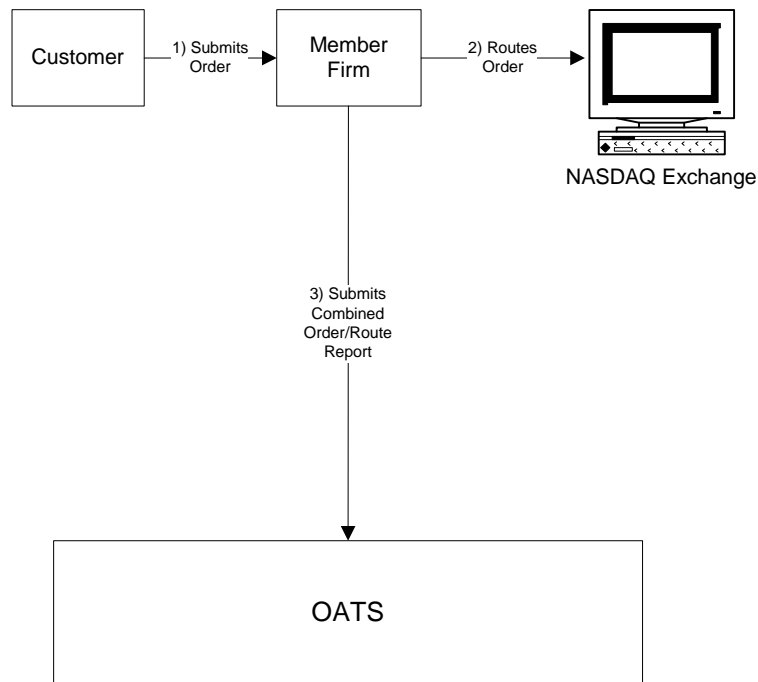
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a 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 NASDAQ Exchange.

4. The customer order is routed on an agency basis. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

5. The order was routed electronically; therefore, a Routed Order ID is required. If the order were routed manually, a Routed Order ID would not be required.

Table 4-14. Order Routing to the NASDAQ Exchange, Event Listing

Ref	Event	Event Details
1	Customer submits order to a member firm.	Market sell order for 2,000 shares of ORCL.
2	Member firm enters order into the NASDAQ Exchange.	Non-market-maker firm includes Order ID Number ABCD1234 on the order.
3	Member firm submits Combined Order/Route Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102105855 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: Sent to Routed Order ID: ABCD1234 Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: XQ

4.4.13 Order Routing to a Non-Member Firm

When a firm routes an order to a non-member firm or exchange, the non-member is not required to report the order to OATS. 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 non-member firm.

Furthermore, this scenario illustrates the following details:

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

Figure 4-13. Order Routing to a Non-Member Firm
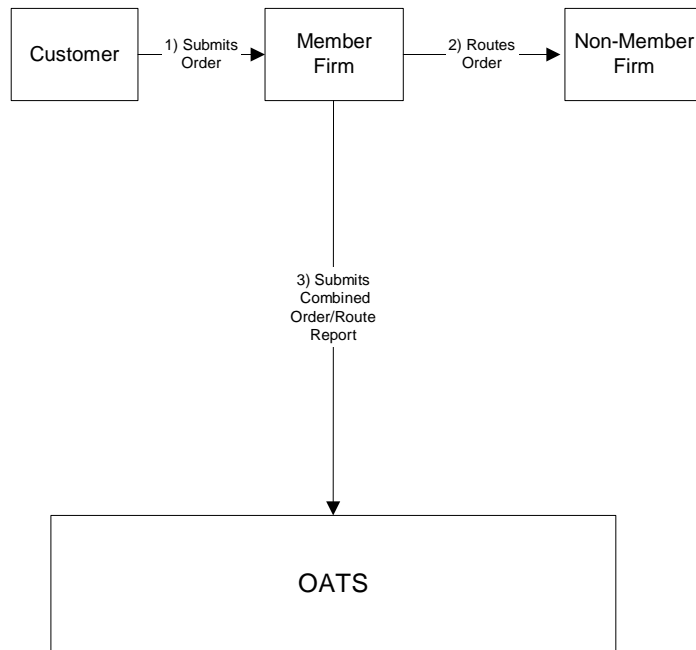
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

2. The 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. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

Table 4-15. Order Routing to a Non-Member Firm, Event Listing

Ref	Event	Event Details
1	Customer submits order to member firm.	Market sell order for 2000 shares of ORCL.
2	Member Firm routes order to Non-Member Firm.	Member Firm electronically routes 2000 shares of ORCL to the non-member firm.
3	Member Firm submits Combined Order/Route Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102110015 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: NON1 Sent to Routed Order ID: Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: N

4.4.14 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 an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-14. Order Rocuting Between MPIDs and Subsequent Execution
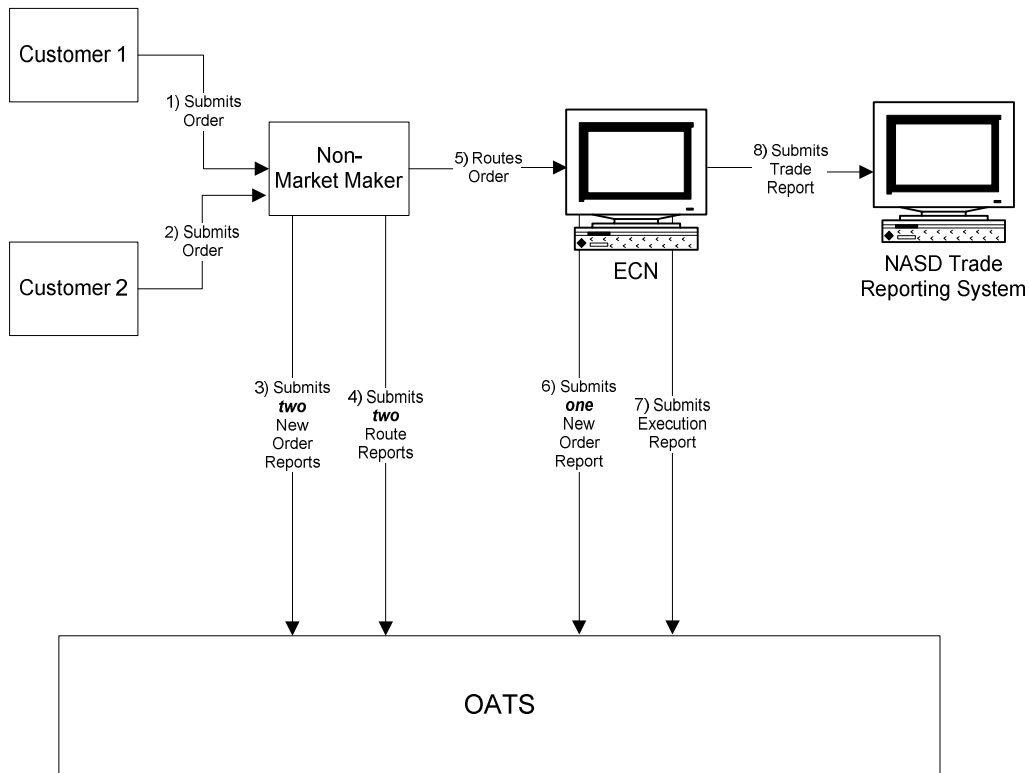
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a 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. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

5. The order was routed electronically; therefore, a Routed Order ID is required. If the order were routed manually, a Routed Order ID would not be required.

6. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-16. Order Routing Between MPIDs and Subsequent Execution, Event Listing

Ref	Event	Event Details
1	Customer submits order to Member Firm.	Market sell order for 2,000 shares of ORCL.
2	MPID1 electronically routes order to MPID2.	Routed sell order for 2,000 shares of ORCL.
3	MPID1 submits a Combined Order/Route Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: MPID1 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MPID2 Sent to Routed Order ID: ABC123 Order Sent Timestamp: 20030102110015 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M
4	MPID2 submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number DEF456.
5	MPID2 submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MPID2 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Routing Firm MPID: MPID1 Routed Order ID: ABC123 Order Received Timestamp: 20030102110020 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102110300 Branch Sequence Number: DEF456 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.15 Single Desk Usage of Multiple Order Handling Systems

This scenario illustrates the reporting requirements to OATS when 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 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
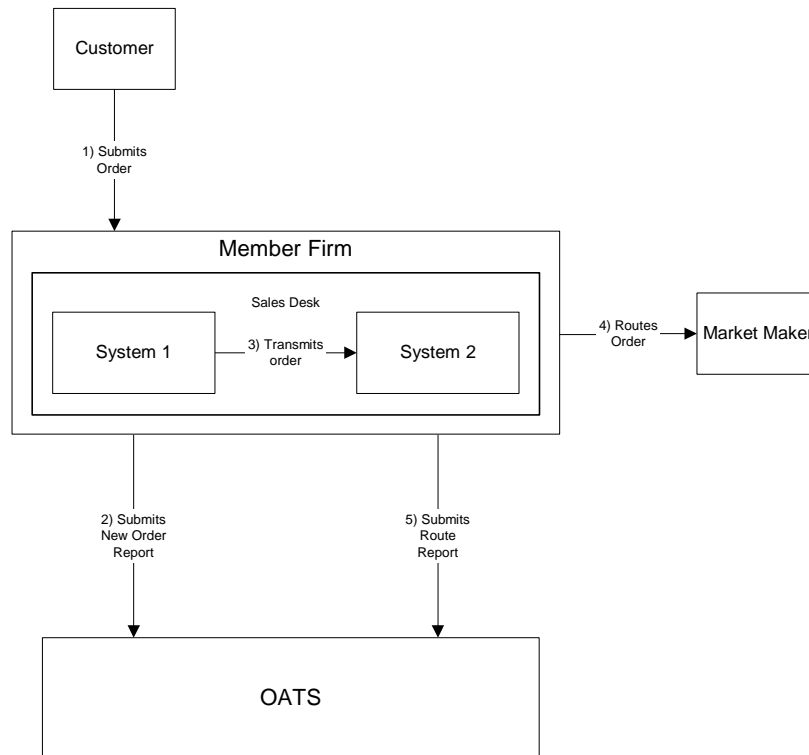
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a 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 4-17. Single Desk Usage of Multiple Order Handling Systems

Ref	Event	Event Details
1	Customer submits order to Member Firm, and Member Firm enters the order into System 1.	Market sell order for 2,000 shares of ORCL.
2	Member Firm submits a New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code:
3	Order routing system electronically transmits Member Firm order to System 2.	Transmits sell order for 2,000 shares of ORCL.
4	System 2 electronically 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: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Issue Symbol ID: ORCL Sent to Firm MPID: MM01 Routed Order ID: ABCD1234 Order Sent Timestamp: 20030102105815 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M

4.4.16 Multiple Desk Usage of Multiple Order Handling Systems

This scenario illustrates the reporting requirements to OATS when firms use multiple Order Handling Systems on different desks. OATS reporting applies to transmittals between departments within member firms; therefore, a receipt at another desk or department within a firm is a reportable event. For example, the firm's Sales Desk 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. The receipt of the order by 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 4-16. Multiple Desk Usage of Multiple Order Handling Systems
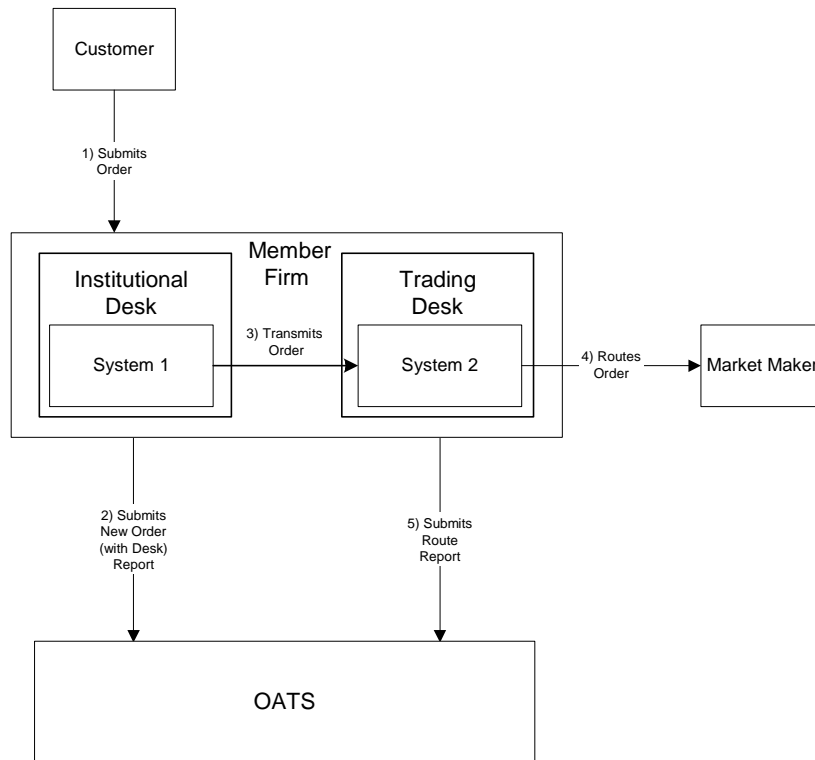
This scenario includes the following assumptions:

1. The transmission time between the Institutional Desk 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. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

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

Ref	Event	Event Details
1	Customer submits order to Member Firm, and Member Firm enters the order into System 1.	Market sell order for 2,000 shares of ORCL.
2	The Trading Desk receives the order from the Sales Desk using System 1 and System 2.	System 1 transmits sell order for 2,000 shares of ORCL to System 2.
3	Member Firm submits New Order (with Desk) Report to OATS.	New Order Report (with Desk) sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N ECN Flag: Desk Received Timestamp: 20030102105757 Received by Desk ID: Trading Desk Desk Type Code: T
4	System 2 electronically 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: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Issue Symbol ID: ORCL Sent to Firm MPID: MM01 Routed Order ID: ABCD1234 Order Sent Timestamp: 20030102105815 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M

4.4.17 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 NASD Rule 6951(n). 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 an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

NOTE: If the clearing firm had not been acting in the capacity of a market maker, it may have routed the order to a market maker and would have reported the route instead of the execution.

Figure 4-17. Order Routing and Execution via a Member Clearing Firm
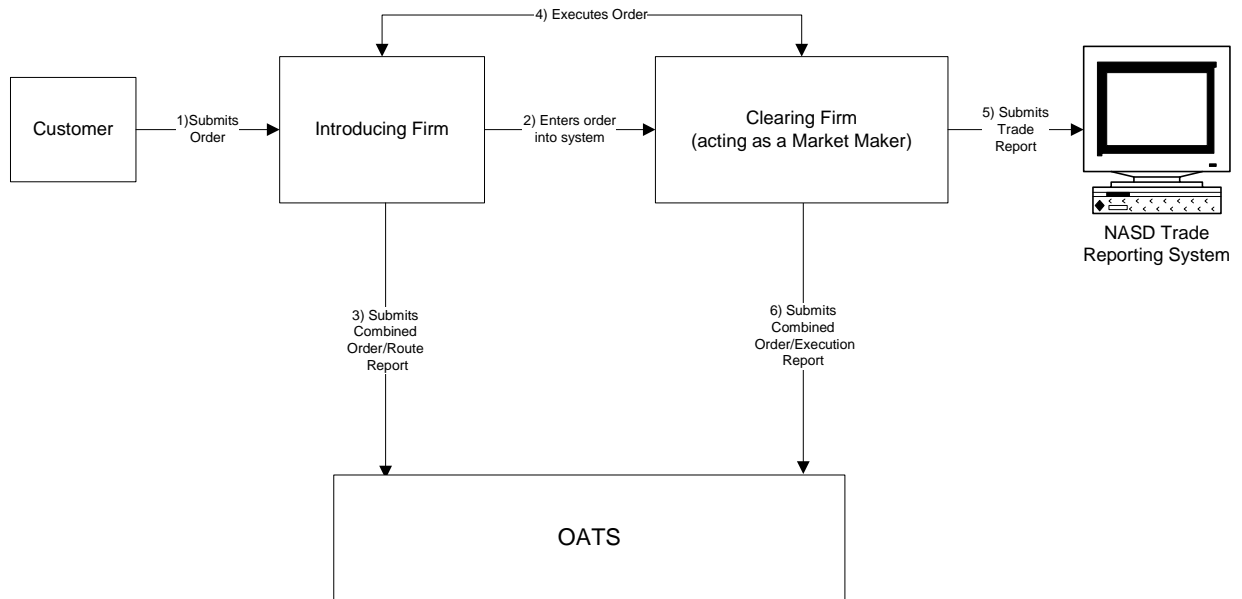
This scenario includes the following assumptions:

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 a firm and time of receipt at a desk or department is simultaneous or within the same second.

3. The customer order is routed on an agency basis. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

4. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

5. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

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

Ref	Event	Event Details
1	Customer submits order to Introducing Firm.	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 a Combined Order/Route Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: ABCD1234 Order Sent Timestamp: 20030102105755 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M
4	Introducing Firm and Clearing Firm execute trade.	Trade fills customer order ABCD1234.
5	Clearing Firm submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number DEFG4568.
6	Clearing Firm submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEFG4568 Routing Firm MPID: FIRM Routed Order ID: ABCD1234 Order Received Timestamp: 20030102105755 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102105858 Branch Sequence Number: DEFG4568 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.18 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 NASD Rule 6951(n), 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 an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-18. Order Received by Non-Reporting Member and Immediately Sent to
Clearing Firm
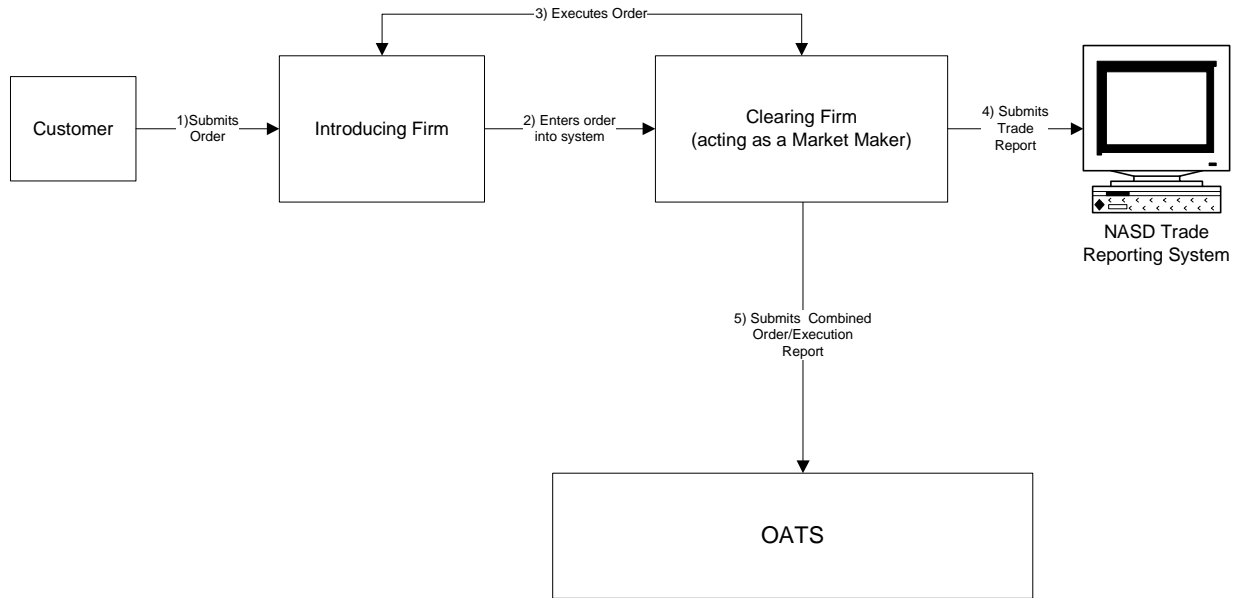
This scenario includes the following assumptions:

1. Introducing Firm immediately sends the order to Clearing Firm.

2. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

3. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

4. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

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

Ref	Event	Event Details
1	Customer submits order to Introducing Firm.	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 and clearing firm execute trade.	Trade fills customer order ABCD1234.
4	Clearing Firm submits an NASD Trade 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: 20030102000000 Order Receiving Firm Order ID: DEFG4568 Routing Firm MPID: FIRM Routed Order ID: Order Received Timestamp: 20030102105858 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Code: E ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102105858 Branch Sequence Number: DEFG4568 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.19 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 NASD Rule 6951(n), 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 4-19. Direct Order Routing via a Clearing Firm's System
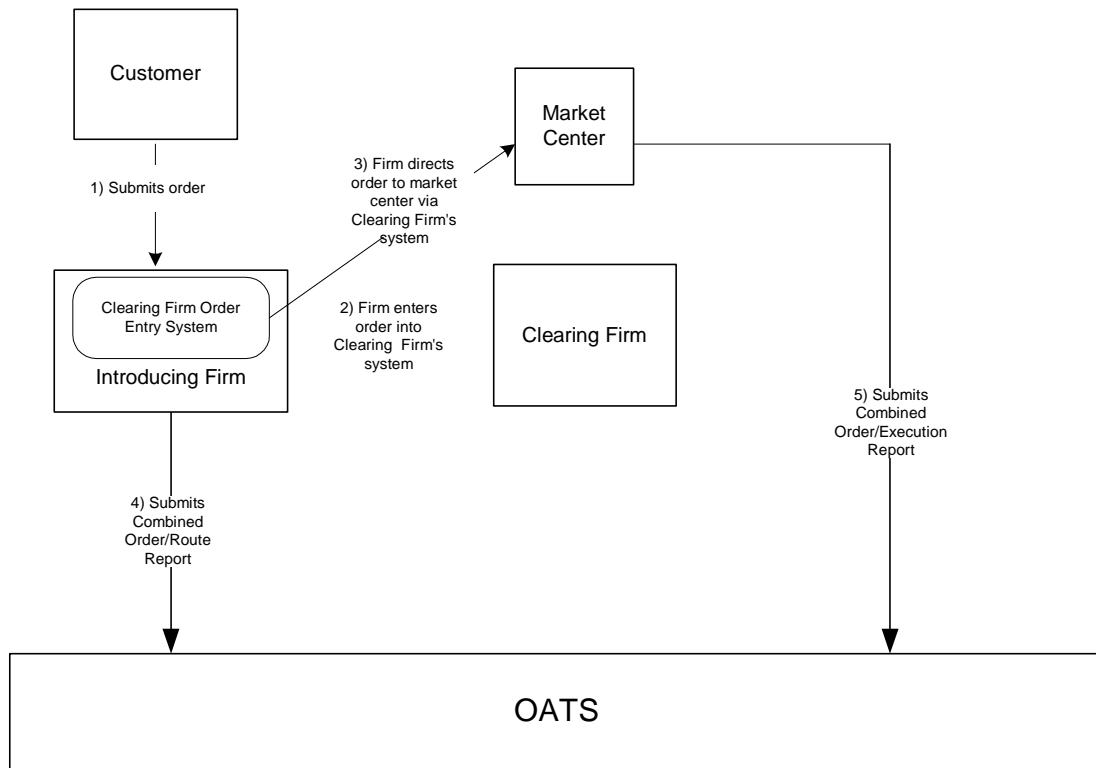
This scenario includes the following assumptions:

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. Order receipt time and the time the order is received at a 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	Event Details
1	Customer submits order to Introducing Firm.	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 sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: ABCD1234 Order Sent Timestamp: 20030102105755 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M
5	The Market Center executes the order and submits Combined Order/Execution Report to OATS.	Combined Order/Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEFG4568 Routing Firm MPID: FIRM Routed Order ID: ABCD1234 Order Received Timestamp: 20030102105755 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102105758 Branch Sequence Number: DEFG4568 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.20 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 NASD Rule 6951(n), 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.

