
Interface Requirements Specification (IRS)

for the

Switching After Hours (SAH) Merged Order Log (MOL) Machine Readable Output (MRO) Files

Version 4.0

Prepared by Business Requirements Team

December, 2009

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Notice

Every effort was made to ensure that the information in this document was complete and accurate at the time of publication. However, information is subject to change without notice.

Table of Contents

Document Information.....	2
Introductory Notes	17
MRO Record Type 1A – Order without Miscellaneous Text.....	20
MRO Record Type 1B – Orders with Miscellaneous Text.....	30
MRO Record Type 1C – e-Quote Order.....	34
MRO Record Type 2A – Reports with 1 Contra	38
MRO Record Type 2B – Reports with 2 Contras	46
MRO Record Type 2B – Reports with 2 Contras	46
MRO Record Type 2C – Reports with 3 Contras	47
MRO Record Type 2D – Reports with 4 Contras.....	48
MRO Record Type 2E – Reports with 5 Contras	49
MRO Record Type 3B – e-Quote Link Message.....	56
MRO Record Type 3C – e-Quote Order Extension.....	58
MRO Trailer Records	61

Document Information

Document history The following table lists each version of this document.

Version	Date Added	Formats Affected	Remarks
1.5	5/2/2002	1B	New format of lines 3F/4 (pos. 196-255)
1.6	6/14/2002	--	Addition of Autoroute product codes
1.7	7/26/2002	1A & 1B	Anonymous DOT indicator (pos. 169) Sponsoring firm (pos. 170-173)
1.8	5/30/2003	1A & 1B	New order status value (pos. 69)
		3A	New admin type value (pos. 74) New admin subtype value (pos. 75) New e-Broker device number field (pos 89-92)
1.9	9/10/2003	1A & 1B	New order status value (pos. 69) for Makes New AON values for Partial (pos. 196-255)
		2A & 2B	New execution type value (pos. 115) for BBSS-generated reports for CAP and Partial orders
1.10	9/30/2003	1A & 1B	New order status value (pos. 69) for orders reconstructed from a Makes message
1.11	11/5/2003	Trailer	Updates to trailer records
1.12	4/15/2004	1A & 1B	Add new value to order entry method (pos. 72) for proprietary orders Add Account type Q (pos. 110) for error account Add description for as-of indicator (pos. 139) Add description for order write-in date (pos. 140-144); shorten length from 8 bytes & add filler (pos. 145-147) Add description for order write-in time (pos. 148-153) Add Designated Market Maker display time field (pos. 154-163) Delete lifespan (pos. 154-156), bill-to (pos. 157-160), send-to (pos. 161-164) and change pos. 164 to filler

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Document Information, Continued**Document history** (continued)

Version	Date Added	Formats Affected	Remarks
1.12 (continued)	4/15/2004 (continued)	1B	Add pos. 164 to filler (pos. 164-195) Show separate field for message length (pos. 196-198) Use standard document format for CAP, CAP2 & other Correct CR LF to LF LF (pos. 210-211 & 234-235 for CAP2 & Partial admins and pos. 239-240 for CAP admins) Correct CAP order branch and CAP order sequence to Child order branch and Child order sequence (pos. 217-220 and 222-226, respectively)
		3A	Add Note on activity ID (pos. 44-52) for Display Book and e-Broker admins Add admin response type values (pos. 74) for Display Book admins Add new values to admin subtype (pos. 75) for Display Book admins & admins for proprietary orders Add expanded response time field (pos. 93-102) Add domain name (pos. 103-127) for proprietary orders
		Header	Correct Header Title for Clearing Firm MRO and Entering Firm MRO
		Trailer	Correct Trailer Title for Clearing Firm MRO and Entering Firm MRO Correct Starting position for Trailer Title (all MROs)

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Document Information, Continued**Document history** (continued)