Figure 4-20. Order Routing via an Algorithm Provided by the Clearing Firm
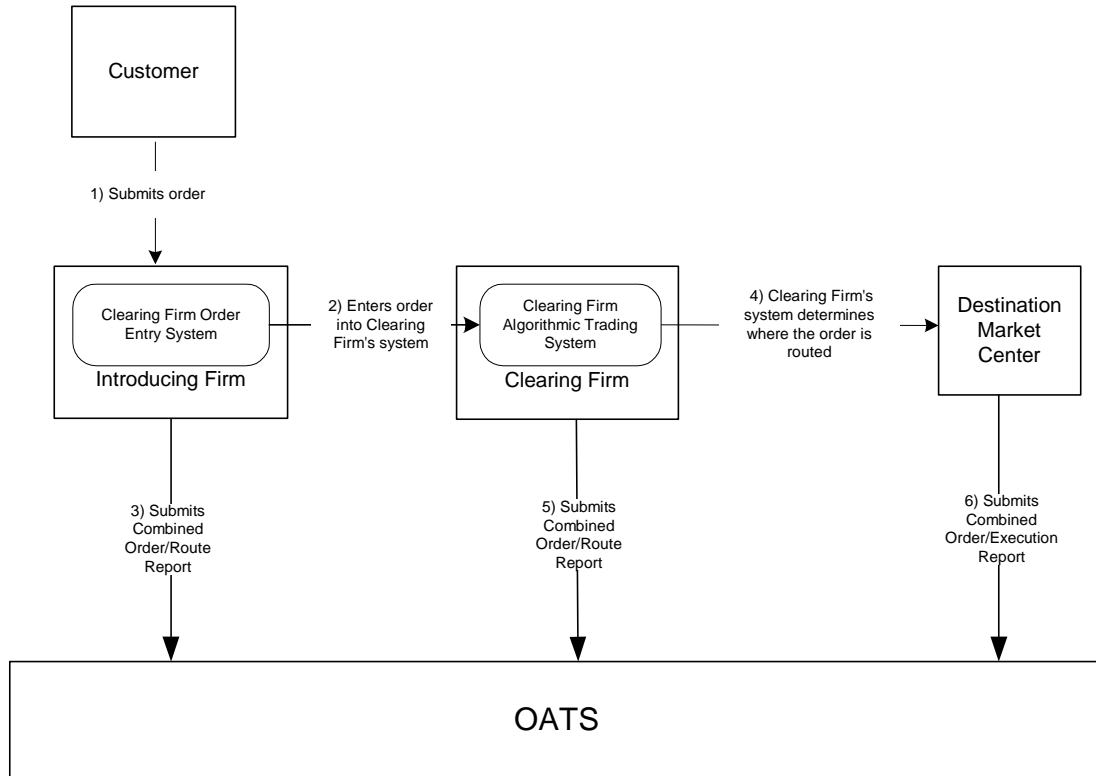
This scenario includes the following assumptions:

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. Order receipt time and the time the order is received at a desk or department is simultaneous or within the same second.

3. The customer order is routed on an agency basis.

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

Ref	Event	Event Details
1	Customer submits order to Introducing Firm.	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 Order/Route report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: ABCD1234 Order Sent Timestamp: 20030102105755 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M
4	Clearing Firm's system determines where the order is routed.	Clearing Firm routes 2,000 shares of ORCL to Market Maker.
5	Clearing Firm submits Combined Order/Route report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Received Method Code: E Member Type Code: M Routed Order ID: ABCD1234 Routing Firm MPID: FIRM ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: ECN1 Sent to Routed Order ID: DEF456 Order Sent Timestamp: 20030102105756 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M

Ref	Event	Event Details	
6	Destination Market Center executes order and submits Combined Order/Execution report to OATS.	Combined Order/Execution sample data includes:	
		Order Receiving Firm MPID:	ECN1
		Order Received Date:	20030102000000
		Order Receiving Firm Order ID:	GHI789
		Order Received Timestamp:	20030102105756
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	2000
		Account Type Code:	W
		Member Type Code:	M
		ECN Flag:	
		Routed Order ID:	DEF456
		Routing Firm MPID:	MM01
		Desk Timestamp:	
		Received by Desk ID:	
		Desk Type Code:	
		Execution Timestamp:	20030102105757
		Branch Sequence Num:	GHI789
		Execution Quantity:	2000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	11.04
		Capacity Code:	P

4.4.21 Smart-Order Routers and Other Order Routing Services Provided by Members

Members that provide other NASD 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. (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 NASD Rule 6951 (n) enters an order into a Smart Router provided by another member firm that meets the conditions noted above. In this scenario, therefore, 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 4-21. Smart-Order Routers and Other Order Routing Services Provided by Members

1) Firm receives or originates order and enters it into a Smart Router provided by a Member Firm

2) Smart Router sends order to Destination Market Center

Member Firm Provided Smart Router

Introducing Firm

Destination Market Center

3) Submits Combined Order/Route Report

4) Submits Combined Order/ Execution Report

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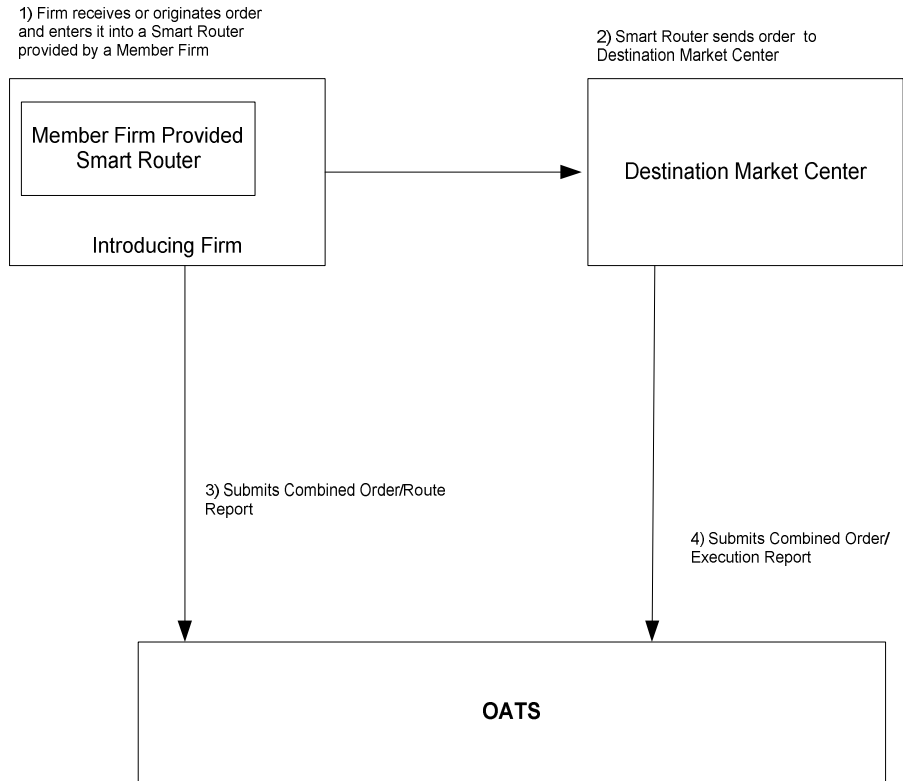
Table 4-23. Smart-Order Routers and Other Order Routing Services Provided by
Members

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 Order/Route report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N Routed Order ID: Routing Firm MPID: ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: DM01 Sent to Routed Order ID: DEF456 Order Sent Timestamp: 20030102105756 Routed Shares Quantity: 2000 Routing Method Code: S Bunched Order Indicator: Destination Code: M
6	Destination Market Center executes order and submits Combined Order/Execution report to OATS.	Combined Order/Execution sample data includes: Order Receiving Firm MPID: DM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: GHI789 Order Received Timestamp: 20030102105756 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Code: M ECN Flag: Routed Order ID: DEF456 Routing Firm MPID: MM01 Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102105757 Branch Sequence Num: GHI789 Execution Quantity: 2000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.22 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 an NASD Trade 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 and other information (i.e. Issue Symbol, firm MPID and the Execution Timestamp) enable the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-22. Order Modification and Subsequent Execution
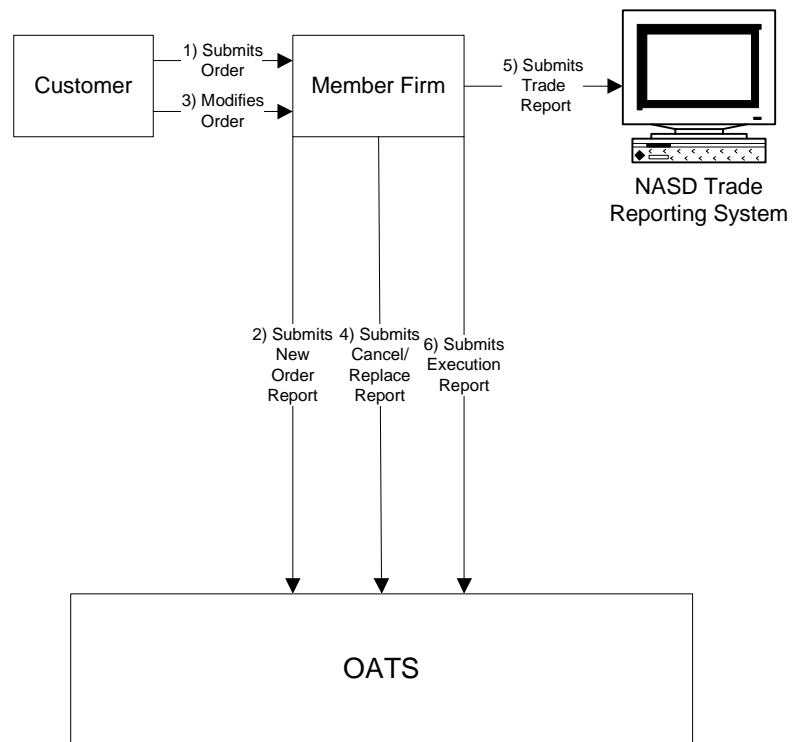
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

2. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

3. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

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

| Ref	Event	Event Details
1	Customer submits limit order to Member Firm.	Limit sell order for 2,000 shares of ORCL at 23.
2	Member Firm submits New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102033 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Limit Price: 23 Time in Force Code: GTC Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code:
3	Customer modifies order.	Limit sell order for 2,500 shares of ORCL at 23.
4	Member Firm submits a Cancel/Replace Report to OATS.	Cancel/Replace Report sample data includes: **Cancel Portion** Order Receiving Firm MPID: MM01 Replaced Order Received Date: 20030102000000 Replaced Firm Order ID: ABC123 **Replace Portion** Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Order Received Timestamp: 20030102103555 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2,500 Limit Price: 23 Time in Force Code: GTC Account Type Code: R Member Type Code: N ECN Flag:
5	Member Firm submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number DEF456.
6	Member Firm submits Execution Report to OATS.	Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Execution Timestamp: 20030102104555 Branch Sequence Number: DEF456 Execution Quantity: 2,500 Trader Terminal ID: TERM00392 Issue Symbol ID: ORCL Execution Type Indicator: F Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.23 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 an NASD Trade 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 enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

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.nasd.com/oatsreport.

Figure 4-23. Customer Modification of a Previously Routed Order and Subsequent Execution
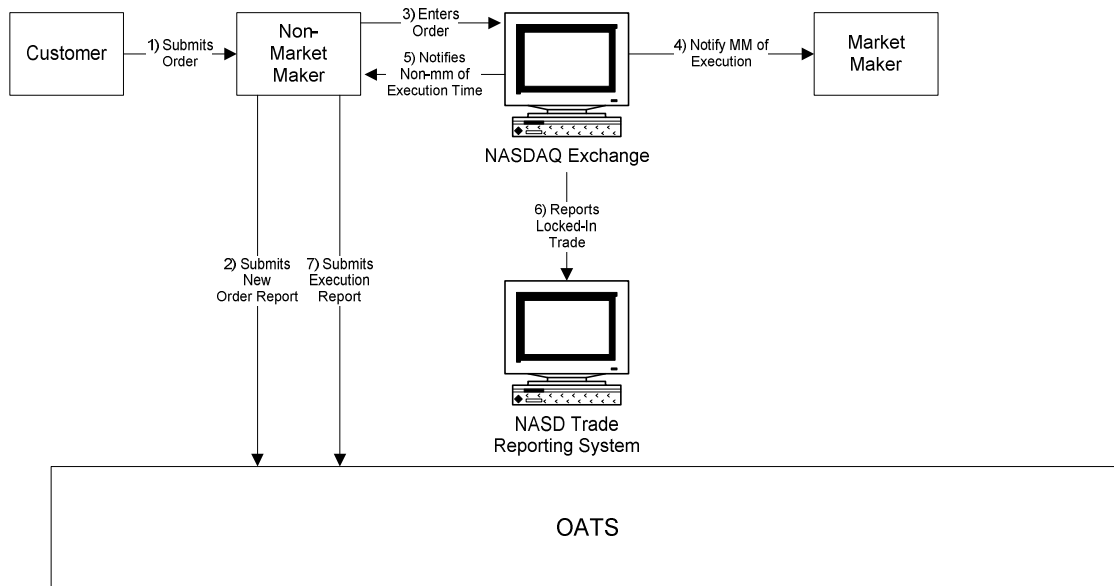
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a 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. If the order is routed on a riskless principal basis, please follow guidance in Section 4.4 Capacity Scenarios.

4. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

5. The trade is reported to the NASD/NASDAQ Trade Reporting Facility.

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

Ref	Event	Event Details
1	Customer submits limit order to Member Firm.	Limit sell order for 2,000 shares of ORCL at 23
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 Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102110203 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Limit Price: 23 Time in Force Indicator: GTC Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: MM01 Sent to Routed Order ID: ABC123 Order Sent Timestamp: 20030102110203 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M
4	Market Maker submits New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Routing Firm MPID: FIRM Routed Order ID: ABC123 Order Received Timestamp: 20030102110203 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Limit Price: 23 Time in Force Indicator: GTC Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code:
5	Customer modifies the order.	Limit sell order for 2,500 shares of ORCL.

Ref	Event	Event Details
6	Member Firm submits a Cancel/Replace Report to OATS.	Cancel/Replace Report sample data includes: **Cancel Portion** Order Receiving Firm MPID: FIRM Replaced Order Received Date: 20030102000000 Replaced Firm Order ID: ABC123 **Replace Portion** Order Received Date: 20030102000000 Order Receiving Firm Order ID: GHI789 Order Received Timestamp: 20030102110300 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2500 Account Type Code: R Member Type Code: N ECN Flag:
7	Member Firm routes modified order to Market Maker.	Limit sell order for 2,500 shares of ORCL.
8	Member Firm submits Route Report.	Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: GHI789 Sent to Firm MPID: MM01 Routed Order ID: GHI789 Issue Symbol ID: ORCL Order Sent Timestamp: 20030102110300 Routed Shares Quantity: 2500 Routing Method Code: E Bunched Order Indicator: Destination Code: M
9	Market Maker submits Cancel/Replace Report to OATS.	Cancel/Replace Report sample data includes: **Cancel Portion** Order Receiving Firm MPID: MM01 Replaced Order Received Date: 20030102000000 Replaced Firm Order ID: DEF456 **Replace Portion** Order Received Date: 20030102000000 Order Receiving Firm Order ID: JKL234 Order Received Timestamp: 20030102110300 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: 23 Account Type Code: W Member Type Code: M ECN Flag:
10	Member Firm and Market Maker execute trade.	Trade fills firm order JKL234, thereby filling customer order GHI789.
11	Market Maker submits an NASD Trade Reporting System Report.	Report includes Branch Sequence Number JKL234.

Ref	Event	Event Details	
12	Market Maker submits Execution Report to OATS.	Execution Report sample data includes:	
		Order Receiving Firm MPID:	MM01
		Order Received Date:	20030102000000
		Order Receiving Firm Order ID:	JKL234
		Execution Timestamp:	20030102110305
		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:	11.04
		Capacity Code:	P

4.4.24 Customer Modification of a Previously Routed Order to the NASDAQ Exchange

This scenario illustrates the reporting requirements to OATS when a customer modifies an existing and previously electronically routed order to the NASDAQ 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 NASDAQ Exchange.

3. The modification of the order by the customer.

4. The entry of the modified order to the NASDAQ 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.

NOTE: When using the Cancel/Replace functionality in the NASDAQ Exchange Single Book system, the member is required to enter a new Order ID. The new OATS Route Report that reflects the NASDAQ Exchange Single Book Cancel/Replace event from the customer must also include a new Routed Order ID that matches the new NASDAQ Exchange Single Book Order ID. This requirement is to ensure that OATS can match the subsequent Route Report to the NASDAQ Exchange Single Book record.

For additional information, refer to OATS Report article titled <u>OATS Route Matching to the NASDAQ Single Book,</u> which is available at http://www.nasd.com/oatsreport.

Figure 4-24. Customer Modification of a Previously Routed Order to the NASDAQ
Exchange
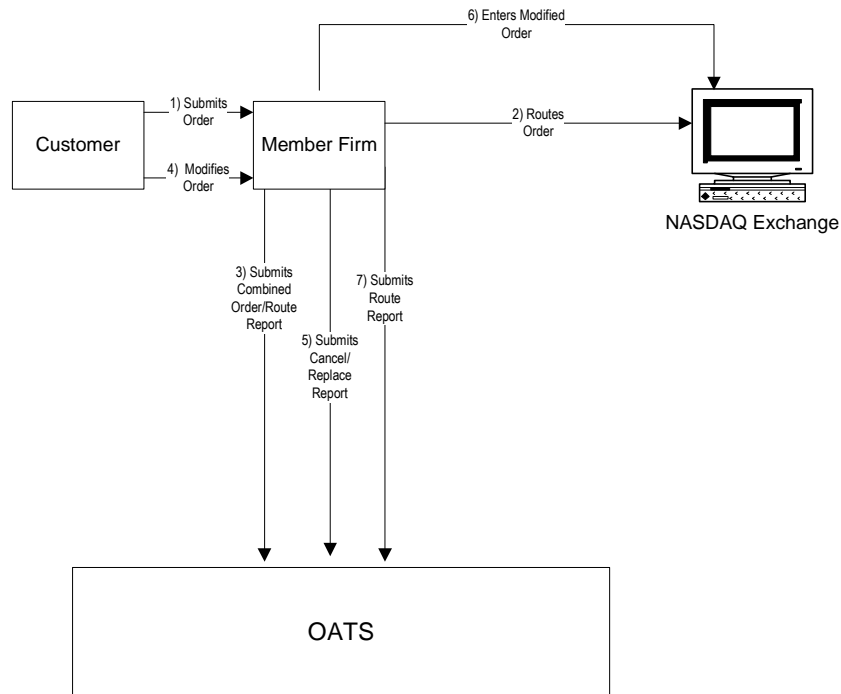
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a 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. If the order is routed on a
   riskless principal basis, please follow guidance in Section 4.4 Capacity
   Scenarios.

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

Ref	Event	Event Details
1	Customer submits limit order to Member Firm.	Sell order for 2,000 shares of ORCL at 23.
2	Member Firm routes order to the NASDAQ Exchange with Order ID ABC123.	Sell order for 2,000 shares of ORCL is routed.
3	Member Firm submits Combined Order/ Route Report to OATS.	Combined Order/Route Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102110203 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Limit Price: 23 Time in Force Indicator: GTC Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Sent to Firm MPID: Sent to Routed Order ID: ABC123 Order Sent Timestamp: 20030102110203 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: 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 includes: **Cancel Portion** Order Receiving Firm MPID: FIRM Replaced Order Received Date: 20030102000000 Replaced Firm Order ID: ABC123 **Replace Portion** Order Received Date: 20030102000000 Order Receiving Firm Order ID: GHI789 Order Received Timestamp: 20030102110300 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2500 Account Type Code: R Member Type Code: N ECN Flag:
6	Member Firm uses the NASDAQ Exchange Single Book Cancel/Replace functionality and cancels order ABC123 and replaces it with order DEF456. .	Sell order for 2,500 shares of ORCL.

Ref	Event	Event Details	
7	Member Firm submits Route Report.	Route Report sample data includes:	
		Order Receiving Firm MPID:	FIRM
		Order Received Date:	20030102000000
		Order Receiving Firm Order ID:	GHI789
		Sent to Firm MPID:	
		Routed Order ID:	DEF456
		Issue Symbol ID:	ORCL
		Order Sent Timestamp:	20030102110300
		Routed Shares Quantity:	2500
		Routing Method Code:	E
		Bunched Order Indicator:	
		Destination Code:	XQ

4.4.25 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 canceled on the same day OATS Business Day, the two events must be reported on a single report to OATS.

Figure 4-25. Order Cancellation in Full on Day of Receipt
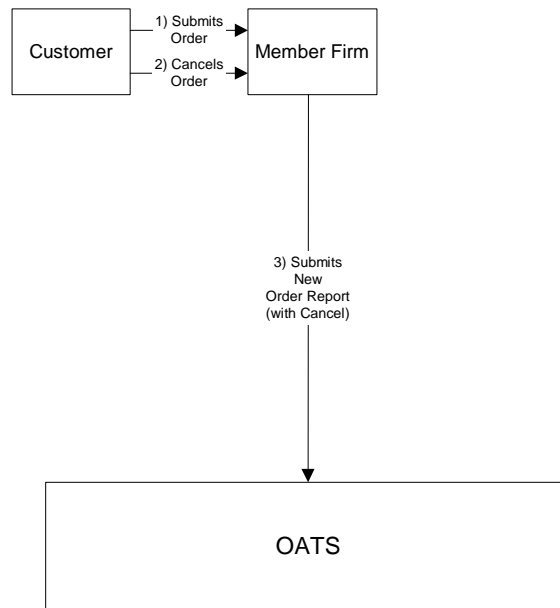
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a 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	Customer submits limit order to Member firm.	Limit sell order for 2,000 shares of ORCL at 23.
2	Customer cancels order.	Customer fully cancels limit sell order for 2,000 shares of ORCL.
3	Member firm submits New Order Report with Cancel information to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102033 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Limit Price: 23 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Order Cancel Timestamp: 20030102104355 Canceled By Flag: C

4.4.26 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 canceled 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 canceled after the day of receipt, a separate Cancel Report is used to report the cancellation.

Figure 4-26. Order Cancellation in Full After Day of Receipt
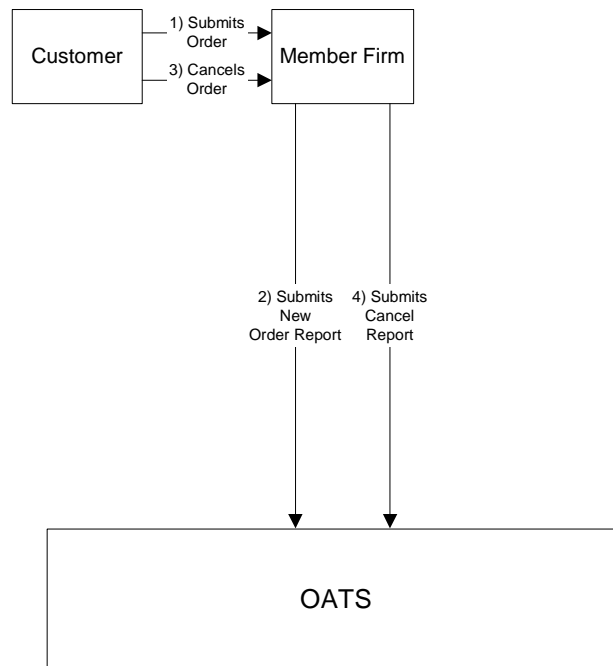
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

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

Ref	Event	Event Details
1	Customer submits limit order to Member Firm.	Limit sell order for 2,000 shares of ORCL at 23.
2	Member Firm submits New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102033 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Limit Price: 23 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: 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: 20030102000000 Order Receiving Firm Order ID: ABC123 Issue Symbol ID: ORCL Order Cancel Timestamp: 20030103104355 Cancel Type Flag: F Cancel Quantity: Leaves Quantity: Canceled By Flag: C

4.4.27 Partial Cancellation of an Order

This scenario illustrates 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 4-27. Partial Cancellation of an Order
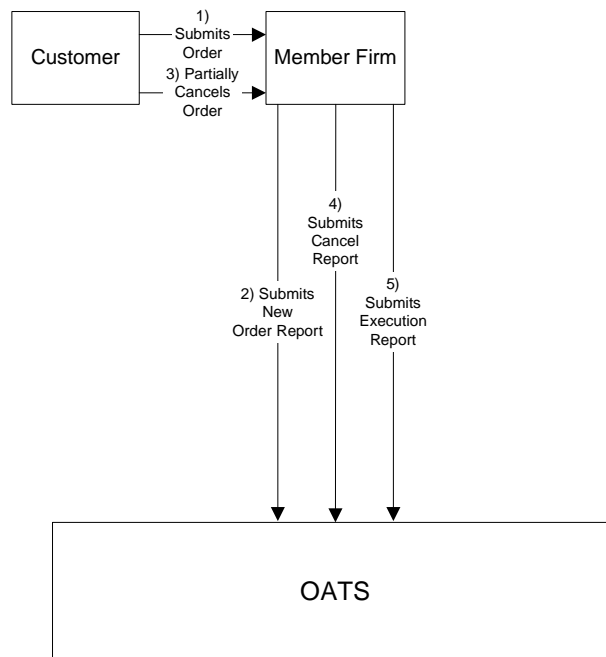
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

2. The order is executed on a principal basis. If the order is executed on a riskless principal basis, then the capacity code should be populated with "R".

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

Ref	Event	Event Details
1	Customer submits limit order to Member Firm.	Limit sell order for 2,000 shares of ORCL at 23.
2	Member Firm submits New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102033 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Limit Price: 23 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code:
3	Customer partially cancels order.	Sell order reduced to 500 shares of ORCL at 23.
4	Member Firm submits Cancel Report to OATS.	Cancel Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Issue Symbol ID: ORCL Order Cancel Timestamp: 20030102104355 Cancel Type Flag: P Cancel Quantity: 1500 Cancel Leaves Quantity: 500 Canceled By Flag: C
5	Member Firm submits Execution Report to OATS.	Execution Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Execution Timestamp: 20030102104555 Branch Sequence Number: ABC123 Execution Quantity: 500 Trader Terminal ID: TERM00392 Issue Symbol ID: ORCL Execution Type Indicator: F Market Center ID: L Execution Price: 11.04 Capacity Code: P

4.4.28 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.

Figure 4-28. Customer Cancellation of a Routed Order on Day of Receipt
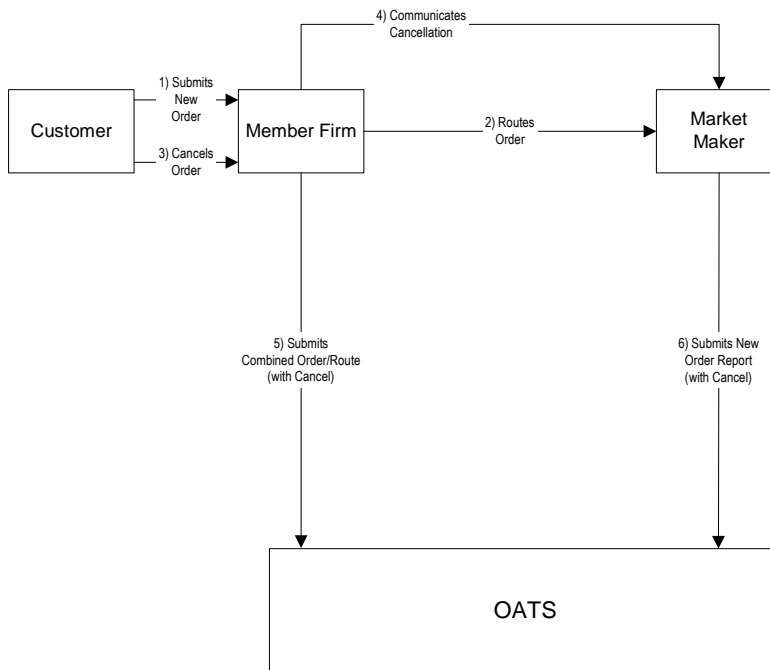
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a 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	Customer submits order to Member Firm.	Market sell order for 2,000 shares of ORCL.
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 sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102105033 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Sent to Routed Order ID: ABC123 Sent to Firm MPID: MM01 Order Sent Timestamp: 20030102105033 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Member Type Code: N Destination Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Order Cancel Timestamp: 20030102110355 Canceled By Flag: C
6	Market Maker submits New Order Report with Cancel information to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Routing Firm MPID: FIRM Routed Order ID: ABC123 Order Received Timestamp: 20030102105033 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Order Cancel Timestamp: 20030102110355 Canceled By Flag: C

4.4.29   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 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. The receipt of the order by 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 4-29. Desk Transmittal, External Route, and Cancellation in Full on Day of Receipt
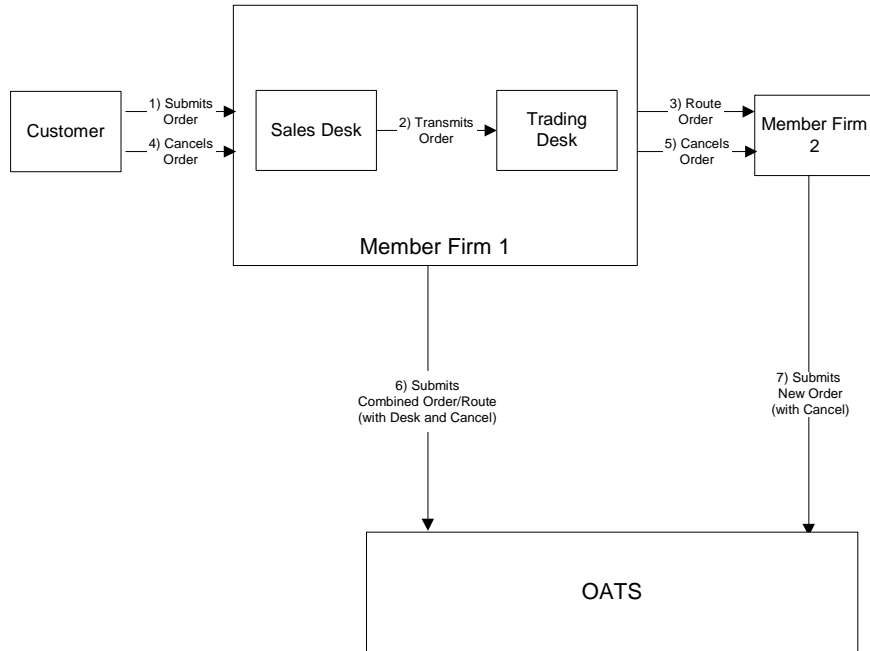
This scenario includes the following assumptions:

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	Event Details
1	Customer submits order to Member Firm 1.	Market sell order for 2,000 shares of ORCL at 23.
2	Trading Desk receives order from Member Firm 1 Sales Desk.	Member Firm 1 Sales Desk transmits 2,000 shares of ORCL to the Trading Desk.
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 and Cancel Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABCD1234 Order Received Timestamp: 20030102105755 Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Account Type Code: R Received Method Code: E Member Type Code: N ECN Flag: Desk Received Timestamp: 20030102105756 Received by Desk ID: TradingDesk Desk Type Code: T Sent to Firm MPID: MM01 Sent to Routed Order ID: ABCD1234 Order Sent Timestamp: 20030102105757 Routed Shares Quantity: 2000 Routing Method Code: E Bunched Order Indicator: Destination Code: M Order Cancel Timestamp: 20030102105800 Canceled by Flag: C
7	Member Firm 2 submits New Order with Cancel information to OATS.	New Order with Cancel Report sample data includes: Order Receiving Firm MPID: MM02 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102105757 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 2000 Limit Price: 23 Account Type Code: W Member Type Code: M Routed Order ID: ABCD1234 Routing Firm MPID: FIRM ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Order Cancel Timestamp: 20030102105800 Canceled By Flag: C

4.4.30 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 4-30. Post Trade Allocation Reporting
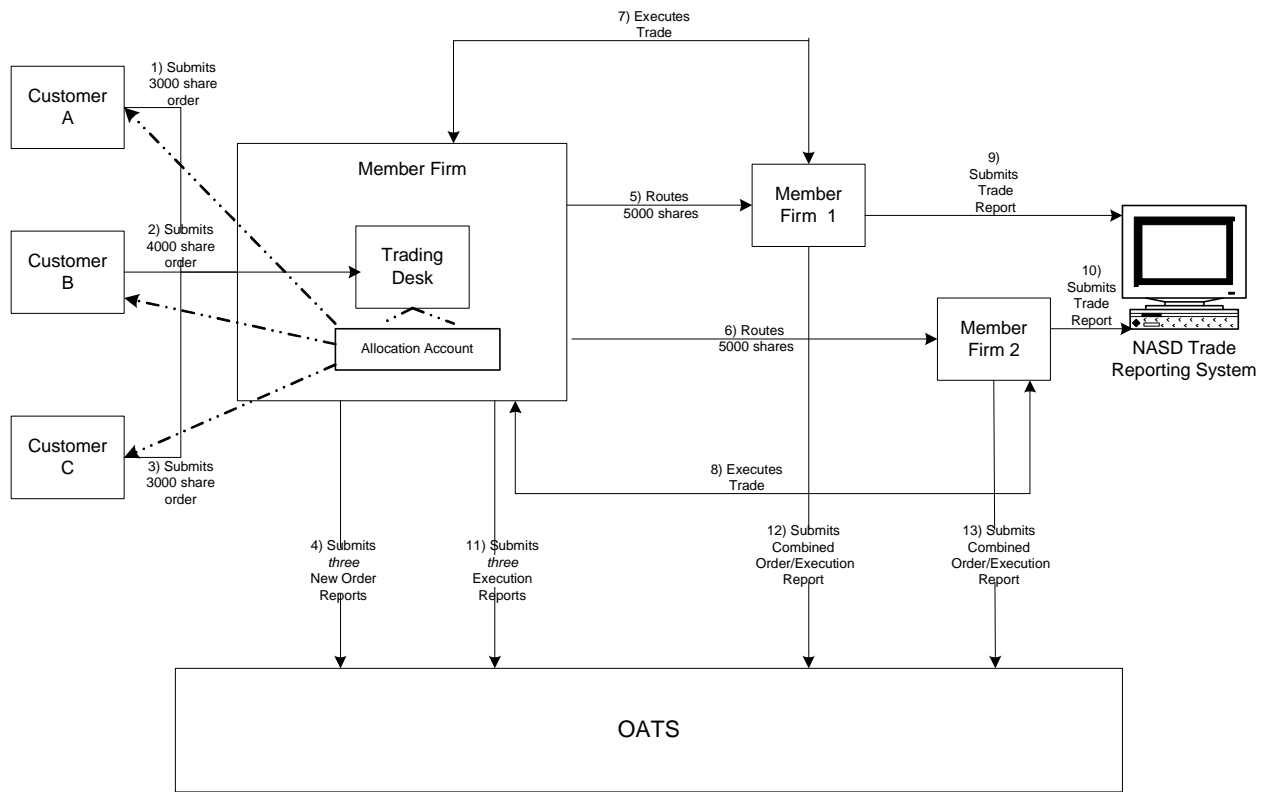
This scenario includes the following assumptions:

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

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

Ref	Event	Event Details
1	Customer A submits order to Member Firm.	Market sell order for 3,000 shares of ORCL.
2	Customer B submits order to Member Firm.	Market sell order for 4,000 shares of ORCL.
3	Customer C submits order to Member Firm.	Market buy order for 3,000 shares of ORCL.
4	Member Firm submits three New Order Reports to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102355 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 3000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Order Received Timestamp: 20030102102357 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 4000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: GHI789 Order Received Timestamp: 20030102102359 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 3000 Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code:
5	Member Firm routes order to Member 1.	Firm A electronically routes 5,000 shares to Member Firm 1.
6	Member Firm routes order to Member 2.	Firm A electronically routes 5,000 shares to Member Firm 2.
7	Member Firm 1 executes order.	
8	Member Firm 2 executes order.	

Ref	Event	Event Details
9	Member Firm 1 submits an NASD Trade Reporting System report.	Branch Sequence ID of KLM123 is included.
10	Member Firm 2 submits an NASD Trade Reporting System report.	Branch Sequence ID of NOP456 is included.
11	Member Firm submits three Execution Reports.	Execution report sample data includes: Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Execution Timestamp: 20030102102435 Branch Sequence Number: Reporting Exception Code: T Execution Quantity: 3000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: DEF456 Execution Timestamp: 20030102102435 Branch Sequence Number: Reporting Exception Code: T Execution Quantity: 4000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: GHI789 Execution Timestamp: 20030102102435 Branch Sequence Number: Reporting Exception Code: T Execution Quantity: 3000 Trader Terminal ID: TERM00392 Market Center ID: L Execution Price: 11.04 Capacity Code: P
12	Member Firm 1 submits a Combined Order/Execution report to OATS.	Combined Order/Execution sample report includes: Order Receiving Firm MPID: MM01 Order Received Date: 20030102000000 Order Receiving Firm Order ID: KLM123 Order Received Timestamp: 20030102102418 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 5000 Account Type Code: W Member Type Code: M ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code: Execution Timestamp: 20030102102420 Branch Sequence Number: KLM123

Ref	Event	Event Details	
		Execution Quantity:	5000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	11.04
		Capacity Code:	P
13	Member Firm 2 submits a Combined Order/Execution report to OATS.	Combined Order/Execution sample report includes:	
		Order Receiving Firm MPID:	MM02
		Order Received Date:	20030102000000
		Order Receiving Firm Order ID:	NOP456
		Order Received Timestamp:	20030102102417
		Received Method Code:	E
		Issue Symbol ID:	ORCL
		Buy/Sell Code:	SL
		Shares Quantity:	5000
		Account Type Code:	W
		Member Type Code:	M
		ECN Flag:	
		Desk Timestamp:	
		Received by Desk ID:	
		Desk Type Code:	
		Execution Timestamp:	20030102102422
		Branch Sequence Number:	NOP456
		Execution Quantity:	5000
		Trader Terminal ID:	TERM00392
		Market Center ID:	L
		Execution Price:	11.04
		Capacity Code:	P

4.4.31 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, an ECN receives an 11,000 share order with a displayed size of 1,000 shares and a reserve size of 10,000 shares. Nine 1,000 share executions occur, leaving a displayed size of 1,000 shares and a reserve size of 1,000 shares. The ECN 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. (Note: the contra parties are not depicted for purposes of simplicity.)

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 an NASD Trade Reporting System, the ECN is required to submit a Branch Sequence Number. The Branch Sequence Number enables the matching of an NASD Trade Reporting System trade to each OATS reported order.

Figure 4-31. Reserve Size Orders
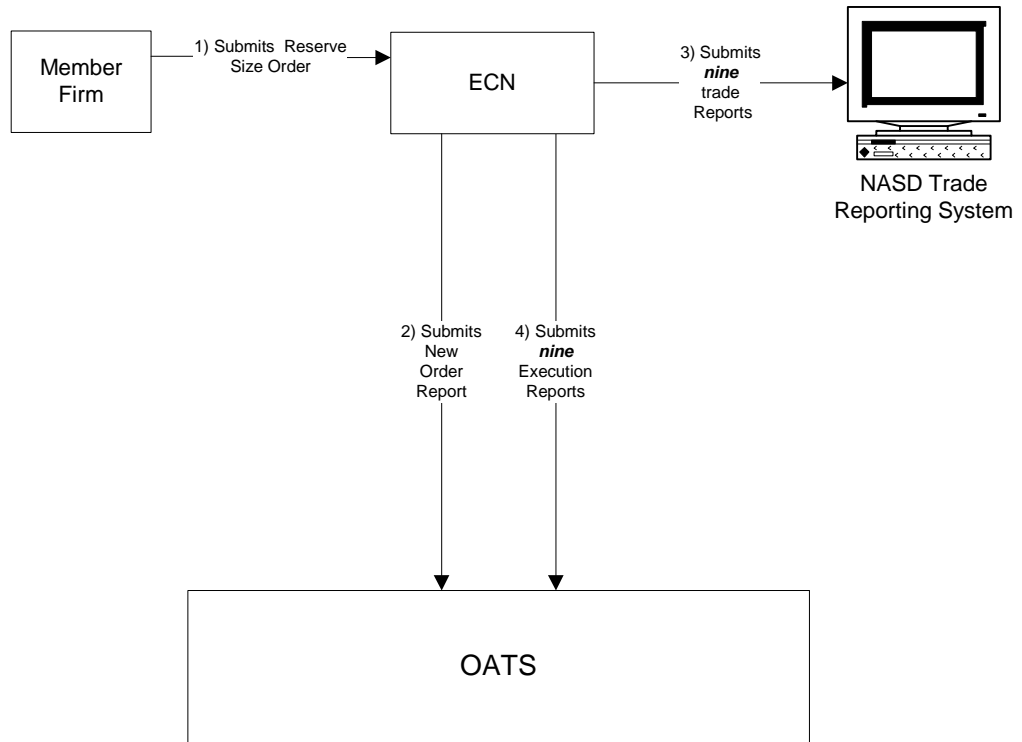
This scenario includes the following assumptions:

1. Time of receipt at a firm and time of receipt at a desk or department is simultaneous or within the same second.

2. The trades are reported to the NASD/NASDAQ Trade Reporting Facility.

Table 4-33. Reserve Size Orders, Event Listing

Ref	Event	Event Details
1	Member firm submits reserve size order to ECN.	Reserve size order to sell 11,000 shares of ORCL at 23. Displayed size of 1,000; reserved size of 10,000.
2	ECN submits New Order Report to OATS.	New Order Report sample data includes: Order Receiving Firm MPID: ECN1 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Routing Firm MPID: FRM1 Order Received Timestamp: 20030102102033 Received Method Code: E Issue Symbol ID: ORCL Buy/Sell Code: SL Shares Quantity: 11000 Limit Price: 23 Time in Force Code: DAY Account Type Code: W First Special Handling Code: RSV Member Type Code: M ECN Flag: Y Desk Timestamp: Received by Desk ID: Desk Type Code:
3	ECN reports nine executions of 1,000 shares to an NASD Trade Reporting System.	Each report includes Branch Sequence Number ABC123.
4	ECN reports nine Execution Reports to OATS. (Only one Execution Report is represented here.)	Sample data from the first Execution Report includes: Order Receiving Firm MPID: ECN1 Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Execution Timestamp: 20030102104555 Branch Sequence Number: ABC123 Execution Quantity: 1000 Trader Terminal ID: TERM01 Issue Symbol ID: ORCL Execution Type Indicator: P Market Center ID: L Execution Price: 11.04 Capacity Code: A

4.4.32 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 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 scenarios illustrates the following details:

1. 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 4-32. Correction of Order Information that was Previously Submitted to OATS,
Unexecuted Order
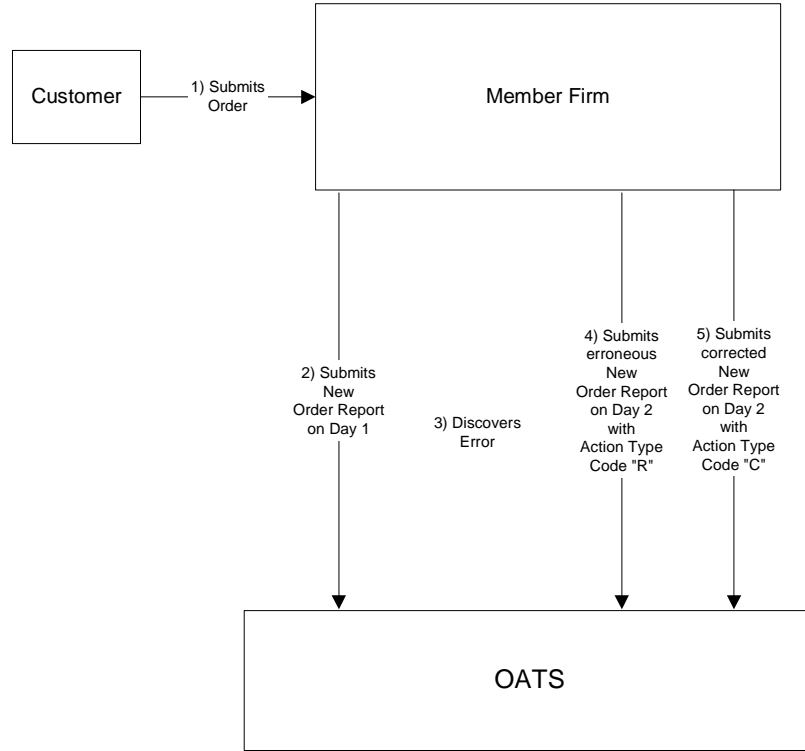
Table 4-34. Correction of Order Information that was Previously Submitted to OATS,
Unexecuted Order, Event Listing

Ref	Event	Event Details
1	Customer submits limit order to Member Firm.	Buy order for 1,000 shares of AAII at a limit price of 11; the order desk mistakenly records the limit price as 12.
2	Member Firm submits New Order Report to OATS.	New Order Report sample data includes: Action Type Code: N Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102102033 Received Method Code: E Issue Symbol ID: AAII Buy/Sell Code: B Shares Quantity: 2000 Limit Price: 12 Time in Force Code: GTC Account Type Code: R Member Type Code: N ECN Flag: Desk Timestamp: Received by Desk ID: Desk Type Code:
3	Member Firm discovers error.	The customer's limit price for 1,000 shares of AAII was actually 11.
4/5	Member Firm submits replace New Order Report followed by a corrected New Order Report to OATS.	The replace New Order Report sample data includes: Action Type Code: R Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102110000 Received Method Code: E Issue Symbol ID: AAII Buy/Sell Code: B Shares Quantity: 2000 Limit Price: 12 Time in Force Code: GTC Account Type Code: R Member Type Code: N ECN Flag: The corrected New Order Report sample data includes: Action Type Code: C Order Receiving Firm MPID: FIRM Order Received Date: 20030102000000 Order Receiving Firm Order ID: ABC123 Order Received Timestamp: 20030102110000 Received Method Code: E Issue Symbol ID: AAII Buy/Sell Code: B Shares Quantity: 2000 Limit Price: 11 Time in Force Code: GTC Account Type Code: R Member Type Code: N ECN Flag:

4.5 Capacity Scenarios

This section provides an illustration of the different capacities that firms may play in each order reporting scenario. (For clarification about reporting responsibilities, see Section 4—Order Reporting.)

4.5.1 Firm Acting in a Principal Capacity

This scenario illustrates the reporting requirements to OATS of a market maker acting in a principal capacity that fills a customer's order. Upon receipt of the customer order for 2,000 shares of an OATS reportable security, the market maker obtains the 2,000 shares by executing with the NASDAQ Exchange for 500 shares, an ECN for 1,000 shares, and another market maker for 500 shares. The market maker takes the 2,000 shares into its position then sells 2,000 shares to the customer. In this scenario, the sale of the 2,000 shares to the customer requires the market maker 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.