Version	Date Added	Formats Affected	Remarks
1.13	6/3/2004	--	Change "Broker Badge" outputs to "Badge" outputs
		1A & 1B	Turnaround number and Cancel Turnaround Number changed to format X(6) to accommodate 6 low-order characters of proprietary system's Order ID (positions 26-31 and 112-117, respectively) Add Order ID Overflow and Cancel Order ID Overflow for 4 high-order positions of proprietary system's Order ID (positions 22-25 and 48-51, respectively)
		3A	Add Note for Activity ID (position 44-52) for e-Broker admins Correct description of admin subtypes (position 75) for proprietary orders, admin type E Add admin type & subtype for Domain name (positions 103-127)
1.14	8/3/2004	1A & 1B	Clarify Time in force (position 73) values 2, 4, 7
		3A	Admin Subtype (position 75) – Delete obsolete values
1.15	9/1/2004	5A	Add Freeze records
1.16	9/15/2004	Trailer	Change "reject total" on Clearing Firm MRO to "other total" to include count of freeze records as well as count of reject records.
1.17	11/24/2004	3A	Admin subtype (Position 75) – Add subtype 8 for e-Broker "order sent" admin Move domain name (positions 103-127) from subtypes 1 & 2 to subtype 8
1.18	3/2/2005	1A & 2A	Add sell conversion indicator (position 111)

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Document Information, Continued**Document history** (continued)

Version	Date Added	Formats Affected	Remarks
2.00	7/14/2005	1A	Delete Xpress Time-in-force 9 (position 73)
		1C	Add e-Quote order record (new message type)
		2A – 2E	Add Display Book Link ID (position 129-134)
		3A	Add new e-Broker “e-Quote sent” admin – admin type E, subtype Q Add admin type L with subtype C and R for “part of e-Quote” and “removed from e-Quote”, respectively Add Display Book replenishment admin – admin type Q, subtype R Domain name (103-127) moved from admin type E, subtype 8 to subtypes 1 & 2 Delete Xpress admin subtypes 6 & 8 Record length expanded to 200 bytes (from 128 bytes).
		3B	Add e-Quote Link admin (new message type)
2.1	9/30/2005	All	Add lot indicator to common fields, position 22.
		2A	Add Contra Report Flag (position 157) value spaces for odd lots.
2.2	10/20/2005	1B	Correct typo in “field name” for positions 44-168.
		3B	Add “filler” for positions 61-73 and 76-88.
2.3	2/17/2006	2A – 2E	Revise for Rule 108: Add ERC Types (position 61) for memo only changes; update descriptions for existing ERC types to include updates to Memo A/B. Modify descriptions for Memo A (positions 97-100) and Memo B fields (positions 101-106).
	2/21/2006	2A – 2E	Add source of report “P” (position 114) for proprietary reports on the Badge MRO.

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Document Information, Continued**Document history** (continued)

Version	Date Added	Formats Affected	Remarks
2.4	4/7/2006	3A	Add fields for admin with cancel or cancel/replace order data: <ul style="list-style-type: none"> • Cancel Order Status (position 163) • Cancel Branch/Sequence (positions 164-172) • Cancel TA Number (positions 177-182) • Cancel Order Time (positions 183-188) • Cancel Order Quantity (positions 193-199)
3.0	6/21/2006	N/A	Add explanation of field format and length (page 1)
		1C	Add new fields and/or values for discretionary and pegged e-Quotes: <ul style="list-style-type: none"> • e-Quote Indicator (position 169) • e-Quote Type (position 170-173) • Ceiling/Floor Price (position 174-186) • Minimum Peg Quantity (position 187-193) • Maximum Peg Quantity (position 194-20) • Pegging Indicator (position 205)
		2A-2E	<ul style="list-style-type: none"> • e-Quote Execution Type (position 62) • Principal Indicator (position 63)
		3C	<ul style="list-style-type: none"> • New administrative record for discretionary orders (extension to e-Quote order record 1C)
3.0c	7/10/2006	3C	<ul style="list-style-type: none"> • Expand definition of Discretionary Price Range to include reference to ceiling/floor price

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Document Information, Continued**Document history** (continued)