The execution between the ECN and the market maker requires the ECN to report the following events to OATS:

1. The receipt of the order.

2. The sale of the 1,000 shares to the market maker.

Furthermore, this scenario illustrates the following details:

1. Market Maker 1 is not required to send Route Reports for the proprietary orders sent to Market Maker 2, the NASDAQ Exchange, and the ECN because proprietary orders effected in the ordinary course of market making are not reportable to OATS.

2. The ECN is required to send a New Order Report and Execution Report for the order it executed with the market maker because all orders received by ECNs must be reported, even orders from market makers filling orders for their proprietary accounts.

3. When reporting to an NASD Trade Reporting System, Market Maker 1 and the ECN are required to submit Branch Sequence Numbers. Both must also submit a corresponding Branch Sequence Number to OATS on their respective Execution Reports.

4. Market Maker 2 is not required to submit any reports to OATS because the order it received from Market Maker 1 is a proprietary order received from another market maker.

Figure 4-33. Firm Acting in a Principal Capacity
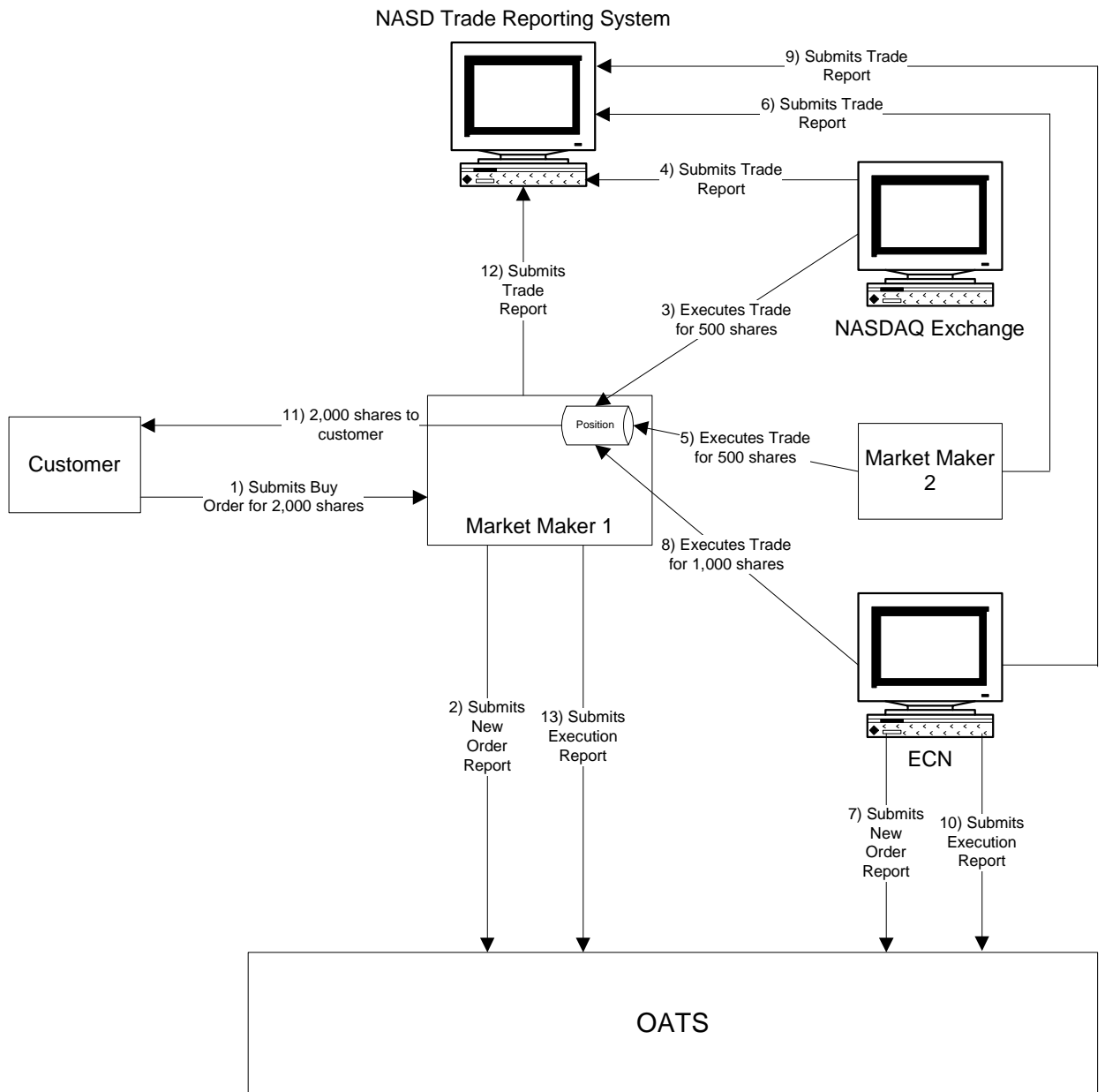
This scenario includes the following assumption:

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

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 the NASDAQ 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 party.

The ECN and market maker would both 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 Exchange, 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 to an NASD Trade Reporting System, the market maker and ECN are required to submit a Branch Sequence Number and submit their Branch Sequence Numbers to OATS on their respective OATS Execution Reports.

Figure 4-34. Firm Acting in an Agency Capacity
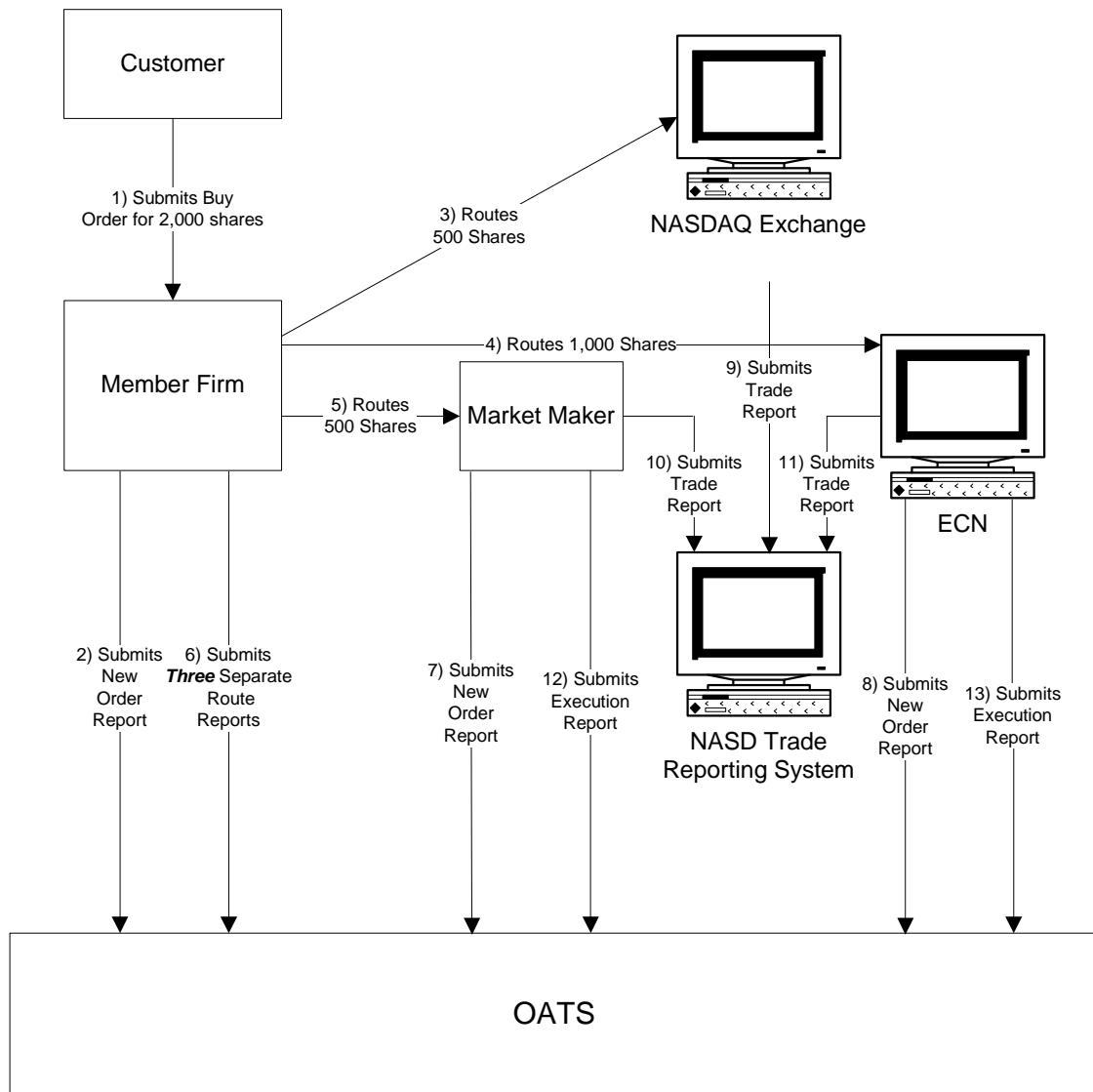
This scenario includes the following assumption:

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

4.5.3   Firm Acting in a Riskless Principal Capacity

This scenario illustrates the reporting requirements to OATS for both market makers and member firms filling a customer's order while acting in a riskless principal capacity. Upon receipt of the customer order for 2,000 shares of an OATS reportable security, the member firm or market maker executes trades with the NASDAQ 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, both the market maker and member firm are 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. Both market makers and member firms are required 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.

2. Member firms using the "original approach" for complying with NASD 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) to indicate that there is no corresponding trade report in an NASD Trade Reporting System to which the OATS Execution Report can match.

3. Member firms using the "alternative approach" for complying with NASD 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 NASD Trade Reporting System report in order for OATS to match the OATS Execution Report to the related clearing only or non-clearing, non-tape NASD Trade Reporting System report.

Figure 4-35. Firm Acting in a Riskless Principal Capacity
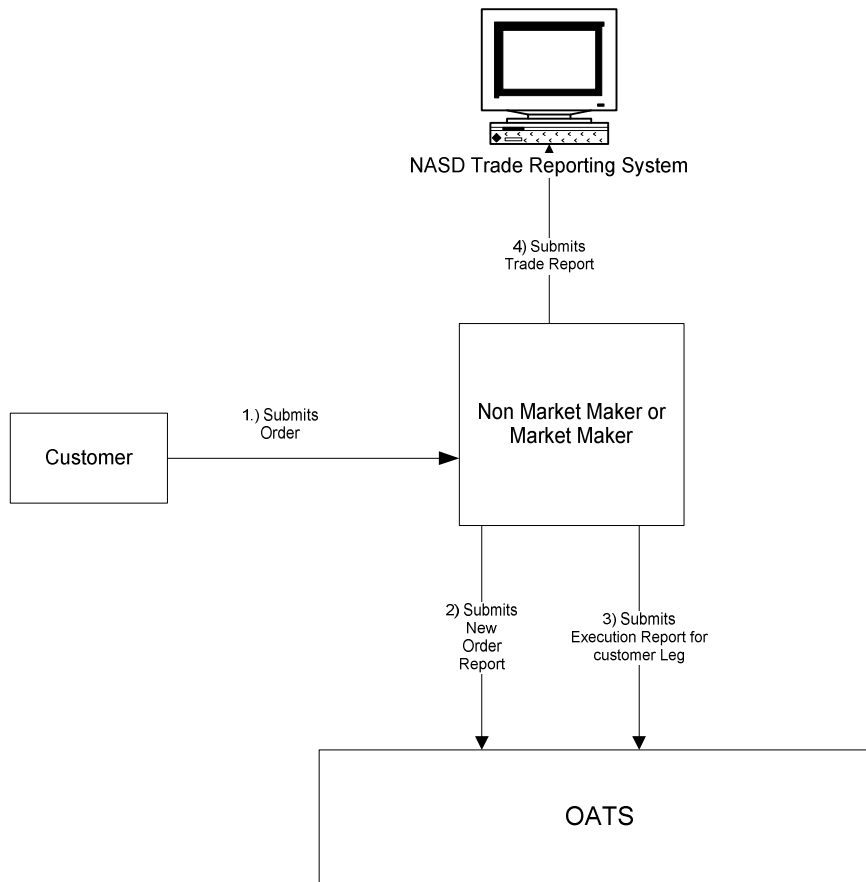
This scenario includes the following assumption:

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

The following events occur:

1. Customer submits order

2. Firm (market maker or non-market maker) submits New Order Report to reflect receipt of customer order.

3.   Firm (market maker or non-market maker) submits an OATS Execution Report to reflect execution of the customer leg of the transaction.

4. **If a firm uses the original approach for complying with NASD rules for reporting of riskless principal transactions, the firm populates the Reporting Exception Code field on the OATS Execution Report with "R" (Riskless Principal Transaction). If a firm uses the alternative approach for complying with NASD

rules for reporting of riskless principal transactions and submits a clearing only or non-tape, non-clearing report to an NASD Trade Reporting System for regulatory purposes, the firm populates the Branch Sequence Number on both the OATS Execution Report and the related NASD Trade Reporting System clearing only or non-clearing, non-tape report in order for the two reports to match.

5. The proprietary order and related execution is not reportable to OATS by market makers or member firms in a riskless principal transaction.

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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 NASD. 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
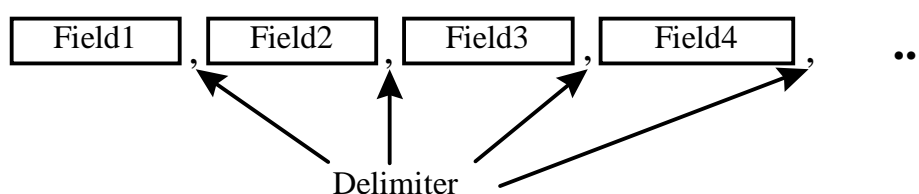
The delimited format, shown in Figure 5-1, can also be described as a field separated format, because fields within each record are separated by a delimiter. The delimiter marks the end of the current field and the beginning of the next field. Each field is identified by its relative position within 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 fourteen (14) digits and are specified as numeric (14) formatted as "YYYYMMDDHHMMSS."

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.

Figure 5-2. Delimited Format
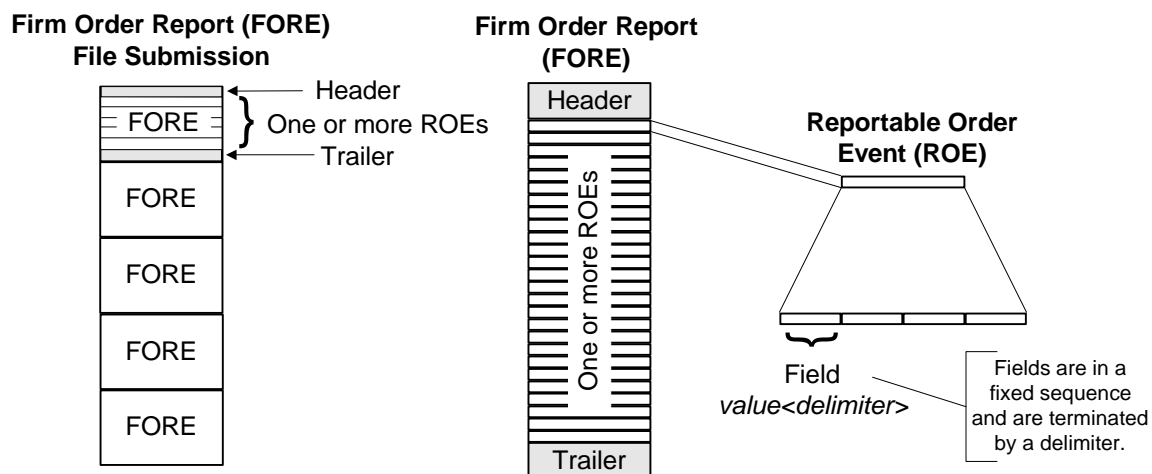
All order events within a FORE (header/trailer pair) must apply to the firm identified in the header. **If order events for more than one combination of firm and Reporting OSO are generated, the order events for each combination of firm and Reporting OSO must be packaged in a separate FORE.** The MPID in the FORE header and the MPID in the ROE refer to the same firm. The MPID in the header must be the current MPID for the firm. 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. NASD examines each header to determine if the user ID/password combination is valid. If the file is submitted via FTP or IFT, the user ID/password field in the header should be left blank; if supplied, it is ignored.

4. NASD examines each header to determine if the user ID/password supplied is associated with a valid Transmitting OSO. If the file is submitted via FTP or IFT, the user ID/password field in the header should be left blank; if supplied, it is ignored.

5. NASD examines each header to determine if the originating firm is a valid firm (MPID).

6. NASD examines each header to determine if the Reporting/Transmitting OSO ID is valid; i.e., authorized to report/transmit for the corresponding firm identified in the header.

7. Failure to pass validation on any mandatory header or trailer values will result in rejection of the entire FORE.

8. All order events contained in a FORE (header/trailer pair) must apply to the combination of firm and Reporting OSO identified in the header.

9. Order events within the FORE may be in any sequence, except for the events addressed in Section 6.5.1.

10. 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.

11. 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. NASD will validate this field against a list of recently sent files to detect duplicate submissions. Duplicate file submissions will be rejected.

12. FORE filenames may not have extensions of *.status* or *.rejects*, and may not include colons or spaces.

13. 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.

14. Each file is limited to a maximum total length of 1.5MB for e-mail or 4MB for FTP and IFT submissions.

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, which is the firm 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 and IFT, but are required in the header of FOREs sent via e-mail.

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.

An NASD 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

#HD#,OATS D1999-01,19981116,FORE300,OSOID,MyUserID3,Password,AAAA

Figure 5-5. OSO Scenario 2

#HD#,OATS D1999-01,19981116,FORE300,OSOID,MyUserID3,Password,AAAA

Figure 5-6. OSO Scenario 3

#HD#,OATS D1999-01,19981116,FORE300,555,MyUserID3,Password,AAAA
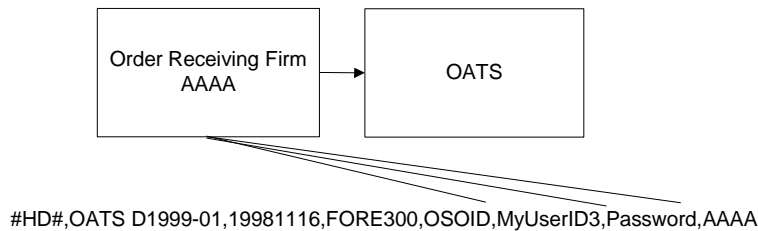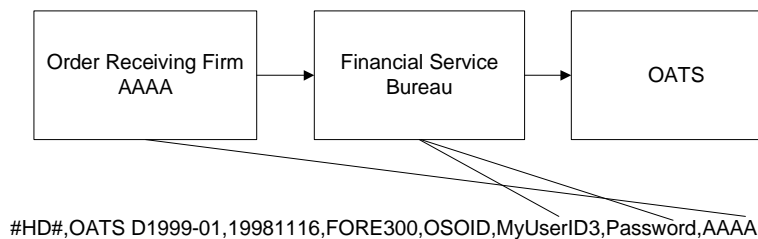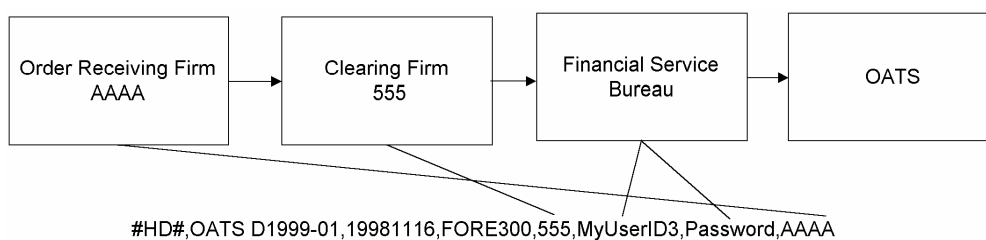
The header is also used to set the delimiter character to be used for the remainder of the FORE. The delimiter character is determined by the fifth character in the header, which follows the four character record type code "#HD#". The delimiters are restricted to one of the following ASCII characters: (comma (,), semicolon (;), pipe (|), tab (→)).

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, Routing, Desk, Execution, Cancel, Cancel/Replace, and Combined Order/Execution, and Combined Order/Route.

5.3 Packaging of Files

Files submitted using FTP and IFT do not require any additional packaging. Files submitted via e-mail are required to be a separate e-mail attachment to a message with no required body text.

5.4 Feedback Formats

Of the available feedback items, only FORE status files, ROE rejection files, Unmatched Execution Reports, Unmatched NASDAQ Route Reports, and Unmatched Interfirm Route Reports that are downloaded via FTP, IFT or the Web are formatted. These formats are explained in Appendix C—Order Report Formats. FORE status, ROE rejections, statistics, Unmatched Execution Reports, Unmatched Route Reports, and Unmatched Interfirm Route Reports that are viewed on the Web, but are not downloaded as files, are embedded with HTML formatting tags for the Web interface.

FORE status messages are comma-delimited and consist of a header record containing the status, zero or more status exception records that contain a numeric and textual explanation of the exception messages, and then a trailer to indicate end of submission.

ROE rejection files downloaded via FTP, IFT and the Web are comma-delimited and consist of a header record, zero or more rejection description records that contain the numeric reason for the rejection and textual content of the original ROE, and then a trailer to indicate end of submission. If there are no rejections on a given day for an OSO, a ROE rejection file consisting only of a header and a trailer may be downloaded via FTP and IFT, whereas no ROE rejection file for that OATS Reporting Day will appear on the Web.

ROE rejection files downloaded via FTP 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 are not available to another OSO.

Firms downloading rejections via the Web may access all rejections, regardless of which OSO submitted the original records. Firms may also access FORE status and reporting statistics via the Web, as detailed in Chapter 3—System Access.

Unmatched Execution Reports, Unmatched NASDAQ Route Reports and Unmatched Interfirm Route Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE; they are available to the OSO that submitted the original FORE and the firm that is the subject of reporting.

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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

- Unmatched Execution Reports— identifies Execution Reports that do not link with trades reported to an NASD Trade Reporting System

- Unmatched NASDAQ Route Reports—identifies Route Reports that do not link with orders submitted to the NASDAQ Exchange

- Unmatched Interfirm Route Reports—identifies 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 firm-initiated 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. They may be viewed and repaired via the OATS Web interface; formatted ROE rejection files may also be downloaded from OATS via the Web, FTP and IFT. ROE rejection files downloaded via FTP 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.

Each rejected ROE will have one or more associated error messages. Errors may be detected during syntax and semantic validation checks, which determine that formats and lengths are correct, values are valid, and field value comparisons are correct. Errors may also be detected during context checking, which compares the ROE against previously received ROEs and identifies duplicates or discrepancies. (For a list of error messages, see Appendix B—Error Messages.) Common reasons for ROE rejection include:

- **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 Limit Order Display Indicator 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.

- **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.

- **Duplicate ROE**—the ROE is a duplicate of a previously submitted ROE.

- **Report is for an order that does not exist in OATS**—a Cancel, Route, Execution, Desk, or Cancel/Replace Report references an order that does not exist in OATS. This may be because the order had never been reported, or was rejected.

ROE rejections should be available by the end of the next Reporting Day. For instance, if the Reporting Day ended at 04:00 Eastern Time on Tuesday, the rejections should be available by 04:00 Eastern Time on Wednesday. Once ROE rejections are available via the Web, FTP and IFT, they may be repaired. ROE rejections must be researched and repaired by the firm. 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.

All rejected order reports must be repaired within 5 business days.   For example, if you submit an order to OATS on Friday and OATS accepts it by 04:00 Eastern Time on Saturday, you must submit all related order events by 04:00 Eastern Time the following Friday. Repaired order reports that are submitted later than this deadline will be considered late repairs and may reject for context.

There are two ways to repair a rejected ROE:

- **Resubmit the repaired ROE in a new FORE**—the firm may regenerate the repaired ROE, package it in a new FORE, and resubmit the FORE to OATS. The following rules apply to resubmitting a rejected ROE via a FORE:

  1. The firm must indicate the ROE is a rejection resubmission by setting the Rejected ROE Resubmit Flag to 'Y' (Yes).

  2. The resubmitted ROE may be commingled with other ROEs in a FORE, or may be sent in a FORE that contains only rejection resubmissions.

3. 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 a ROE for validation via the OATS Web interface.

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 04:00 Eastern Time on Tuesday, the statistics will be available by 04:00 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 Unmatched Execution and Combined Order/Execution Report Data

OATS must be able to link orders with trades reported to an NASD Trade Reporting System. The system attempts to match OATS Execution or Combined Order/Execution Reports with a Market Center ID which represents an NASD Trade Reporting System to trades reported to an NASD Trade Reporting System that do not contain a Reporting Exception Code and have an Action Type Code of 'N' (New) or 'C' (Correction). (Refer to Appendix A for a list of Market Center IDs which represent an NASD Trade Reporting System.) The following fields are used for the match criteria:

1. MPID

2. Execution Date

3. Branch/Sequence Number

4. Issue Symbol

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. These Unmatched Execution and Combined Order/Execution Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE.

6.5 Unmatched NASDAQ Route Report Data

OATS must be able to link OATS orders with orders sent to the NASDAQ Exchange. The system attempts to match all Route and Combined Order/Route Reports with a Destination Code of 'XQ' (NASDAQ Exchange), an Action Type Code of 'N' (New) or 'C' (Correction), and a Routing Method Code of 'E' (Electronic) or 'S' (Smart Router) to the related order in the NASDAQ Exchange.

The following fields are used for the match criteria:

1. Firm ID/Client ID to OATS Receiving Firm MPID
2. Order Entry Date to OATS Order Sent Timestamp (Date portion)
3. Order Update Timestamp to OATS Order Sent Timestamp (Time portion)
4. Order ID to OATS Routed Order ID (RT) or Sent to Routed Order ID (OR)[1]
5. Issue Symbol to OATS Issue Symbol ID

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. These Unmatched Route and Combined Order/Route Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE.

6.6 Unmatched Interfirm Route Report Data – Orders Routed

OATS must be able to link Route Reports 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. If the Action Type Code is 'N' (New) or 'C' (Corrected) and the Routing Method Code is 'E' (Electronic) or 'S' (Smart Router) and the Destination Code is 'M' (Member) or 'E' (ECN), the system attempts to match the report to the corresponding New Order, Cancel/Replace, Combined Order/Execution

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1 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.

or Combined Order/Route Report submitted by the firm to which the order was routed. 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. Order Sent Timestamp (date and time) is within +/- 3 seconds of the Order Received Timestamp

5. Routed Shares Quantity to Order Shares Quantity

6. Issue Symbol ID to Issue Symbol ID

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. These Unmatched Route and Combined Order/Route Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE.

6.7 Unmatched Interfirm Route Report Data – Orders Received

OATS must be able to link Route Reports 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. If the Action Type Code is 'N' (New) or 'C' (Corrected) and the Routing Method Code is 'E' (Electronic) or 'S' (Smart Router) and the Destination Code is 'M' (Member) or 'E' (ECN), the system attempts to match the report 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. 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. Order Sent Timestamp (date and time) is within +/- 3 seconds of the Order Received Timestamp

5. Routed Shares Quantity to Order Shares Quantity

6. Issue Symbol ID to Issue Symbol ID

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. Data associated with the Unmatched Route and Combined Order/Route Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE.

6.8 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 04:00 Eastern Time on Saturday, you must submit all related order events by 04:00 Eastern Time the following Friday. Order reports that are submitted later than this deadline will be rejected for context.

6.8.1   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 6.8.2.) 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 canceled 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 6.8.2.) 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.

6.8.2   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 canceled 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 canceled 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 6.8.2.) The corrected ROE should then be submitted with an Action Type Code of 'N'.

5. A deleted ROE shoud 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.

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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 and obtain a valid User ID and password. OSOs can transmit to the OATS test environment via File Transfer Protocol (FTP) as soon as they have a connection to NASD's private network and have been assigned an OSO ID, User ID, and password. OSOs can transmit to the OATS test environment via Internet File Transfer (IFT) as soon as they have a connection to the OATS network using the SecureTransport ™ software and have been assigned an OSO ID, User ID, and password. OSOs can transmit to the OATS test environment via encrypted e-mail as soon as they have requested and stored NASD's security certificate and have been assigned an OSO ID, User ID, and password. OSOs can transmit to the OATS test environment via the OATS Web interface as soon as they have been assigned an OSO ID, User ID, and password.

NASD 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 differences between the test and production environments are the addresses used to contact OATS (presented in Table 3-3 in Chapter 3, "System Access") and the availability of immediate record rejections. In the test environment, you can immediately access Reportable Order Event (ROE) syntax rejections after submitting a FORE file. This function is not available in the production environment.

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. NASD 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.

Complete details of these procedures are available in the *OATS Subscriber Manual*.

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 NASD Rules 6950 through 6958. 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. (NOTE: Firms are allowed to submit FOREs during business hours.) Events that occurred during a particular OATS Business Day must be reported by 04:00 Eastern Time the following calendar day. Reports received after the deadline will be marked late by NASD. 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. Order events that occur between 16:00:01 and 03:59:59 and are submitted either the same OATS Business Day or the next OATS Business Day will not be marked late. Table 8-1 illustrates the time periods involved.

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

Table 8-1. Scenarios for OATS Order Reporting Hours

Event Occurs	Holiday	Business Day	Report Due to OATS
Wednesday 15:15 ET	N/A	Wednesday	Thursday 04:00 ET
Wednesday 17:30 ET	N/A	Thursday	Friday 04:00 ET
Friday 10:00 ET	N/A	Friday	Saturday 04:00 ET
Friday 19:30 ET	N/A	Monday	Tuesday 04:00 ET
Friday 19:30 ET	Following Monday	Tuesday	Wednesday 04:00 ET
Saturday 06:00 ET	N/A	Monday	Tuesday 04:00 ET
Monday 14:00 ET	Monday	Tuesday	Wednesday 04:00 ET

8.2 Deadlines for ROE Submission

All order events that occur during a particular OATS Business Day must be reported by 04:00 a.m. Eastern Time the following calendar day. Order reports that are submitted later than this deadline will be marked late by NASD.

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**. 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 04:00 a.m. Eastern Time on Saturday, all related order events must be submitted by 04:00 a.m. Eastern Time the following Friday.

8.3 Deadline for ROE Rejection Repair

All repairable rejected ROEs must be repaired and resubmitted within five OATS Business Days.

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 04:00 a.m. Eastern Time on Saturday, all related order events must be submitted by 04:00 a.m. Eastern Time the following Friday.

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**. 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 04:00 a.m. Eastern Time on Saturday, all related order events must be submitted by 04:00 a.m. Eastern Time the following Friday.

8.5 Data Retention Requirements

As stated in NASD Rule 6954, each reporting member must retain records of the information required to be recorded under this rule in accordance with NASD 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 NASD Business and Technology Support Services

NASD 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 NASD Rules 6950 through 6958, clock synchronization, member firm reporting responsibilities, technical specifications for reporting to NASD, OATS publications, deadlines, OATS Announcements, and more.

NASD 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, NASD Business and Technology Support Services publishes information about OATS on a Web Page on the NASD Web Site. Please provide your name, title, firm's name, Broker Dealer Number, and a phone number when contacting NASD Business and Technology Support Services via phone, fax, or e-mail.

	Technical Support	Business Support
Telephone:	800-321-NASD	800-321-NASD
Fax:	240-386-6499	240-386-4841
E-mail:	*supportservices@nasd.com*	*supportservices@nasd.com*
WWW:	*http://www.nasd.com*	*http://www.nasd.com*

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Appendix A — Data Dictionary

Name	Permitted Values and Description		Definition
Account Type Code	R	Retail—An order received for the account of an investor, including institutional orders	The account type for which an order is placed. The value of 'C' is only permitted in instances where orders for different accounts (e.g. Retail and Employee) are bunched into one order for OATS reporting purposes. Multiple orders may be reported to OATS as one order in instances where a registered representative is exercising discretion over multiple accounts.
	W	Wholesale—An order received from another broker/dealer	
	P	Proprietary—An order placed by a firm for a proprietary account	
	E	Employee—An order received for the account of an employee or associated person of a member firm	
	C	Combined—An order placed for more than one type of account	
Action Type Code	N C D R	New order event Corrected order event Deleted order event Delete for replacement order event	Indicates the purpose of the Order Report, whether to report a new event to OATS, to correct a previously reported event, to delete a previously reported event, or to delete a previously reported event with the intention of correcting it.
Arbitrage Code	Y N X	Part of an arbitrage strategy Not part of an arbitrage strategy Not known (not an accepted value for retail or employee orders)	Indicates if an order is part of an arbitrage trading strategy involving the purchase or sale of a "basket" or group of securities. This is in conjunction with the purchase or sale (or intended purchase or sale) of one or more cash-settled options or futures contracts on index stock groups, or options on any such futures contracts in an attempt to profit by the price difference.
Branch Sequence Number			The Branch Sequence Number assigned to an order by the order receiving firm, as reported to an NASD Trade Reporting System. Must be provided when a trade is reported to an NASD Trade Reporting System.
Bunched Order Indicator	Y <blank>	The identified order is part of a bunch The identified order is not part of a bunch	Indicates the Route or Combined Order/Route Report represents more than one order when routing.

Name	Permitted Values and Description		Definition
Buy/Sell Code	B	Buy	Indicates if an order is an instruction to buy or to sell shares of a security.
	SL	Sell Long	
	SS	Short Sale	
	SX	Short Sale Exempt	
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 canceled.
Cancel Quantity			The number of shares canceled 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	Indicates if the cancellation was a full or partial cancellation.
	P	Partial—Cancel quantity is less than the total shares quantity of the order	
Canceled by Flag	C	Order canceled by customer or firm placing the order	Indicates whether the order was canceled by the customer or firm that placed the order, or the firm that received the order.
	F	Canceled by firm receiving the order	
Capacity Code	A	Agency	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 association for trade reporting purposes.
	P	Principal	
	R	Riskless Principal	
Continuation	Y	Continuation	Indicates that this ROE rejection description record is the continuation of the previous description record.
	N	Not a continuation	
Correction/Deletion Timestamp			The date and time a correction or a deletion to an order was effective. The alphanumeric string must use the format YYYYMMDDHHMMSS 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, and SS is the current second of the minute.

Name	Permitted Values and Description		Definition
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 YYYYMMDDHHMMSS 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, and SS is the current second of the minute.
Desk Type Code	T PR S IS PT IN AR A D PF B C TR SW EC CR O	Trading Proprietary Sales Institutional Program Trading International Arbitrage Agency Derivatives Preferred Trading Block Trading Convertible Desk Treasury Swaps Equity Capital Central Risk Books Other	Indicates the type of Desk or Department at which the order was received.

Name	Permitted Values and Description		Definition
Destination Code	M	Member	Indicates whether the Route Report or Combined Order/Route Report was routed to a Member Firm, Non-Member Firm, ECN, or Exchange.
	E	ECN	
	N	Non-Member	
	A	Non-Member Affiliate	
	Exchanges		
	XA	American Stock and Options Exchange (AMEX)	
	XB	Boston Stock Exchange	
	XC	National Stock Exchange	
	XF	Non-US Exchange	
	XI	International Securities Exchange	
	XM	Chicago Stock Exchange	
	XN	New York Stock Exchange	
	XO	Bourse de Montreal	
	XP	NYSE/Arca Exchange	
	XQ	NASDAQ Exchange	
	XT	Toronto Stock Exchange	
	XV	TSX Venture Exchange	
	XW	Chicago Board Options Exchange	
	XX	Philadelphia Stock Exchange	
Do Not Reduce/Do Not Increase Code	<blank>	Not Applicable	Indicates if the customer has specified that the order price or shares quantity not be adjusted to reflect a cash or stock dividend.
	DNR	Do Not Reduce	
	DNI	Do Not Increase	
	DIR	Do Not Reduce or Increase	
ECN Flag	Y	The identified order is submitted by an 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.
	<blank>	The identified order is not submitted by an ECN	
End of Record Marker	LF	Line Feed	End of record marker for the Header Record, the Trailer Record, or specified record type.
	CR/LF	Carriage Return/Line Feed	

Name	Permitted Values and Description		Definition
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 E	Warning Error	Specifies the type of FORE exception that occurred.
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. Values are any integer greater than zero.
Execution Timestamp			The date and time of an execution. The alphanumeric string must use the format YYYYMMDDHHMMSS 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, and SS is the current second of the minute.
Execution Type Indicator	F P	Full—Execution equals total shares quantity of the order 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 HHMMSS 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, and SS is the current second of the minute.

Name	Permitted Values and Description		Definition
Fifth Desk Special Handling Code (Maximum of 5 codes)	See First Special Handling Code.		See First Special Handling Code.
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 optional identifier assigned to an 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.	Additional order instructions that serve to qualify the pricing, quantity, execution timing, or execution method of an order.
	AON	All or None—Requires that if an order cannot be filled in its entirety, the order should not be executed.	
	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.	
	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 execution	
	E.W	Exchange for Physical Transaction – Equity trade component of an "exchange for physical" transaction. An	

Name	Permitted Values and Description		Definition
		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 canceled.	
	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 canceled.	
	ISO	Intermarket Sweep Order—An order that meets the 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 limitspecified.	
	MAC	Market at Close— Instructs the trader to execute the order at the closing inside quote price of regular market	

Name	Permitted Values and Description		Definition
		hours.	
	MAO	Market at Open— Instructs the trader to execute the order at the opening inside quote price of regular market hours.	
	MOC	Market 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.	
	MQT	Minimum Quantity— Instruction to cancel the order if a specified minimum quantity cannot be executed.	
	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.	
	RSV	Reserve Size Order—	

Name	Permitted Values and Description	Definition
	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 that meets both of the following conditions: 1) the transaction is the result of an order in which a member and another party agree that the order will be executed at a Stop Stock Price or better; and 2) the order is executed at the Stop Stock Price.	
	SCL Scale—Requires partial executions that are not more than a specified price increment apart (e.g., 1/8 of a point).	
	TMO Time 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	

Name	Permitted Values and Description	Definition
		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 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.	
	F7	Strict Scale	
	F8	Try to Scale	
	F9	Stay on Bidside	
	FA	No Cross—The broker executing this trade is forbidden from taking the other side of the trade. Opposite of OK to Cross.	
	FB	OK to Cross—The broker executing this trade is allowed to take the other side of the trade. Opposite of No Cross.	
	FC	Call First—Refer to client before trading.	
	FD	Percent of Volume— The sender does not want to be all of the volume.	
	FH	Reinstate on System	

Name	Permitted Values and Description	Definition
	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.	
	FI Institutions Only— Broker is restricted to dealing with other buy side firms.	
	FJ Reinstate on Trading Halt—If trading in this instrument is halted, reinstate this order when/if trading resumes, subject to time in force limitations.	
	FK Cancel on Trading Halt—If trading in this instrument is halted, cancel this order and do not reinstate it when/if trading resumes.	
	FL Last Peg	
	FM Mid-price Peg	
	FN Non-negotiable	
	FO Opening Peg	
	FP Market Peg	
	FQ 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	

Name	Permitted Values and Description		Definition
		placed in 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 selling.	
	Fb	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 OATS.
	R	Rejected	
FORE Validated Timestamp			The date and time that a FORE was validated by OATS.
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.
Issue Symbol ID			The unique symbol for an OATS reportable security.
Last File	Y	Last file	Indication of the last ROE rejection file for the generation date.
	N	Not last file	

Name	Permitted Values and Description		Definition
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.
Limit Order Display Indicator	Y	Yes. Customer has instructed that a limit order should not be displayed or that a block size order be displayed.	Indicates if a customer has instructed that a limit order should not be displayed or that a block size order be displayed.
	N	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.	

Market Center ID	A	American Stock and Options Exchange (AMEX)	The national securities exchange or trade reporting system operated by registered securities association where the trade was reported.
	B	Boston Stock Exchange	
	C	National Stock Exchange	
	I	International Securities Exchange	
	M	Chicago Stock Exchange	
	N	New York Stock Exchange	
	O	Bourse de Montreal	
	P	NYSE/Arca Exchange	
	Q	NASDAQ Exchange	
	T	Toronto Stock Exchange	
	V	TSX Venture Exchange	
	W	Chicago Board Options Exchange	
	X	Philadelphia Stock Exchange	
	NASD Trade Reporting Systems		
	DB	NASD/BSE TRF	
	DC	NASD/NSX TRF	
	D	ADF	
	L	NASD/NASDAQ TRF	
Member Type Code	M	Member	Indicates whether the order was received from a Member Firm, Non-Member Firm, ECN, or Non-Reporting Member Firm.
	N	Non-Member	
	A	Non-Member Affiliate	
	C	ECN	
	E	Member Firm does not meet the definition of reporting member under NASD Rule 6951(n)	
NASDAQ Exchange			NASDAQ Stock Market LLC

Order Cancel Timestamp			The date and time a cancellation was originated or received. The alphanumeric string must use the format YYYYMMDDHHMMSS 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, and SS is the current second of the minute.
Order Event Type Code	NW RT DS EX CL CR OE OR	New Order Report Routing Report Desk Report Execution Report Cancel Report Cancel/Replace Report Combined Order/ Execution Report Combined Order/Route Report	Indicates the type of Order Event received by OATS.
Order Received Timestamp			The date and time the order was received or originated. The alphanumeric string must use the format YYYYMMDDHHMMSS 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, and SS is the current second of the minute.
Order Receiving Firm MPID			The four-character MPID of the member firm that received the order.
Order Receiving Firm Order ID			The identifier assigned to an order by the order 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. The alphanumeric string must use the format YYYYMMDDHHMMSS 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, and SS is the current second of the minute.

Order Sent Timestamp			The date and time the order was sent outside the firm. The alphanumeric string must use the format YYYYMMDDHHMMSS 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, and SS is the current second of the minute.
Originating Department ID			The department or desk within a firm that originates a proprietary order. The member firm must maintain a list of the department identifiers and provide them on request to NASD. Codes must be unique within a firm, regardless of the number of locations in which it operates.
Originating MPID			The MPID of the Order Receiving Firm from the originally submitted order that, due to a merger, acquisition, or some other reason, needs to link to a secondary event with a different Order Receiving Firm MPID.
OSO ID			Order Sending Organization ID—a unique identifier assigned to an Order Sending Organization by NASD.
Password			The password for the supplied User ID.
Password Life			Remaining life in the password used by this User ID. NOTE: This will only be supplied when the value is less than 14 days.
Program Trading Code	Y	Part of a program trade	Indicates if an order is part of a program trade, a strategy involving the related purchase or sale of a group of 15 or more securities having a total market value of $1 million or more, as further defined in NYSE Rule 80A.
	N	Not part of a program trade	
	X	Not known—Not an accepted value for retail or employee orders	
Reason 1-5			Numeric error number indicating reason for ROE rejection.
Received by Desk ID			Identifies the desk or department within the firm where the order was received. The member firm must maintain a list of the department identifiers and provide them on request to NASD. Identifiers must be unique within a firm, regardless of the number of locations in which it operates.
Received Method Code	E	Electronic	Indicates whether the order was received electronically or manually.
	N	Manual	

Receiving Department ID			The department or desk within a firm that receives an order. Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. The member firm must maintain a list of the department identifiers and provide them on request to NASD. Codes must be unique within a firm, regardless of the number of locations in which it operates.
Receiving Terminal ID			The identifier of the terminal where the order was received from a customer. Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer.
Record Count			Total number of records in the FORE File, not including header and trailer records.
Record Type Code	#HD#	Header	Identifies the record type.
	#TR#	Trailer	
	#OE#	New Order	Valid values to be submitted by firm to OATS.
		Routing	
		Desk	
		Execution	
		Cancel	
		Cancel/Replace	
		Combined Order/Execution	
		Combined Order/Route	
	#RH#	Rejected ROE Header	Values that are generated by OATS only and returned to the firm.
	#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 Execution Trailer	
	#EH#	Unmatched NASDAQ Route Header	
	#ED#	Unmatched NASDAQ Route Description	
	#ET#	Unmatched	

		NASDAQ 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	
Rejected ROE Resubmit Flag	Y	Resubmitted ROE	Indicates if the ROE submitted to OATS was previously rejected.
	\<blank\>	Not a resubmitted ROE	
Rejection Text			Text of the originally submitted ROE (delimiters are changed to commas if not originally submitted as commas).
Replaced Firm Order ID			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.
Reporting Exception Code	P	Intra-firm order filled from firm's proprietary account	Indicates the reason that a Branch Sequence Number was not supplied to a Trade Reporting System.
	M	Execution where entry of branch/sequence number is not possible	
	S	ECN execution of convertible debt	
	R	Riskless principal transaction	
	A	Agency Average Price Transaction	
	T	Agency Post Trade Allocation	
	F	Reported on Form T pursuant to NASD Trade Reporting Rules	

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		Required if the order received is an electronic wholesale order from a member firm or an ECN. Not required if the order is a manual order. Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes. Required when the Account Type Code is 'W', the Received Method Code is 'E', and the Member Type Code is 'C' or 'M'. If the Member Type Code is 'M' and the Account Type Code is 'P', 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		Required if a wholesale order is received from another member firm. ECNs are required to include this value for all orders received from NASD members. Must be a valid MPID for the Order Received Timestamp. Required if the Account Type Code is 'W', and the Member Type Code is 'C', 'E' or 'M'. If the Account Type Code is 'W' and the Member Type Code is 'N' or 'A', this field must contain a non-member firm MPID for the Order Received Timestamp or must be blank. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank. Case sensitive, must be capital letters.
Routing Method Code	E Routed electronically N Routed manually 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.
Sent to Routed Order ID		Required if the order was routed electronically to a member, ECN, or the NASDAQ Exchange. If an order is routed to the same destination within the same second, the Routed Order ID passed to the receiving firm must be different for each route having the same shares quantity. Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes.

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 of displayed size and reserve size. Values are any integer greater than zero.
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	<blank> Market Order—Valid for execution at the prevailing market price DAY Day Order—Valid until executed or the next market close GTD Good Till Date— Valid until the close of market on a specified date GTT Good Till Time— Valid until the specified time GTC Good Till Canceled— Valid until executed or canceled by the customer GTM Good Till Month — Valid until the last business day of the month in which the order was received	The length of time when an order is valid.
TMO Timestamp		The specific date and time that an order becomes a market or limit price order. The alphanumeric string must use the format YYYYMMDDHHMMSS 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, and SS is the current second of the minute.

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.

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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.

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	Exception Code Description	Explanation
E	1001	Duplicate FORE	A file with the same Firm FORE ID, Generation Date and User ID has previously been accepted by OATS.
E	1003	Missing or invalid User ID	User ID in the Header record is missing or invalid. (e-mail only)
E	1004	Missing or invalid Password	The Password in the Header record is missing or invalid. (e-mail only)
E	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.
E	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).
E	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).
E	1008	Missing or invalid Generation Date	Generation Date is missing or is not a valid date.