Version	Date Added	Formats Affected	Remarks
3.1	8/25/2006	--	Miscellaneous updates and corrections
		All	<ul style="list-style-type: none"> Change notation that symbol (positions 11-21) is “compressed” to “space between base and suffix”
		1A	<ul style="list-style-type: none"> Rename AON field to CHILD ORDER INDICATOR (position 127) and delete codes for AON (1), Not Held (2) and AON/NH (3), and adjust references in Format 1B accordingly
		2A	<ul style="list-style-type: none"> Add Origination Booth ID (positions 116-118) and Destination Booth ID (positions 119-121)
		3A	Admin type and subtype (positions 74 and 75): <ul style="list-style-type: none"> Delete admin types for UR GUAR (3) and UR GUAR at OPG (4) and associated admin subtype (8) Delete admin type subtype for eBroker UR GUAR (M) Add admin subtype for eBroker Sent OPG.(P)
3.2	10/26/2006	1A	<ul style="list-style-type: none"> Rename CHILD ORDER INDICATOR to SPECIAL ORDER INDICATOR (position 127) for clarification Add new values for SPECIAL ORDER INDICATOR (position 127): ISO (7), SOC (8), partial/SOC (P)
3.3	02/13/2007	1A	<ul style="list-style-type: none"> Add new values for SPECIAL ORDER INDICATOR (position 127): DNS (7), partial DNS (Q)
		2A	<ul style="list-style-type: none"> Rename CONTRA REPORT FLAG to AWAY MARKET CENTER (position 157) Add new values for AWAY MARKET CENTER (POSITION 157): A = AMEX, B – Boston, C = National, D = NASD, I = ISE, M = Chicago, P = Arca, T = Nasdaq, W = CBOE, X = Philadelphia, Blank = N/A

3.4	02/12/08	2B-2E	<ul style="list-style-type: none"> ▪ Replace CONTRA REPORT FLAG (position 179, 201, 223, 245) with FILLER
		Introductory Notes	<ul style="list-style-type: none"> ▪ Add ASCII values for ASCII recipients under the LF character
		1A & 1B	<ul style="list-style-type: none"> ▪ Rename ACCOUNT TYPE (position 110-110) value of “J” to Proprietary Algorithmic Program Trading ▪ Rename ACCOUNT TYPE (position 110-110) value of “K” to Agency Algorithmic Program Trading ▪ Add new value for ORDER INSTRUCTION (position 71): “7” = Buy Minus Zero Plus Orders.
3.5	03/18/08	2A	<ul style="list-style-type: none"> ▪ Rename AWAY MARKET CENTER to LIQUIDITY INDICATOR (position 157-157) ▪ Add new values for LIQUIDITY INDICATOR (POSITION 157): 1 = TAKER, 2 = PROVIDER, 3 = BLENDED, 4 = OPENING PRIOR DAY, 5 = OPENING, 6 = CLOSING, 7 = CLOSING MOC/LOC, 8 = DESIGNATED MARKET MAKER (1 through 8).
		1A & 1B	<ul style="list-style-type: none"> ▪ Rename ANONYMOUS DOT INDICATOR to MESSAGE INDICATOR ▪ Add new values for the ANONYMOUS DOT INDICATOR (POSITION 169): 2 = EQUOTE , 3= GQUOTE , 4 = DQUOTE, 5 = RESERVE ORDER ▪ Add a new field RESERVE PUBLISHED QUANTITY (POSITION 174-180) to denote the Published Quantity of a Reserve Order.
3.6	06/20/08	1C	<ul style="list-style-type: none"> ▪ Add new fields for Broker Algo e-Quotes: <ul style="list-style-type: none"> ○ ALGO INDICATOR (POSITION 210) ○ ALGO BRANCH/SEQUENCE (POSITION 241-249) ○ ALGO TA (POSITION 250-255)
		2A-2E	<ul style="list-style-type: none"> ▪ Add new value for LIQUIDITY INDICATOR (POSITION 157): Z = BATS ▪ Add new field for EXPANDED ACTIVITY ID (POSITION 97-106)
		3A	<ul style="list-style-type: none"> ▪ Add new values for ADMIN SUBTYPE (POSITION 75) <ul style="list-style-type: none"> ○ ALGO ORDER ACCEPTED ○ ALGO CONFIRM CANCEL ○ ALGO CONFIRM CANCEL/REPLACE ▪ Add new field for EXPANDED ACTIVITY ID (POSITION 128-137)
		4A-5A	<ul style="list-style-type: none"> ▪ Removal of 4A and 5A records