Exception Type Code	Exception Code	Exception Code Description	Explanation
E	1009	Missing or invalid Version Description	Version Description is missing or is not a valid value.
E	1010	Invalid Delimiter	The delimiter must equal the fifth character of the Header Record. Valid delimiters are ASCII comma (','), semicolon (';'), pipe ('|'), and tab ('→').
E	1011	User ID not registered with an OSO	User ID in the Header record is not registered with an OSO.
E	1012	Invalid User ID and password combination	User ID and Password combination in the Header record is invalid. (e-mail only)
E	1013	User is not recognized by OATS	User ID does not exist in OATS.
E	1014	Missing or invalid Firm FORE ID	Firm FORE ID is missing or is invalid.
E	1015	User's Order Sending Organization has expired	The User's OSO has expired.
E	1016	MPID has expired	MPID in the Header record has expired.
E	1019	Password has expired	The Password for the user has expired.
E	1020	User ID locked	The User ID is locked.
E	1021	User ID disabled	The User ID is disabled.
E	1022	Invalid Reporting OSO ID	Reporting OSO ID provided is in an invalid format.
E	1023	Reporting OSO ID invalid or expired	Reporting OSO ID provided is invalid or has expired.
E	1024	No FORE attached to e-mail message	Attach the FORE file to the e-mail message before sending it to OATS.
E	1025	FORE attached to e-mail was less than 128-bit encryption	E-mail clients with less than 128-bit encryption may not be used to send FORE files to OATS.
E	1026	FORE attached to e-mail was not encrypted	E-mail messages must be encrypted before they are sent to OATS.

Exception Type Code	Exception Code	Exception Code Description	Explanation
E	1027	Multiple FORE attachments to e-mail	Each e-mail message may only contain one FORE file.
E	1028	E-mail attachment exceeds the supported size	Do not send FORE files to OATS via e-mail that are larger than 1.5 Mb; files increase in size during transmission.
E	1029	No status sent due to violation of submission requirements	If OATS submission requirements are violated, OATS will not generate FORE status.
E	1030	FTP file exceeds the supported size	Do not send FORE files to OATS via FTP that are larger than 4 Mb; files increase in size during transmission
E	1031	Test e-mail is not properly encrypted	This warning appears if you send order data to the OATS testing environment via e-mail without sufficient encryption. If you had done this in the production environment, your User ID would have been disabled without warning.
E	1032	Certificate or decryption error	The certificate or e-mail client used to send FOREs to OATS is invalid.
E	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.
E	1034	Missing Reporting/Transmitting OSO ID	Reporting or Transmitting OSO ID is missing from the FORE file header.
E	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

Exception Type Code	Exception Code	Exception Code Description	Explanation
			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 Code	Rejection Description	Explanation
2001	Missing or invalid Order Receiving Firm MPID	Order Receiving Firm MPID must be a valid symbol for the event date.
2002	Missing or invalid ROE Record Type	The first field in an ROE record must be #OE#.
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 a New Order, Cancel Replace, and Combined Order/Execution Report.

Rejection Code	Rejection Description	Explanation
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.
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 blank or invalid when routing to a non-member.	When order is routed to a nonmember, Sent To Firm MPID should be blank or contain a symbol that is not a valid Market Participant symbol for the event date.
2024	Invalid Sent To Firm MPID	Sent to Firm MPID must be a valid Market Participant symbol for the event date.
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) Report or 'OR' (Combined Order/Route) when the Destination Code is 'M' (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.

Rejection Code	Rejection Description	Explanation
2029	Issue is not reportable to OATS	OATS distinguishes between orders rejected because the issue is not reportable to OATS (i.e. it is a valid CQS symbol) and the issue is not valid in any market (i.e., it is not a recognized issue symbol for the order event date). For instance, the symbol 'IBM' will be rejected with the reason "Issue is not reportable to OATS," whereas the symbol 'XX' will be rejected with the reason "Issue symbol invalid for Order Event Date."
2030	Issue Symbol invalid for Order Event Date	Issue Symbol ID must identify an active issue on the date of the order event.
2031	ROE line length exceeds maximum length	ROE line length must not exceed maximum length for the ROE type.
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 in the ROE must equal submitting firm (MPID in header or firm logged on)	The data in all ROEs in a single FORE must belong to either the firm identified by the Order Receiving Firm MPID in the FORE header or the firm logged on.
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	Canceled Timestamp is prior to Order Received Timestamp	An order cannot be canceled before it is received. Therefore, the Canceled Timestamp must be equal to or later than the Order Received Timestamp.
2102	Invalid Routing Firm MPID	Routing Firm Market Participant ID must be a valid symbol for the Order Received Date.
2107	Missing or Invalid Routed Order ID	Routed Order ID must be provided in the correct format.
2108	Invalid Sent To Routed Order ID	Sent To Routed Order ID provided 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), 'SX' (short sale exempt).
2111	Missing Time In Force Code	If the order contains either 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), or 'GTM' (good till month),
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.

Rejection Code	Rejection Description	Explanation
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), 'N' (Non-Electronic).
2125	Missing or Invalid Account Type Code	Required if the Received Method Code is 'E' (Electronic) or 'N' (Non-Electronic), the Member Type Code is 'M' (Member), 'N' (Non-Member), 'A' (Non-Member Affiliate), or 'C' (ECN) and the ECN Flag is blank. If provided, Account Type Code must be one of the following values: 'R' (retail), 'W' (wholesale), 'P' (proprietary), 'E' (employee), or 'C' (combined).
2126	Invalid Receiving Terminal ID	Receiving Terminal ID must be in the correct format.
2128	Invalid Receiving Department ID	Receiving Department ID must be in the correct format.
2129	Invalid Program Trading Code	Program Trading Code must be one of the following values: 'Y' (yes), 'N' (no), 'X' (not known).
2130	Invalid Arbitrage Code	If provided, Arbitrage Code must be one of the following values: 'Y' (yes), 'N' (no), 'X' (not known).
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.
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).
2144	Invalid Limit Order Display Flag	If a limit price is provided, Limit Order Display Flag must be one of the following values: 'Y' (yes) or 'N' (no).
2145	Invalid Originating Department ID	Originating Department ID must be in the correct format.

Rejection Code	Rejection Description	Explanation
2147	Invalid First Special Handling Code	If provided, the First Special Handling Code must be one of the following values: 'FOK' (fill or kill), 'AON' (all or none), 'NH' (not held), 'IOC' (immediate or cancel), 'MAO' (market at open), 'MAC' (market at close), 'MOO' (market on open), 'MOC' (market on close), 'MTL' (market to limit), 'OVD' (over the day), 'SCL' (scale), 'WRK' (work), MQT (minimum quantity), 'RSV' (reserved size order), 'TS' (trailing stop), 'LOC' (limit on close), 'IO' (imbalance only), 'LOO' (limit on open), 'E.W' (exchange for physical transaction), 'S.W' (stop stock transaction), 'CNH' (cash not held), 'ADD' (add-on order), 'TMO' (time order), 'DIR' (directed order), 'OPT' (options related transaction), 'ISO' (intermarket sweep), or '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), 'FC' (call first), 'FD' (percent of volume), 'FH' (reinstate on system failure), 'FI' (institutions only), 'FJ' (reinstate on trading halt), 'FK' (cancel on trading halt), 'FL' (last peg), 'FM' (mid-price peg), 'FN' (non-negotiable), 'FO' (opening peg), 'FP' (market peg), 'FQ' (cancel on system failure), 'FR' (primary peg), 'FS' (suspend), 'FT' (fixed peg to local BBO at time of order), 'FW' (peg to VWAP), 'FX' (trade along), 'FY' (try to stop), 'FZ' (cancel if not best), 'Fb' (strict limit), 'Fc' (ignore price validity checks), 'Fd' (peg to limit price), 'Fe' (work to target strategy).
2148	Invalid Second Special Handling Code	See Exception Code 2147
2149	Invalid Third Special Handling Code	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-member firm for the Member Type Code 'N' or 'A'	If the Member Type Code is 'N' or 'A', the Routing Firm MPID must be blank or contain a non-NASD or non-NASDAQ MPID for the Event Timestamp.

Rejection Code	Rejection Description	Explanation
2154	Routing Firm MPID must be blank for this Member Type Code and Account Type Code	For the New Order Report, Cancel Replace Report, Combined Order/Route Report and Combined Order/Execution Report, if the Member Type Code is 'M', 'N' or 'A' and the Account Type Code is 'R', 'E', or 'C', the Routing Firm MPID must not be populated. If the Member Type Code is 'M' and the Account Type Code is 'P, the Routing Firm MPID must not be populated.
2155	Routed Order ID must be blank for this Member Type Code and Account Type Code	For the New Order Report, Cancel Replace Report, Combined Order/Route Report and Combined Order/Execution Report, if the Member Type Code is 'M' and the Account Type Code is 'P', the Routed Order ID must not be populated.
2156	Missing or invalid Market Center ID	Required on all Execution Reports and Combined Order/Execution Reports. Valid values are 'A' (AMEX), 'B' (Boston Stock Exchange), 'DB' (NASD/BSE TRF), 'C' (National), 'DC' (NASD/NSX TRF), 'D' (ADF), 'I' (International Securities Exchange), 'L' (NASD/NASDAQ TRF), 'M' (Chicago Stock Exchange), 'N' (New York Stock Exchange), 'O' (Bourse de Montreal), 'P' (NYSE/Arca Exchange), 'Q' (NASDAQ Exchange), 'T' (Toronto Stock Exchange), 'V' (TSX Venture Exchange), 'W' (Chicago Board Options Exchange) or 'X' (Philadelphia Stock Exchange).
2157	Invalid Originating MPID for the original Order Received Date	Originating MPID must be valid for the original order received date.
2158	No relationship exists between Originating MPID and Order Receiving Firm MPID	A valid relationship must exist between the Originating MPID and the Order Receiving Firm MPID.
2159	Missing or Invalid Member Type Code	Required on all New Orders, Cancel/Replace Reports, Combined Order/Route Reports, and Combined Order/Execution Reports. Valid values are: 'C' (ECN), 'M' (Member Firm), 'N' (Non-Member Firm), 'A' (Non-Member Affiliate) or 'E' (Non-Reporting Member).

Rejection Code	Rejection Description	Explanation
2161	Missing or invalid Destination Code	Required on all Route Reports and Combined Order/Route Reports. Valid values are: 'E' (ECN), 'M' (Member Firm), 'N' (Non-Member Firm), 'A' (Non-Member Affiliate), 'XA' (AMEX), 'XB' (Boston Stock Exchange), 'XC' (National Stock Exchange), 'XF' (Non-US Exchange), 'XI' (International Securities Exchange), 'XM (Chicago Stock Exchange), 'XN (New York Stock Exchange), 'XO' (Bourse de Montreal), 'XP' (NYSE/Arca Exchange), 'XQ' (NASDAQ Exchange), 'XT' (Toronto Stock Exchange), 'XV' (TSX Venture Exchange), 'XW' (Chicago Board Options Exchange) or 'XX' (Philadelphia Stock Exchange).
2162	Invalid ECN Flag	Required on all New Orders, Cancel/Replace Reports, Combined Order/Route Reports, 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 Orders, Cancel/Replace Reports, Combined Order/Route Reports, and Combined Order/Execution Reports, if the Account Type Code is 'C' (Combined), 'E' (Employee), or 'R' (Retail), the Member Type Code must be 'N' (Non-Member Firm).
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'.
2201	Missing or invalid Branch Sequence Number	Must be provided when a trade is reported to an NASD Trade Reporting System.
2202	Missing or invalid Execution Type Flag	Execution Type Flag must be one of the following values: 'F' (full execution), or 'P' (partial execution).
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	Invalid Trader Terminal ID	Trader Terminal ID must not contain special characters or exceed the specified length.

Rejection Code	Rejection Description	Explanation
2207	Invalid Reporting Exception Code	Must be provided if the execution is not required to be reported to an NASD Trade 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; account; S-ECN convertible debt execution; R-Riskless principal transaction; A-Agency Average Price Transaction; T- Agency Post Trade Allocation; F- Reported on Form T pursuant to NASD Trade Reporting Rules.
2211	Missing or invalid Leaves Quantity	A valid Leaves Quantity must be provided if the Execution Type is 'P' (partial).
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 canceled (Cancel Type Flag ='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 Canceled Timestamp	Canceled 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 Canceled By Flag	The Canceled By Flag must be one of the following values: 'C' (customer canceled), or 'F' (firm canceled).
2308	Canceled 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.
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).

Rejection Code	Rejection Description	Explanation
2407	Invalid Bunched Order Indicator	If provided, Bunched Order Indicator must be 'Y' (yes).
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) and the Destination Code is 'M', 'E' or 'XQ'.
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	Canceled Timestamp is prior to Order Sent Timestamp	An order cannot be routed after it has been fully canceled. Therefore, the Canceled 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.
2502	Missing or invalid Desk Received Identifier	Desk Identifier 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	Desk Type Code must be one of the following values: 'T' (Trading), 'PR' (Proprietary), 'S' (Sales), 'IS' (Institutional), 'PT' (Program Trading), 'IN' (International), 'AR' (Arbitrage), 'A' (Agency), 'D' (Derivatives), 'PF' (Preferred Trading), 'B' (Block Trading), 'C' (Convertible Desk), 'TR' (Treasury), 'SW' (Swaps), 'EC' (Equity Capital), 'CR' (Central Risk Book) or 'O' (Other).
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. This should be the Firm Order ID of the order being replaced.
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.
2702	Execution Date must be equal to Order Received Date	The Combined Order/Execution report can only be used if the order was received and fully executed in one trade in the same calendar day.
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) and the Destination Code is 'M', 'E' or 'XQ'.
2752	Missing Routing Firm MPID	Routing Firm MPID is required on New, Cancel/Replace, Combined Order/Route, or Combined Order/Execution report, when the Account Type Code is 'W' and the Received Method Code is 'E' or 'N' and the 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, 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.

Rejection Code	Rejection Description	Explanation
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 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.
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 an Delete/Replace report that was not reported to OATS or was rejected.
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. Those events received on a previous day having the duplicate OATS Order ID will be not be rejected by OATS.

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

This version of the OATS reporting specification will be encoded as "OATS D1999-01" in the second field of the header (there is a space between "OATS" and "D1999-01"). When additional fields are added or field definitions or lengths are modified, the version number will be adjusted to indicate the change. As future versions are introduced, a short grace period will allow submission of both versions.

Definition

The delimited format can also be described as a field separated format, because 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.

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 fourteen (14) digits and are specified as numeric (14) formatted as "YYYYMMDDHHMMSS'.

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 firm 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 firm. NOTE: Order events are required to include the firm MPID that was valid when the event occurred, while the MPID in the header is the current MPID for a firm.

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 are of differing lengths, but each is terminated by an ASCII line feed (LF), or a combination of carriage return and line feed (CR/LF).

Figure C-1. Packaging of Delimited Records
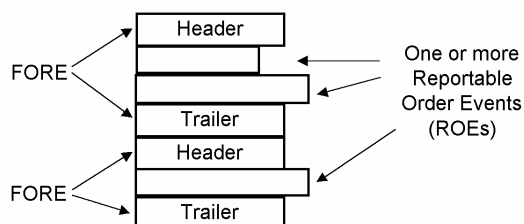
The following rules apply to the formatting of the files:

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 total length of 1.5MB for e-mail or 4MB for FTP submissions.

4. NASD will examine each header to determine if the User ID supplied is associated with a valid Transmitting Order Sending Organization (OSO).

5. NASD will examine each header to determine if the originating firm is a valid firm (MPID).

6. NASD will examine each header to determine if the Reporting/Transmitting OSO ID, if supplied, is valid.

7. NASD will examine each OSO ID and originating firm (MPID) for FORE file reporting/transmitting privileges.

8. NASD will examine each header to determine if the User ID/password combination is valid. If the file is submitted via FTP, the User ID/password field in the header should be left blank; if supplied, it will be ignored.

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 firm 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. NASD 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.

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 describe 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 ("→").
Alphanumeric (n)	ASCII characters between 32 and 127, except for the 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 NASD would be encoded as: "NASD,".[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. **Example** 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.

> [1]The Routed Order ID and/or the Sent to Routed Order ID must not contain a delimiter, spaces, blanks, or leading zeroes.

Summary of Record Types

Table C-2 summarizes the record types that OATS uses. The detailed definitions and descriptions for each of these record types follow.

Table C-2. Record Types

Record Description	Record Type	Order Event Type Code	Page Number
FORE Header	#HD#	N/A	6
FORE Trailer	#TR#	N/A	6
New Order Report	#OE#	NW	8
Routing Report	#OE#	RT	13
Desk Report	#OE#	DS	15
Execution Report	#OE#	EX	17
Cancel Report	#OE#	CL	19
Cancel/Replace Report	#OE#	CR	20
Combined Order/Route Report	#OE#	OR	24
Combined Order/Execution Report	#OE#	OE	30
Status Header	#ST#	N/A	35
Status Exception	#SE#	N/A	36
Status Trailer	#SR#	N/A	36
Rejected ROE Header	#RH#	N/A	37
Rejected ROE Description	#RD#	N/A	38
Rejected ROE Trailer	#RT#	N/A	38
Unmatched Execution Report Header	#UH#	N/A	39
Unmatched Execution Report Description	#UD#	N/A	39
Unmatched Execution Report Trailer	#UT#	N/A	40
Unmatched NASDAQ Route Report Header	#EH#	N/A	41
Unmatched NASDAQ Route Report Description	#ED#	N/A	41
Unmatched NASDAQ Route Report Trailer	#ET#	N/A	42
Unmatched Interfirm Route Report – Orders Routed Header	#OH#	N/A	43
Unmatched Interfirm Route Report – Orders Routed Description	#OD#	N/A	43
Unmatched Interfirm Route Report – Orders Routed Trailer	#OT#	N/A	44
Unmatched Interfirm Route Report – Orders Routed Header	#IH#	N/A	45
Unmatched Interfirm Route Report – Orders Routed Description	#ID#	N/A	45
Unmatched Interfirm Route Report – Orders Routed Trailer	#IT#	N/A	46

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 NASD. 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 Code	Alphanumeric (4)	M	'#HD#'—identifies a header record. Delimiter character must follow these four characters.
2	Version Description	Alphanumeric (16)	M	'OATS D1999-01'—identifies the current version of the format specification. (NOTE: There is a single space between *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/Transmitting OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the organization that is authorized 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 or IFT; mandatory when FORE is sent via e-mail.
7	Password	Alphanumeric (20)	C	Password for this User ID. Optional when FORE is sent via FTP or IFT; mandatory when FORE is sent via e-mail.
8	Order Receiving Firm MPID	Alphanumeric (4)	M	The current firm symbol identifying the firm for which the ROEs in the FORE are reported. Must be valid for the Generation Date.
9	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed), or CR/LF (Carriage Return/Line 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)	C	Total number of order entry records in the file. NOTE: This does not include the header and the trailer.
3	End of Record	(1 or 2)	M	Values: LF (Line Feed), or CR/LF (Carriage

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
	Marker			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 a order event record. Case sensitive.
2	Order Event Type Code	Alphanumeric (2)	M	'NW'—identifies the order event record type as a new 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 Timestamp	Numeric (14)	C	Required if the Action Type Code is 'C,' 'D,' or 'R.' Format: YYYYMMDDHHMMSS.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	Required when the ROE has been rejected by OATS and has been corrected for resubmission. Value: 'Y'. Case sensitive.
7	Order Receiving Firm MPID	Alphanumeric (4)	C	Must be supplied if the MPID in effect on the Order Received Date is different from the MPID in the Header Record. Case sensitive.
8	Order Receiving Firm Order Received Date	Numeric (14)	M	Format: YYYYMMDDHHMMSS.
9	Order Receiving Firm Order ID	Alphanumeric (20)	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)	C	Required if a wholesale order is received from another member firm. ECNs are required to include this value for all orders received from NASD members. Must be a valid MPID for the Order Received Timestamp. Required if the Account Type Code is 'W', and the Member Type Code is 'C', 'E' or 'M'. If the Account Type Code is 'W' and the Member Type Code is 'N' or 'A', this field must contain a non-member firm MPID for the Order Received Timestamp or must be blank. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank. Case sensitive.
11	Routed Order ID	Alphanumeric (20)	C	Required if the order received is an electronic wholesale order from a member firm or an ECN. Not required if the order is received from a non-member firm or non-reporting member firm, or if the order is a manual order. Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes. Required when the Account Type Code is 'W', the Received Method Code is 'E', and the Member Type Code is 'M' or 'C'. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank.
12	Order Received Timestamp	Numeric (14)	M	Format: YYYYMMDDHHMMSS.‡

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
13	Received Method Code	Alphanumeric (1)	M	Values: 'E' (Electronic), 'N' (Manual). Case sensitive.
14	Issue Symbol ID	Alphanumeric (14)	M	Must be a symbol for a valid OATS reportable security, including convertible bonds, for the Order Received Date. Case sensitive.
15	Buy/Sell Code	Alphanumeric (2)	M	Values: 'B,' 'SL,' 'SS,' or 'SX.' ECNs are not required to differentiate between Short Sale Exempt ('SX') and Short Sale ('SS') when reporting a Sell order. Case sensitive.
16	Shares Quantity	Numeric (9)	M	For reserved size orders, must be the sum of displayed size and reserved size. Values are any integer greater than zero.
17	Limit Price	Numeric (18,8)	C	If entered, must be greater than 0. If entered, a Time in Force Code must be provided.
18	Limit Order Display Indicator	Alphanumeric (1)	C	For Non-ECNs, must exist if either a Limit Price, or a Limit Price and a Stop Price, is provided. Not mandatory for orders received by an ECN. Values are 'Y' or 'N.' Case sensitive.
19	Stop Price	Numeric (18,8)	C	If entered, a Time in Force Code must be provided.
20	Time in Force Code	Alphanumeric (3)	C	Values: 'DAY,' 'GTD,' 'GTT,' 'GTC,' or 'GTM.' blank is interpreted by OATS as a market order. Case sensitive.
21	Expiration Date	Date (8)	C	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. Format: YYYYMMDD.
22	Expiration Time	Numeric (6)	C	Required if the Time in Force is 'GTT.' The format is HHMMSS. Must be greater than the time in the Order Received Timestamp.
23	Do Not Reduce/Do Not Increase Code	Alphanumeric (3)	C	Values: 'DNR', 'DNI', or 'DIR.' Case sensitive.
24	First Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
25	Second Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
26	Third Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
27	Fourth Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
28	Fifth Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
29	Receiving Terminal ID	Alphanumeric (12)	C	Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. Not required for ECNs. Format: Any alphanumeric not containing a delimiter.
30	Receiving Department ID	Alphanumeric (12)	C	Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
31	Originating Department ID	Alphanumeric (12)	C	Must be provided when the Account Type Code is 'P'. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
32	Account Type Code	Alphanumeric (1)	C	Required if an electronic order submitted by a non-ECN. Values: 'R' (Retail), 'W' (Wholesale), 'P' (Proprietary), 'E' (Employee), or 'C' (Combined). If an order is an electronic order and is submitted by an ECN, this must be blank or a valid value. 'W' may be used for orders received from both NASD member and non-member broker/dealers. Case sensitive.
33	Program Trading Code	Alphanumeric (1)	M	Values: 'Y', 'N', or 'X'. ECNs must populate this field with a value of 'X'. Case sensitive.
34	Arbitrage Code	Alphanumeric (1)	M	Values: 'Y', 'N', 'X'. ECNs must populate this field with a value of 'X'. Case sensitive.
35	Member Type Code	Alphanumeric (1)	M	Values: 'C' (ECN), 'M' (Member Firm), 'N' (Non-Member Firm), 'A' (Non-Member Affiliate) or 'E' (Non-Reporting Member Firm). Case sensitive.
36	ECN Flag	Alphanumeric (1)	C	Required if the submitting organization is an ECN.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
				Valid value is 'Y'. Case sensitive.
37	Order Cancel Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders fully canceled on the same day the order was received.
38	Canceled by Flag	Alphanumeric (1)	C	Values are: 'C' or 'F'. Case sensitive. Required for orders fully canceled on the same day the order was received.
39	Received by Desk Id	Alphanumeric (12)	C	Any alphanumeric not containing a delimiter. Required for orders that are fully transmitted to an internal desk the same day the firm received the order.
40	Desk Received Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders that are fully transmitted to an internal desk the same day the firm received the order.
41	Desk Type Code	Alphanumeric (2)	C	Values are: 'T', 'PR', 'S', 'IS', 'PT', 'IN', 'AR', 'A', 'D', PF', 'B', 'C', 'TR', 'SW', 'EC', 'CR', or 'O'. Required for orders that are fully transmitted to an internal desk the same day the firm received the order.
42	Desk Special Handling Code 1	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
43	Desk Special Handling Code 2	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
44	Desk Special Handling Code 3	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
45	Desk Special Handling Code 4	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
46	Desk Special Handling Code 5	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
47	TMO Trigger Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders with any Special Handling Code of 'TMO'.
48	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

‡ Order Received Timestamp must reflect the date and time the order was received in any form from a customer or another firm.