3.7	02/03/09	1A-1C, 2A-2E, 3A-3C	<ul style="list-style-type: none"> ▪ Updated Field Value description of Turnaround (TA) Number, Cancel Turnaround Number and Parent Order Turnaround Number <ul style="list-style-type: none"> ○ 1A-1C, 2A-2E, 3A-3C RECORD – POSITION 26-31 ○ 1A, 1B AND 1C RECORD – POSITION 112-117 ○ 1B RECORD – POSITION 228-233 ○ 1C RECORD – POSITION 250-255 ○ 3A RECORD – POSITION 177-182
3.8	09/22/09	1A	<ul style="list-style-type: none"> ▪ Added Introducing Broker to Order Record for orders routed directly to a broker <ul style="list-style-type: none"> ○ 1A RECORD – POSITION 181-185
		General	<ul style="list-style-type: none"> ▪ Addition of FIX tags in Field Name column (when applicable). ▪ Specialist changed to Designated Market Maker (DMM). ▪ CMS changed to CCG ▪ SAX changed to GTM ▪ Partials changed to DOT order from e-Broker

		1A	<p>Updated following positions in Record Type 1A – Order without Miscellaneous Text</p> <ul style="list-style-type: none"> ▪ Lot Indicator (position 22-22): Removed ‘Order ID Overflow’ ▪ Turnaround Number (position 26-31): Removed ‘or Order ID’ in field name ▪ Filler (position 44-52): Filler field is extended to position 52 replacing ‘Cancel Order ID Overflow’ field ▪ Poss Dupe (position 53-53): Added field values ‘D = Rule 902’ and ‘E = Poss Dupe Rule 902.’ Removed field values 1,2,3,4,5,6,7,8,9, B, and C ▪ Order Status (position 69-69): Removed field values E,I,1, and 2 ▪ Order type (position 70-70): Removed field values 3,5,6,7,8,9,A, and B ▪ Order Entry Method (position 72-72): Removed field value 9 ▪ Time in Force (position 73-73): Removed field value 8 ▪ Settlement Terms (position 107-109): Field value ‘nnn = number of days Sellers option (002-060)’ decreased from “002-180” to “002-060” ▪ Sell Conversion Indicator (position 111-111): Updated field value 3 to say ‘convert for all sessions.’ Removed field values 1 and 2 ▪ Cancel Turnaround Number (position 112-117): Removed ‘or Cancel Order ID’ in field name
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		<p>1A (con't)</p>	<ul style="list-style-type: none"> ▪ Special Order Indicator (position 127-127): Added field values '6 = CO, Closing Offset order (future value)' and 'R = CO, Closing Offset order (future value).' Removed field value 4 ▪ Filler (position 128-128): Removed 'Try To Stop' field and replaced with 'Filler' ▪ Filler (position 130-132): Removed 'Currency Code' field and replaced with 'Filler' ▪ Primary Market (position 145-145): New field 'Primary Market.' Added new field values: '0 = NYSE,' '1 = NYSE AMEX,' and '2 = NYSE AMEX NASDAQ - UTP' ▪ Message Indicator (position 169-169): Removed field value 1 ▪ Filler (position 170-173): Removed 'Competing Specialist (Sponsoring Firm)' and replaced with 'Filler' ▪ Introducing Broker (position 181-184): Changed explanation in field value to 'Broker Badge that sent the order.'
		<p>1C</p>	<p>Updated following positions in Record Type IC – e-Quote Orders.</p> <ul style="list-style-type: none"> ▪ e-Quote Type (position 170-173): Added additional field value of 'EQCR = (cross order - future use).' ▪ Parent TA (position 250-255): New field name 'Parent TA'