§Account Type Code is reportable in Phase III for manual orders only to the extent it is available. It was fully reportable for electronic orders on 8/1/1999.

Routing 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 Type Code	Alphanumeric (2)	M	'RT'—identifies the order event record type as a routing record. 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 (14)	C	Required if the Action Type Code is 'C,' 'D,' or 'R.' The format is YYYYMMDDHHMMSS.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	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)	C	Must be supplied if the MPID in effect on the Order Sent Date is different from the MPID in the Header Record. Must be a valid MPID for the Order Sent Date. Case sensitive.
8	Order Receiving Firm Order Received Date	Numeric (14)	M	Format: YYYYMMDDHHMMSS.
9	Order Receiving Firm Order ID	Alphanumeric (20)	M	Values: Any alphanumeric not containing a delimiter.
10	Sent to Firm MPID	Alphanumeric (4)	C	Required if the order was routed to a member firm or ECN. Optional if the order was routed to the NASDAQ Exchange or to a non-member firm. Must be a valid MPID for the Order Sent Timestamp. Should not be a valid MPID if the order was routed to a non-member firm. Case sensitive.
11	Routed Order ID	Alphanumeric (20)	C	Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes. Required if an order is routed electronically or via a Smart Router to a member, an ECN or NASDAQ Exchange. If an order is routed to the same destination within the same second, the Routed Order ID passed to the receiving firm must be different for each route having the same shares quantity.
12	Issue Symbol ID	Alphanumeric (14)	M	Must be a symbol for a valid OATS reportable security, including convertible bonds, for the Order Sent Date. Case sensitive.
13	Order Sent Timestamp	Numeric (14)	M	Format: YYYYMMDDHHMMSS.
14	Routed Shares Quantity	Numeric (9)	M	The number of shares routed. If the order was bunched, this would be the total number of bunched shares routed. Values are any integer greater than zero.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
15	Routing Method Code	Alphanumeric (1)	M	Values: 'E' (Electronic), 'N' (Manual), 'S' (Smart Router). Case sensitive.
16	Bunched Order Indicator	Alphanumeric (1)	C	Required for orders when the identified order is bunched with other orders and routed to another firm or ECN. Values: Y or blank. Case sensitive.
17	Originating MPID	Alphanumeric (4)	C	Must be provided if this ROE needs to link to a previously submitted ROE with a different Order Receiving Firm MPID. Firms may include or exclude the field from the report. Case sensitive.
18	Destination Code	Alphanumeric (2)	M	Values: 'A', 'E' , 'M', 'N','XA', XB', 'XC', 'XF', 'XI', 'XM', 'XN', 'XO', 'XP', 'XQ', 'XT', 'XV', 'XW', 'XX'. Case sensitive.
19	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

Desk Report

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
1	Record Type	Alphanumeric (4)	M	'#OE#'—identifies a order event record. Case sensitive.
2	Order Event Type Code	Alphanumeric (2)	M	'DS'—identifies the order event record type as a desk record. 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 (14)	C	Required if the Action Type Code is 'C,' 'D,' or 'R.' Format: YYYYMMDDHHMMSS.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	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)	C	Must be supplied if the MPID in effect on the Desk Received Date is different from the MPID in the Header Record. Must be a valid MPID for the Desk Received Date. Case sensitive.
8	Order Receiving Firm Order Received Date	Numeric (14)	M	Format: YYYYMMDDHHMMSS.
9	Order Receiving Firm Order ID	Alphanumeric (20)	M	Values: Any alphanumeric not containing a delimiter.
10	Received by Desk ID	Alphanumeric (12)	M	Values: Any alphanumeric not containing a delimiter.
11	Issue Symbol ID	Alphanumeric (14)	M	Must be a symbol for a valid OATS reportable security, including convertible bonds, for the Order Received Date. Case sensitive.
12	Desk Received Timestamp	Numeric (14)	M	Format: YYYYMMDDHHMMSS
13	Originating MPID	Alphanumeric (4)	C	Must be provided if this ROE needs to link to a previously submitted ROE with a different Order Receiving Firm MPID. Firms may include or exclude the field from the report. Case sensitive.
14	Desk Shares Quantity	Numeric (9)	M	The number of shares transmitted to another desk or department within a firm. Values are any integer greater than zero.
15	Desk Type Code	Alphanumeric (2)	M	Values are: 'T', 'PR', 'S', 'IS', 'PT', 'IN', 'AR', 'A', 'D', PF', 'B', 'C', 'TR', 'SW', 'EC', 'CR', or 'O'.
16	Desk Special Handling Code 1	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
17	Desk Special Handling Code 2	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
18	Desk Special Handling Code 3	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
19	Desk Special Handling Code 4	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
20	Desk Special Handling Code 5	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
21	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 are: 'N,' 'C,' 'D,' or 'R.' Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	C	Any alphanumeric not containing a delimiter.
5	Correction/ Deletion Timestamp	Numeric (14)	C	Required if the Action Type Code is 'C,' 'D,' or 'R.' The format is YYYYMMDDHHMMSS.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	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)	C	Must be supplied if the MPID in effect on the Execution Date is different from the MPID in the Header Record. Must be a valid MPID for the Execution Date. Case sensitive.
8	Order Receiving Firm Order Received Date	Numeric (14)	M	Format YYYYMMDDHHMMSS.
9	Order Receiving Firm Order ID	Alphanumeric (20)	M	Values: Any alphanumeric not containing a delimiter.
10	Execution Timestamp	Numeric (14)	M	The format is YYYYMMDDHHMMSS.
11	Branch/Sequence Number	Alphanumeric (8)	C	Must be provided when a trade is reported to an NASD Trade Reporting System. If two orders in the same issue symbol are executed within the same second and reported to an NASD trade reporting system in two separate transaction reports, different branch sequence numbers must be used for each execution.
12	Execution Quantity	Numeric (9)	M	The number of shares executed. Values are any integer greater than zero.
13	Trader Terminal ID	Alphanumeric (12)	M	Values: Any alphanumeric not containing a delimiter.
14	Reporting Exception Code	Alphanumeric (1)	C	Values: 'P', 'M', 'S', 'R', 'A', 'T', 'F'. Must be provided if the execution is not required to be reported to an NASD Trade Reporting System. Case sensitive.
15	Issue Symbol ID	Alphanumeric (14)	M	Must be a symbol for a valid OATS reportable security, including convertible bonds, for the Execution Date. Case sensitive.
16	Execution Type Indicator	Alphanumeric (1)	M	Values: 'F' or 'P'. Case sensitive.
17	Leaves Quantity	Numeric (9)	C	Must be provided when the Execution Type Indicator value is 'P.' If the partial execution reported results in the sum of all executions equaling the order quantity, the value should be zero.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
18	Market Center ID	Alphanumeric (2)	C	Values: 'A', 'B', 'C', 'D', 'DB', 'DC', 'I', 'L', 'M', 'N', 'O', 'P', 'Q', 'T', 'V', 'W' or 'X'. Case sensitive.
19	Originating MPID	Alphanumeric (4)	C	Must be provided if this ROE needs to link to a previously submitted ROE with a different Order Receiving Firm MPID. Case sensitive.
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.
22	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 are: 'N,' 'C,' 'D,' or 'R.' Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	C	Any alphanumeric not containing a delimiter.
5	Correction/ Deletion Timestamp	Numeric (14)	C	Required if the Action Type Code is 'C,' 'D,' or 'R.' The format is YYYYMMDDHHMMSS
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	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)	C	Must be supplied if the MPID in effect on the date in the Order Cancel Timestamp is different from the MPID in the Header Record. Must be a valid MPID on the date indicated in the Order Cancel Timestamp. Case sensitive.
8	Order Receiving Firm Order Received Date	Numeric (14)	M	Format YYYYMMDDHHMMSS.
9	Order Receiving Firm Order ID	Alphanumeric (20)	M	Values: Any alphanumeric not containing a delimiter.
10	Issue Symbol ID	Alphanumeric (14)	M	Must be a symbol for a valid OATS reportable security, including convertible bonds, for the Order Received Date. Case sensitive.
11	Order Cancel Timestamp	Numeric (14)	M	The format is YYYYMMDDHHMMSS.
12	Cancel Type Flag	Alphanumeric (1)	M	Values are: 'F' or 'P'. Case sensitive.
13	Cancel Quantity	Numeric (9)	C	Required when the Cancel Type Flag value is 'P.' Must be an integer greater than zero.
14	Cancel Leaves Quantity	Numeric (9)	C	Required when the Cancel Type Flag value is 'P.' Must be an integer greater than or equal to zero.
15	Canceled by Flag	Alphanumeric (1)	M	Values are: 'C' or 'F'. Case sensitive.
16	Originating MPID	Alphanumeric (4)	C	Must be provided if this ROE needs to link to a previously submitted ROE with a different Order Receiving Firm MPID. Case sensitive.
17	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 are: 'N,' 'C,' 'D,' or 'R.' Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	C	Any alphanumeric not containing a delimiter.
5	Correction/ Deletion Timestamp	Numeric (14)	C	Required if the Action Type Code is 'C,' 'D,' or 'R.' The format is YYYYMMDDHHMMSS.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	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)	C	Must be supplied if the MPID in effect on the Replaced Order Received Date is different from the MPID in the Header Record. Must be a valid MPID for the Order Receiving Firm Order Received Date. Case sensitive.
8	Replaced Order Received Date	Numeric (14)	M	Order received date for the canceled order. Format is YYYYMMDDHHMMSS.
9	Replaced Firm Order ID	Alphanumeric (20)	M	Order ID for the canceled order. Values: Any alphanumeric not containing a delimiter.
10	Order Receiving Firm Order Received Date	Numeric (14)	M	Order received date for the replacement order. Date Format is YYYYMMDDHHMMSS.
11	Order Receiving Firm Order ID	Alphanumeric (20)	M	Order ID for the replacement order. Values: Any alphanumeric not containing a delimiter. Must be unique for the firm within the Order Received Date.
12	Routing Firm MPID	Alphanumeric (4)	C	Required if a wholesale order is received from another member firm. ECNs are required to include this value for all orders received from NASD members. Must be a valid MPID for the Order Received Timestamp. Required if the Account Type Code is 'W', and the Member Type Code is 'C', 'E' or 'M'. If the Account Type Code is 'W' and the Member Type Code is 'N' or 'A', this field must contain a non-member firm MPID for the Order Received Timestamp or must be blank. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank. Case sensitive.

Seq.	Name	Data Type/ Length	M/C	Permissible Values and Instructions
13	Routed Order ID	Alphanumeric (20)	C	Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes. Required if the order received is an electronic wholesale order from a member firm or an ECN. Not required if the order is received by a non-member firm or non-reporting member firm, or if the order is a manual order. Required when the Account Type Code is 'W', the Received Method Code is 'E', and the Member Type Code is 'M' or 'C'. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank.
14	Order Received Timestamp	Numeric (14)	M	Format: YYYYMMDDHHMMSS.‡
15	Received Method Code	Alphanumeric (1)	M	Values: 'E' (Electronic), 'N' (Manual). Case sensitive.
16	Issue Symbol ID	Alphanumeric (14)	M	Must be a symbol for a valid OATS reportable security, including convertible bonds, for the replacement Order Received Date. Case sensitive.
17	Buy/Sell Code	Alphanumeric (2)	M	Values are: 'B', 'SL', 'SS', or 'SX'. ECNs are not required to differentiate between Short Sale Exempt ('SX') and Short Sale ('SS') when reporting a Sell order. Case sensitive.
18	Shares Quantity	Numeric (9)	M	For reserved size orders, must be the sum of displayed size and reserved size. Values are any integer greater than zero.
19	Limit Price	Numeric (18,8)	C	If entered, must be greater than 0. If entered, a Time in Force Code should be provided.
20	Limit Order Display Indicator	Alphanumeric (1)	C	For Non-ECNs, must exist if either a Limit Price, or a Limit Price and a Stop Price, is provided. Not mandatory for orders received by an ECN. Values are 'Y' or 'N.' Case sensitive.
21	Stop Price	Numeric (18,8)	C	If entered, a Time in Force Code must be provided.
22	Time in Force Code	Alphanumeric (3)	C	Values are 'DAY,' 'GTD,' 'GTT,' 'GTC,' or 'GTM.' 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. Case sensitive.
23	Expiration Date	Date (8)	C	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. The format is YYYYMMDD.
24	Expiration Time	Numeric (6)	C	Required if the Time in Force is 'GTT.' The format is HHMMSS. Must be greater than the time in the Order Received Timestamp.
25	Do Not Reduce/Do Not Increase Code	Alphanumeric (3)	C	Values are: 'DNR,' 'DNI,' or 'DIR'. Case sensitive.

Seq.	Name	Data Type/ Length	M/C	Permissible Values and Instructions
26	First Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
27	Second Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
28	Third Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
29	Fourth Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
30	Fifth Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
31	Receiving Terminal ID	Alphanumeric (12)	C	Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
32	Receiving Department ID	Alphanumeric (12)	C	Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.

Seq.	Name	Data Type/ Length	M/C	Permissible Values and Instructions
33	Originating Department ID	Alphanumeric (12)	C	Must be provided when the Account Type Code is 'P'. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
34	Account Type Code	Alphanumeric (1)	C	Required if an electronic order submitted by a non-ECN. Values: 'R' (Retail), 'W' (Wholesale), 'P' (Proprietary), 'E' (Employee), or 'C' (Combined). If an order is an electronic order and is submitted by an ECN, this must be blank or a valid value. 'W' may be used for orders received from both NASD member and non-member broker/dealers. Case sensitive.
35	Program Trading Code	Alphanumeric (1)	M	Values are: 'Y', 'N', or 'X'. ECNs must populate this field with a value of 'X'. Case sensitive.
36	Arbitrage Code	Alphanumeric (1)	M	Values are: 'Y', 'N', 'X'. ECNs must populate this field with a value of 'X'. Case sensitive.
37	Member Type Code	Alphanumeric (1)	M	Values: 'C' (ECN), 'M' (Member Firm), 'N' (Non-Member Firm), 'A' (Non-Member Affiliate) or E' (Non-Reporting Member Firm). Case sensitive.
38	ECN Flag	Alphanumeric (1)	C	Required if the submitting organization is an ECN. Valid value is 'Y'. Case sensitive.
39	TMO Trigger Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders with any Special Handling Code of 'TMO'.
40	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

‡ Order Received Timestamp must reflect the date and time the order was received in any form from a customer or another firm.

§Account Type Code is reportable in Phase III for manual orders only to the extent it is available. It was fully reportable for electronic orders on 8/1/1999.

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 Type Code	Alphanumeric (2)	M	'OR'—identifies the order event record type as a combined 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 Timestamp	Numeric (14)	C	Required if the Action Type Code is 'C,' 'D,' or 'R.' Format: YYYYMMDDHHMMSS.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	Required when the ROE has been rejected by OATS and has been corrected for resubmission. Value: 'Y'. Case sensitive.
7	Order Receiving Firm MPID	Alphanumeric (4)	C	Must be supplied if the MPID in effect on the Order Received Date is different from the MPID in the Header Record. Case sensitive.
8	Order Receiving Firm Order Received Date	Numeric (14)	M	Format: YYYYMMDDHHMMSS.
9	Order Receiving Firm Order ID	Alphanumeric (20)	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)	C	Required if a wholesale order is received from another member firm. ECNs are required to include this value for all orders received from NASD members. Must be a valid MPID for the Order Received Timestamp. Required if the Account Type Code is 'W', and the Member Type Code is 'C', 'E' or 'M'. If the Account Type Code is 'W' and the Member Type Code is 'N' or 'A', this field must contain a non-member firm MPID for the Order Received Timestamp or must be blank. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank. Case sensitive.
11	Routed Order ID	Alphanumeric (20)	C	Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes. Required if the order received electronically and is a wholesale order from a member firm or an ECN. Not required if the order is received by a non-member firm or non-reporting member firm, or if the order is a manual order. Required when the Account Type Code is 'W', the Received Method Code is 'E', and the Member Type Code is 'M' or 'C'. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank.
12	Order Received Timestamp	Numeric (14)	M	Format: YYYYMMDDHHMMSS.‡

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
13	Received Method Code	Alphanumeric (1)	M	Values: 'E' (Electronic), 'N' (Manual). Case sensitive.
14	Issue Symbol ID	Alphanumeric (14)	M	Must be a symbol for a valid OATS reportable security, including convertible bonds, for the Order Received Date. Case sensitive.
15	Buy/Sell Code	Alphanumeric (2)	M	Values: 'B,' 'SL,' 'SS,' or 'SX.' ECNs are not required to differentiate between Short Sale Exempt ('SX') and Short Sale ('SS') when reporting a Sell order. Case sensitive.
16	Limit Price	Numeric (18,8)	C	If entered, must be greater than 0. If entered, a Time in Force Code must be provided.
17	Limit Order Display Indicator	Alphanumeric (1)	C	For Non-ECNs, must exist if either a Limit Price, or a Limit Price and a Stop Price, is provided. Not mandatory for orders received by an ECN. Values are 'Y' or 'N.' Case sensitive.
18	Stop Price	Numeric (18,8)	C	If entered, a Time in Force Code must be provided.
19	Time in Force Code	Alphanumeric (3)	C	Values: 'DAY,' 'GTD,' 'GTT,' 'GTC,' or 'GTM.' Blank is interpreted by OATS as a market order. Case sensitive.
20	Expiration Date	Date (8)	C	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. Format: YYYYMMDD.
21	Expiration Time	Numeric (6)	C	Required if the Time in Force is 'GTT.' The format is HHMMSS. Must be greater than the time in the Order Received Timestamp.
22	Do Not Reduce/Do Not Increase Code	Alphanumeric (3)	C	Values: 'DNR', 'DNI', or 'DIR.' Case sensitive.
23	First Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
24	Second Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
25	Third Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
26	Fourth Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
27	Fifth Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
28	Receiving Terminal ID	Alphanumeric (12)	C	Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. Not required for ECNs. Format: Any alphanumeric not containing a delimiter.
29	Receiving Department ID	Alphanumeric (12)	C	Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
30	Originating Department ID	Alphanumeric (12)	C	Must be provided when the Account Type Code is 'P'. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
31	Account Type Code	Alphanumeric (1)	C	Required if an electronic order submitted by a non-ECN. Values: 'R' (Retail), 'W' (Wholesale), 'P' (Proprietary), 'E' (Employee), or 'C' (Combined). If an order is an electronic order and is submitted by an ECN, this must be blank or a valid value. 'W' may be used for orders received from both NASD member and non-member broker/dealers. Case sensitive.
32	Program Trading Code	Alphanumeric (1)	M	Values: 'Y', 'N', or 'X'. ECNs must populate this field with a value of 'X'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
33	Arbitrage Code	Alphanumeric (1)	M	Values: 'Y', 'N', 'X'. ECNs must populate this field with a value of 'X'. Case sensitive.
34	Sent To Routed Order ID	Alphanumeric (20)	C	Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes. Required if an order is routed electronically or via a Smart Router to a member firm, an ECN or NASDAQ Exchange. If an order is routed to the same destination within the same second, the Routed Order ID passed to the receiving firm must be different for each route having the same shares quantity.
35	Sent to Firm MPID	Alphanumeric (4)	C	Required if the order was routed to a member firm or ECN. Optional if the order was routed to the NASDAQ Exchange or to a non-member firm. Must be a valid MPID for the Order Sent Timestamp. Should not be a valid MPID if the order was routed to a non-member firm. Case sensitive.
36	Order Sent Timestamp	Numeric (14)	M	Format: YYYYMMDDHHMMSS.
37	Routed Shares Quantity	Numeric (9)	M	The number of shares routed. If the order was bunched, this would be the total number of bunched shares routed. Values are any integer greater than zero.
38	Routing Method Code	Alphanumeric (1)	M	Values: 'E' (Electronic), 'N' (Manual), 'S' (Smart Router). Case sensitive.
39	Bunched Order Indicator	Alphanumeric (1)	C	Required for orders when the identified order is bunched with other orders and routed to another firm or ECN. Values: Y or blank. Case sensitive.
40	Member Type Code	Alphanumeric (1)	M	Values: 'C' (ECN), 'M' (Member Firm), 'N' (Non-Member Firm), 'A', (Non-Member Affiliate) or 'E' (Non-Reporting Member Firm). Case sensitive.
41	Destination Code	Alphanumeric (2)	M	Values: 'A', 'E', 'M', 'N','XA', XB', 'XC', 'XF', 'XI', 'XM', 'XN', 'XO', 'XP', 'XQ', 'XT', 'XV', 'XW', 'XX'. Case sensitive.
42	ECN Flag	Alphanumeric (1)	C	Required if the submitting organization is an ECN. Valid value is 'Y'. Case sensitive.
43	Order Cancel Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders fully canceled on the same day the order was received.
44	Canceled by Flag	Alphanumeric (1)	C	Values are: 'C' or 'F'. Case sensitive. Required for orders fully canceled on the same day the order was received.
45	Shares Quantity	Numeric (9)	M	For reserved size orders, must be the sum of displayed size and reserved size. Values are any integer greater than zero.
46	Received by Desk ID	Alphanumeric (12)	C	Any alphanumeric not containing a delimiter. Required for orders that are fully transmitted to an internal desk the same day the firm received the order.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
47	Desk Received Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders that are fully transmitted to an internal desk the same day the firm received the order.
48	Desk Type Code	Alphanumeric (2)	C	Values are: 'T', 'PR', 'S', 'IS', 'PT', 'IN', 'AR', 'A', 'D', PF', 'B', 'C', 'TR', 'SW', 'EC', 'CR', or 'O'. Required for orders that are fully transmitted to an internal desk the same day the firm received the order.
49	Desk Special Handling Code 1	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
50	Desk Special Handling Code 2	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
51	Desk Special Handling Code 3	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
52	Desk Special Handling Code 4	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
53	Desk Special Handling Code 5	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
54	TMO Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders with any Special Handling Code of 'TMO'.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
55	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 are: 'N', 'C', 'D', or 'R." Case sensitive.
4	Firm ROE ID	Alphanumeric (12)	C	Any alphanumeric not containing a delimiter.
5	Correction/ Deletion Timestamp	Numeric (14)	C	Required if the Action Type Code is 'C' 'D' or 'R'. Format is YYYYMMDDHHMMSS.
6	Rejected ROE Resubmit Flag	Alphanumeric (1)	C	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)	C	Must be supplied if the MPID in effect on the Order Received Date is different from the MPID in the Header Record. Case sensitive.
8	Order Receiving Firm Order Received Date	Date (14)	M	Format is YYYYMMDDHHMMSS.
9	Order Receiving Firm Order ID	Alphanumeric (20)	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)	C	Required if a wholesale order is received from another member firm. ECNs are required to include this value for all orders received from NASD members. Must be a valid MPID for the Order Received Timestamp. Required if the Account Type Code is 'W', and the Member Type Code is 'C', 'E' or 'M'. If the Account Type Code is 'W' and the Member Type Code is 'N' or 'A', this field must contain a non-member firm MPID for the Order Received Timestamp or must be blank. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank. Case sensitive.
11	Routed Order ID	Alphanumeric (20)	C	Values: Any alphanumeric not containing a delimiter, spaces, blanks, or leading zeroes. Required if the order received electronically and is a wholesale order from a member firm or an ECN. Not required if the order is received by a non-member firm or non-reporting member firm, or if the order is a manual order. Required when the Account Type Code is 'W', the Received Method Code is 'E', and the Member Type Code is 'M' or 'C'. If the Member Type Code is 'M' and the Account Type Code is 'P', this field must be blank.
12	Order Received Timestamp	Numeric (14)	M	The format is YYYYMMDDHHMMSS. If a contemporaneous execution, will be identical to the Execution Timestamp. ‡
13	Received Method Code	Alphanumeric (1)	M	Values: 'E' (Electronic), 'N' (Manual). Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
14	Issue Symbol ID	Alphanumeric (14)	M	Must be a symbol for a valid OATS reportable security, including convertible bonds, for the Order Received Date. Case sensitive.
15	Buy/Sell Code	Alphanumeric (2)	M	Values are: 'B', 'SL', 'SS', or 'SX'. ECNs are not required to differentiate between Short Sale Exempt ('SX') and Short Sale ('SS') when reporting a Sell order. Case sensitive.
16	Limit Price	Numeric (18,8)	C	If entered, must be greater than 0. If entered, a Time in Force Code must be provided.
17	Limit Order Display Indicator	Alphanumeric (1)	C	For Non-ECNs, must exist if either a Limit Price, or a Limit Price and a Stop Price, is provided. Not mandatory for orders received by an ECN. Values are 'Y' or 'N'. Case sensitive.
18	Stop Price	Numeric (18,8)	C	If entered, a Time in Force Code must be provided.
19	Time in Force Code	Alphanumeric (3)	C	Values are 'DAY,' 'GTD,' 'GTT,' 'GTC' or 'GTM'. 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. Case sensitive.
20	Expiration Date	Date (8)	C	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. The format is YYYYMMDD.
21	Expiration Time	Numeric (6)	C	Required if the Time in Force is 'GTT.' The format is HHMMSS. Must be greater than the time in the Order Received Timestamp.
22	Do Not Reduce/Do Not Increase Code	Alphanumeric (3)	C	Values are: 'DNR', 'DNI', or 'DIR'. Case sensitive.
23	First Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
24	Second Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
25	Third Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
26	Fourth Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
27	Fifth Special Handling Code	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
28	Receiving Terminal ID	Alphanumeric (12)	C	Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
29	Receiving Department ID	Alphanumeric (12)	C	Either the Receiving Terminal ID or the Receiving Department ID must be provided when an order is received directly from a customer. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
30	Originating Department ID	Alphanumeric (12)	C	Must be provided when the Account Type Code is 'P'. Not required for ECNs. Not required for ECNs. Values: Any alphanumeric not containing a delimiter.
31	Account Type Code	Alphanumeric (1)	C	Required if an electronic order submitted by a non-ECN. Values: 'R' (Retail), 'W' (Wholesale), 'P' (Proprietary), 'E' (Employee), or 'C' (Combined). If an order is an electronic order and is submitted by an ECN, this must be blank or a valid value. 'W' may be used for orders received from both NASD member and non-member broker/dealers. Case sensitive.
32	Program Trading Code	Alphanumeric (1)	M	Values are: 'Y', 'N', or 'X'. ECNs must populate this field with a value of 'X'. Case sensitive.
33	Arbitrage Code	Alphanumeric (1)	M	Values are: 'Y', 'N', 'X'. ECNs must populate this field with a value of 'X'. Case sensitive.
34	Execution Timestamp	Numeric (14)	M	The format is YYYYMMDDHHMMSS. If a contemporaneous execution, will be identical to the Order Received Timestamp.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
35	Branch/ Sequence Number	Alphanumeric (8)	C	Must be provided when a trade is reported to an NASD Trade Reporting System. If two orders in the same issue symbol are executed within the same second and reported to an NASD trade reporting system in two separate transaction reports, different branch sequence numbers must be used for each execution.
36	Execution Quantity	Numeric (9)	M	The number of shares executed. Values are any integer greater than zero.
37	Trader Terminal ID	Alphanumeric (12)	M	Values: Any alphanumeric not containing a delimiter.
38	Reporting Exception Code	Alphanumeric (1)	C	Values: 'P', 'M', 'S', 'R', 'A', 'T', 'F'. Must be provided if the execution is not required to be reported to an NASD Trade Reporting System.
39	Market Center ID	Alphanumeric (2)	C	Values: 'A', 'B', 'C', 'D', 'DB', 'DC', 'I', 'L', 'M', 'N', 'O', 'P', 'Q', 'T', 'V', 'W' or 'X'. Case sensitive.
40	Member Type Code	Alphanumeric (1)	M	Values: 'C' (ECN), 'M' (Member Firm), 'N' (Non-Member Firm), 'A' (Non-Member Affiliate) or E' (Non-Reporting Member Firm). Case sensitive.
41	ECN Flag	Alphanumeric (1)	C	Required if the submitting organization is an ECN. Valid value is 'Y'. Case sensitive.
42	Execution Price	Numeric (18,8)	M	Must be the same price that is reported to the applicable transaction reporting association for trade reporting purposes.
43	Capacity Code	Alphanumeric (1)	M	Values: 'A', 'P', 'R'. Case sensitive.
44	Shares Quantity	Numeric (9)	M	For reserved size orders, must be the sum of displayed size and reserved size. Values are any integer greater than zero.
45	Received by Desk Id	Alphanumeric (12)	C	Any alphanumeric not containing a delimiter. Required for orders that are fully transmitted to an internal desk the same day the firm received the order.
46	Desk Received Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders that are fully routed to a desk on the same day the order was received.
47	Desk Type Code	Alphanumeric (2)	C	Values are: 'T', 'PR', 'S', 'IS', 'PT', 'IN', 'AR', 'A', 'D', PF', 'B', 'C', 'TR', 'SW', 'EC', 'CR', or 'O'. Required for orders that are fully transmitted to an internal desk the same day the firm received the order.
48	Desk Special Handling Code 1	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.

Seq.	Name	Data Type (Length)	M/C	Permissible Values and Instructions
49	Desk Special Handling Code 2	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
50	Desk Special Handling Code 3	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
51	Desk Special Handling Code 4	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
52	Desk Special Handling Code 5	Alphanumeric (3)	C	Values: 'ADD', 'AON', 'CNH', 'DIR', 'E.W', 'FOK', 'IO', 'IOC', 'ISO', 'LOC', 'LOO', 'MAC', 'MAO', 'MOC', 'MOO', 'MTL', 'MQT', 'NH', 'OPT', 'OVD', 'RSV', 'SCL', 'S.W', 'TMO', 'TS', 'WRK', 'F0', 'F3', 'F6', 'F7', 'F8', 'F9', 'FA', 'FB', 'FC', 'FD', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FW', 'FX', 'FY', 'FZ', 'Fb', 'Fc', 'Fd', 'Fe'. Case sensitive.
53	TMO Trigger Timestamp	Numeric (14)	C	Format: YYYYMMDDHHMMSS. Required for orders with any Special Handling Code of 'TMO'.
54	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed), or CR/LF (Carriage Return/Line Feed)

‡Order Received Timestamp must reflect the date and time the order was received in any form from a customer or another firm.

§Account Type Code is reportable in Phase III for manual orders only to the extent it is available. It was fully reportable for electronic orders on 8/1/1999.

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

ROE Rejections File

ROE rejection information may be retrieved via FTP or downloaded via the Web. ROE rejection files retrieved via FTP are generated once per day per OSO based on all ROEs received on that OATS Reporting Day. Only designated users may retrieve files via FTP. Procedures for designating users as recipients of rejections files via the OATS Web interface are in the *OATS Subscriber Manual*. ROE rejection files downloaded via the Web may be downloaded for a specific FORE by selecting the FORE from a list of those submitted on a selected OATS Reporting Day.

For FTP files, if there are no rejections on a given day for an OSO, a ROE rejection file will still be generated, but will consist only of a header and trailer. This "empty" file may be retrieved via FTP but may not be viewed or downloaded via the Web. 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.

ROE rejection files are comma-delimited and consist of a header record, followed by zero or more rejection description records that contain the numeric reason for the rejection and the original content of the ROE, and then a trailer to indicate end of submission. (NOTE: A list of all possible rejection reasons and their descriptions is available in Appendix B, Error Messages.) The format of each file component follows.

ROE Rejection Header

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#RH#'—identifies a header record for the ROE Rejections file.
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	OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the OSO by OATS.
5	Sequence Number	Numeric (4)	M	Sequence number of the files generated for the Generation Date.
6	Last File	Alphanumeric (1)	M	Indication of the last file in this FORE file for the Generation Date; Y indicates last file, N indicates not last file.
7	End of Record Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line 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).
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

After an Execution or Combined Order/Execution Report has passed OATS validation checks, it is compared to trade records reported to an NASD Trade Reporting System. Unless there is a Reporting Exception Code in the OATS report, or the Action Type Code is "D" (Delete) or "R" (Replace), the system attempts to match reports to NASD Trade Reporting System trades by comparing five fields: MPID, Execution Date, Branch/Sequence Number, Issue Symbol, and Execution Timestamp. OATS attempts this 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. These Unmatched Execution and Combined Order/Execution Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE. 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 Code	Alphanumeric (4)	M	'#UH#'—identifies a header record for Unmatched Execution ROEs.
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	OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the OSO by OATS.
5	Sequence Number	Numeric (4)	M	Sequence number of the files generated for the generation 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 Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line 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	Firm FORE ID	Alphanumeric (20)	FORE ID from original submitted FORE.
3	Order Receiving Firm MPID	Alphanumeric (4)	Data provided by firm.
4	Branch Sequence Number	Alphanumeric (8)	Data provided by firm.
5	Issue Symbol ID	Alphanumeric (14)	Data provided by firm.
6	Execution Timestamp	Numeric (14)	Data provided by firm.
7	Execution Quantity	Numeric (9)	Data provided by firm.
8	Firm ROE ID	Alphanumeric (12)	Data provided by firm.
9	Order Receiving Firm Order ID	Alphanumeric (20)	Data provided by firm.
10	Order Event Type Code	Alphanumeric (2)	Data provided by firm.
11	Action Type Code	Alphanumeric (1)	Data provided by firm.
12	Correction/ Deletion Timestamp	Numeric (14)	Data provided by firm.
13	Rejected ROE Resubmit Flag	Alphanumeric (1)	Data provided by firm.
14	Order Receiving Firm Order Received Date	Numeric (14)	Data provided by firm.

Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
15	Trader Terminal ID	Alphanumeric (12)	Data provided by firm.
16	Reporting Exception Code	Alphanumeric (1)	Data provided by firm.
17	Execution Type Indicator	Alphanumeric (1)	Data provided by firm.
18	Leaves Quantity	Numeric (9)	Data provided by firm.
19	Market Center ID	Alphanumeric (2)	Data provided by firm.
20	Execution Price	Numeric (18,8)	Data provided by firm.
21	Capacity Code	Alphanumeric (1)	Data provided by firm.
22	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 Code	Alphanumeric (4)	M	'#UT#'—identifies a trailer record for Unmatched 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 Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

Unmatched NASDAQ Route Reports

After a Route or Combined Order/Route Report has passed OATS validation checks and the Destination Code represents the NASDAQ Exchange, it is compared to order records from the NASDAQ Exchange. If the Action Type Code is 'N' (New) or 'C' (Corrected), the Routing Method Code is 'E' (Electronic) or 'S' (Smart Router), and the Destination Code is 'XQ' (NASDAQ Exchange), the system attempts to match OATS reports to the NASDAQ Exchange orders by comparing four fields:

a.) Firm ID/Client ID to OATS Receiving Firm MPID

b.) Order Entry Date to OATS Order Sent Timestamp (Date portion)

c.) Order Update Timestamp to OATS Order Sent Timestamp (Time portion)

d.) Order ID to OATS Routed Order ID (RT) or Sent to Routed Order ID (OR)[*]

e.) Issue Symbol to OATS Issue Symbol ID

OATS attempts this 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. These Unmatched Route and Combined

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[*] 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.

Order/Route Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE. Each Unmatched NASDAQ Route Report file may contain a maximum of 10,000 ROE records. If there are more than 10,000 Unmatched NASDAQ Route Report records, they may be downloaded from the Web in groups of 10,000 or less. ROEs in Unmatched NASDAQ Route Report files are sorted first by Order Receiving Firm MPID, and then by Routed Order ID.

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

Unmatched NASDAQ Route Report File Header

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#EH#'—identifies a header record for Unmatched Route ROEs.
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	OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the OSO by OATS.
5	Sequence Number	Numeric (4)	M	Sequence number of the files generated for the generation 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 Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

Unmatched NASDAQ Route Report Description Record

Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	'#ED#'—identifies an Unmatched Route ROE description record.
2	Firm FORE ID	Alphanumeric (20)	FORE ID from original submitted FORE.
3	Order Receiving Firm MPID	Alphanumeric (4)	Data provided by firm.
4	Routed Order ID	Alphanumeric (20)	Data provided by firm.
5	Issue Symbol ID	Alphanumeric (14)	Data provided by firm.
6	Order Sent Timestamp	Numeric (14)	Data provided by firm.
7	Routed Shares Quantity	Numeric (9)	Data provided by firm.
8	Firm ROE ID	Alphanumeric (12)	Data provided by firm.
9	Order Receiving Firm Order ID	Alphanumeric (20)	Data provided by firm.
10	Order Event Type Code	Alphanumeric (2)	Data provided by firm.
11	Sent to Firm MPID	Alphanumeric (4)	Data provided by firm.
12	Action Type Code	Alphanumeric (1)	Data provided by firm.
13	Correction/ Deletion	Numeric (14)	Data provided by firm.

Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
	Timestamp		
14	Rejected ROE Resubmit Flag	Alphanumeric (1)	Data provided by firm.
15	Order Receiving Firm Order Received Date	Numeric (14)	Data provided by firm.
16	Routing Method Code	Alphanumeric (1)	Data provided by firm.
17	Bunched Order Indicator	Alphanumeric (1)	Data provided by firm.
18	Sent To Routed Order ID	Alphanumeric (20)	Data provided by firm
19	Destination Code	Alphanumeric (2)	Data provided by firm.
20	End of Record Marker	(1 or 2)	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

Unmatched NASDAQ 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

All Route or Combined Order/Route Reports routed to another member firm or ECN that have passed OATS validation checks are compared to New, Cancel Replace, Combined Order/Execution or Combined Order/Route reports reported by the member firm to which the order was routed. If the Action Type Code is 'N' (New) or 'C' (Corrected) and the Routing Method Code is 'E' (Electronic) or 'S' (Smart Router), and the Destination Code is 'M' (Member) or 'E' (ECN), the system attempts to match OATS reports to one corresponding New, Cancel/Replace, Combined Order/Execution or Combined Order/Route Report orders by comparing six fields:

a) Sent to Firm MPID to Firm MPID

b) MPID to Routing Firm MPID

c) Routed Order ID (RT) or Sent to Routed Order ID (OR) to Routed Order ID

d) Order Sent Timestamp (date and time) is within +/- 3 seconds of the Order Received Timestamp

e) Routed Shares Quantity to Order Shares Quantity

f) Issue Symbol ID to Issue Symbol ID

OATS attempts this match for two consecutive days, starting with the day the report is received. If OATS cannot match the Route or Combined Order/Route report with the values in these fields, the OATS report is considered to be unmatched. These Unmatched Route and Combined Order/Route Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE. 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 Code	Alphanumeric (4)	M	'#OH#'—identifies a header record for Unmatched Route ROEs.
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	OSO ID	Alphanumeric (8)	M	The OSO ID assigned to the OSO by OATS.
5	Sequence Number	Numeric (4)	M	Sequence number of the files generated for the generation 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 Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line 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	Firm FORE ID	Alphanumeric (20)	FORE ID from original submitted FORE.
3	Order Receiving Firm MPID	Alphanumeric (4)	Data provided by firm.
4	Routed Order ID	Alphanumeric (20)	Data provided by firm.
5	Issue Symbol ID	Alphanumeric (14)	Data provided by firm.
6	Order Sent Timestamp	Numeric (14)	Data provided by firm.
7	Routed Shares Quantity	Numeric (9)	Data provided by firm.
8	Firm ROE ID	Alphanumeric (12)	Data provided by firm.

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

Unmatched Interfirm Route Report – Orders Routed Trailer Record

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#OT#'—identifies a trailer record for Unmatched Route 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).

Unmatched Interfirm Route Report – Orders Received

All Route or Combined Order/Route Reports received by a member firm or ECN that have passed OATS validation checks are compared to New, Cancel Replace, Combined Order/Execution or Combined Order/Route reports by the member firm to which the order was routed. If the Action Type Code is 'N' (New) or 'C' (Corrected) and the Routing Method Code is 'E' (Electronic) or 'S' (Smart Router), and the Destination Code is 'M' (Member) or 'E' (ECN), the system attempts to match OATS reports to one corresponding New, Cancel/Replace, Combined Order/Execution or Combined Order/Route Report orders by comparing six fields:

a) Sent to Firm MPID to Firm MPID

b) MPID to Routing Firm MPID

c) Routed Order ID (RT) or Sent to Routed Order ID (OR) to Routed Order ID

d) Order Sent Timestamp (date and time) is within +/- 3 seconds of the Order Received Timestamp

e) Routed Shares Quantity to Order Shares Quantity

f) Issue Symbol ID to Issue Symbol ID

OATS attempts this match for two consecutive days, starting with the day the report is received. If OATS cannot match the Route or Combined Order/Route report with the values in these fields, the OATS report is considered to be unmatched. Data associated with these Unmatched Interfirm Route Reports may be viewed or downloaded via the OATS Web interface two business days after submission of the original FORE. 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

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#IH#'—identifies a header record for Unmatched Route ROEs.
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	Sequence Number	Numeric (4)	M	Sequence number of the files generated for the generation 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 Marker	(1 or 2)	M	Values: LF (Line Feed) or CR/LF (Carriage Return/Line 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	Order Receiving Firm MPID	Alphanumeric (4)	Data provided by routing firm.
3	Routed Order ID	Alphanumeric (20)	Data provided by routing firm.
4	Issue Symbol ID	Alphanumeric (14)	Data provided by routing firm.

Seq. #	Name	Data Type (Length)	Permissible Values and Instructions
5	Order Sent Timestamp	Numeric (14)	Data provided by routing firm.
6	Routed Shares Quantity	Numeric (9)	Data provided by routing firm.
7	Sent to Firm MPID	Alphanumeric (4)	Data provided by routing firm.
8	End of Record Marker	(1 or 2)	Values: LF (Line Feed) or CR/LF (Carriage Return/Line Feed).

Unmatched Interfirm Route Report – Orders Received Trailer Record

Seq. #	Name	Data Type (Length)	M	Permissible Values and Instructions
1	Record Type Code	Alphanumeric (4)	M	'#IT#'—identifies a trailer record for Unmatched Route 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).

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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 an NASD Trade Reporting System. OATS will use this identifier to match Execution and Combined Order/Execution reports to trades reported in an NASD Trade Reporting System.

Bunched Order
Two or more orders that are aggregated for further handling or execution.

Cancel/Replace Report
Firms submit a Cancel/Replace Report to OATS when an order is modified.

Cancel Report
Firms submit a Cancel Report to OATS when an order is fully or partially canceled.

Combined Order/Execution Report
Firms submit a Combined Order/Execution Report to OATS when an order is received or originated and fully executed in one trade, in the same day, with no routing or modifications.

Combined Order/Route Report
Firms submit a Combined Order/Route Report to OATS when an order is received or originated and fully routed in the same day, with no modifications.

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.

ECN
Electronic Communication Network—any electronic system that widely disseminates to third parties orders entered therein by a market participant, and permits such orders to be executed in whole or in part.

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.

Executed Order
An order that was executed for the full shares quantity of the original order.

Execution Report
Firms submit an Execution Report to OATS when an order is fully or partially executed.

Expired Order
An open order that has exceeded its Time in Force.

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 NASD. 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. 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 total length of 1.5MB for e-mail or 4MB for FTP and IFT submissions.
Firm Order Report (FORE) File	One or more FOREs (header/trailer pairs) submitted in a file by an OSO to NASD. 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 total length of 1.5MB for e-mail or 4MB for FTP and IFT submissions.
FORE Status	Indicates whether the FORE was accepted or rejected and identifies errors or warnings.
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 or ECN by the NASDAQ Exchange.
NASD Trade Reporting System	An NASD Trade Reporting Facility or the Alternative Display Facility Trade Reporting and Comparison Service (TRACS). Refer to Appendix A for the list of NASD Trade Reporting Facilities.
New Order Report	Firms submit a New Order Report to OATS when an order is originated or received by a firm.
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 04:00:00 Eastern Time on Thursday.
OATS Order ID	The three fields that comprise the OATS Order ID are Firm Order ID, Firm MPID, and Order Received Date.

OATS Reportable Securities	Equity securities listed on the NASDAQ Stock Market and OTC equity securities as defined in NASD Rule 6951. 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.
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 04:00:00 Eastern Time the next calendar day.
Order	Any oral, written, or electronic instruction to effect a transaction in an equity security listed on the Nasdaq Stock Market 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 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 NASD member firm that transmits an order to another market center for handling or execution.
Order Sending Organization (OSO)	An NASD 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, IFT, e-mail, or the Web interface.
	• Reporting OSO—Is 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 NASD Rule 6951(n).
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.

Routing	When an order is received or originated by a NASD member and transmitted to another market center for handling or execution, it has been routed. For instance, if a non-market maker receives an order from a customer and transmits the order to a market maker for execution, the order has been "routed" to the market maker. Some orders are transmitted to entities or exchanges that are not NASD member firms; such orders are considered "routed" to non-members. An order that is transferred between two valid MPIDs within the same firm is also considered routed.
Routing Report	Firms submit a Routing Report to OATS when an order is routed away from the firm for further handling or execution.
Syntax Error	An incorrect field value or format within one ROE. Common reasons for an ROE's syntax rejection include missing mandatory fields, invalid fields, and invalid field combinations (invalid symbols and MPIDs are syntax rejections).
True Duplicate	Two or more identical ROEs. OATS will accept the first record and reject all subsequent identical records.
Unmatched Execution Report	Execution and Combined Order/Execution Reports that do not link with trades reported in an NASD Trade Reporting System. Unmatched Execution Reports may be viewed or downloaded via the OATS Web interface.
Unmatched Interfirm Route Report – Orders Routed	Route or Combined Order/Route Reports routed to another member firm or ECN that have passed OATS validation checks but do not link to a corresponding New, Cancel Replace, Combined Order/Execution or Combined Order/Route Report. Orders Routed may be viewed or downloaded via the Web interface.
Unmatched Interfirm Route Report – Orders Received	Route or Combined Order/Route Reports representing an order received by a member firm or ECN that have passed OATS validation checks but do not link to a corresponding New, Cancel Replace, Combined Order/Execution or Combined Order/Route Report submitted to OATS by the receiving firm. Orders Received may be viewed or downloaded via the Web interface.
Unmatched NASDAQ Route Report	Route and Combined Order/Route Reports that do not link with orders submitted to the NASDAQ Exchange. Unmatched NASDAQ Route Reports may be viewed or downloaded via the OATS Web interface.