		<p>2A Updated following positions in Record Type 2A – Reports with 1 Contra</p> <ul style="list-style-type: none"> ▪ Common fields have been reduced to positions ‘3-24’ from positions ‘3-43.’ ▪ Billing Tier (position 25-25): New field name ‘Billing Tier.’ Billing Tier is for future use. ▪ Activity ID (position 44-52): Added a note in field value section: “Note: This is only populated on BBSS Activity and the field is obsolete for Post Activity and has been replaced by the Expanded Activity ID in positions 97-106.” ▪ Execution Report Correction (ERC) Type (position 61-61): Removed field values 3,5,6,7,8,9,B,G, and H ▪ Filler (position 64-64): Removed ‘Ex-Clearing Indicator’ and replaced with ‘Filler’ ▪ Expanded Activity ID (position 97-106): New field name ‘Expanded Activity ID’ ▪ Source of Report (position 114-114): Updated field value 7 to say ‘Away Market (AWO) Name Change.’ Removed field values 0 and P ▪ Execution Type (NX Indicator) (position 115-115): Removed field value 2 ▪ Opening Time Indicator (position 128-128): Removed field value 1 ▪ Original ERC Type (position 135-135): New field name ‘Original ERC Type.’ New field values include 0,1,2,4, and A ▪ Liquidity Indicator (1) (position 157-157): New field values F,G,J,K,N,Y, and 9. ▪ Vendor Destination (position 158-159): New field name ‘Vendor Destination.’
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4.0	12/02/09	3A	<p>Updated following positions in Record Type 3A – Admin Reponses</p> <ul style="list-style-type: none"> ▪ Activity ID (position 44-52): Added a note in field value section: “Note: This is only populated on BBSS Activity and the field is obsolete for Post Activity and has been replaced by the Expanded Activity ID in positions 128-137.” ▪ Admin Price Code (position 61-61): Updated field value description with a “Note: This is an obsolete value. Save for future use.” ▪ Admin Price (position 62-73): Updated field value description with a “Note: This is an obsolete value. Save for future use.” ▪ Admin Type (position 74-74): Removed field values 2,6,8,B,D, and Q ▪ Admin Subtype (position 75-75): Switched Admin Type 1 to UR OUT. Removed all values for Admin Types 2,6, and Q ▪ Broker Algo (position 103 – 112): New field name ‘Broker Algo’ Removed ‘Domain Name’ field ▪ Expanded Activity ID (position 128-137): New field name ‘Expanded Activity ID’ ▪ Broker Algo Overflow (position 138-143): New field name ‘Broker Algo Overflow’ ▪ Algo Strategy (position 144-159): New field name ‘Algo Strategy’ ▪ Filler (position 160-162): Filler reduced to position ‘160-162’ from previous position of ‘138-162’ because of new ‘Broker Algo Overflow’ and new ‘Algo Strategy’ fields
		3B	<p>Updated following positions in Record Type 3B – e-Quote Link Message</p> <ul style="list-style-type: none"> ▪ Filler (position 44-52): Removed ‘Activity ID’ field and replaced with ‘Filler’
		General	<ul style="list-style-type: none"> ▪ Updated Overview ▪ Changed AutoRoute Numbers

1A	<p>Updated following positions in Record Type 1A – Order without Miscellaneous Text</p> <ul style="list-style-type: none"> • Order Quantity Field: expanded to 9 bytes (position 74-82) • Account ID (position 171-202): add new field • Filler (position 215-216) add filler • Leaves Quantity (position 217-225): Add new field • Filler (position 226-245) add filler • Shift all records appropriately
1B	<p>Updated following positions in Record Type 1B – Orders with miscellaneous Text</p> <ul style="list-style-type: none"> • Order Quantity Field: expanded to 9 bytes (position 74-82) • Account ID (position 171-202): add new field • Filler (position 215-216) add filler • Filler (position 226-245) add filler • Shift all records appropriately
1C	<p>Updated following positions in Record Type IC – e-Quote Orders.</p> <ul style="list-style-type: none"> • Order Quantity Field: expanded to 9 bytes (position 74-82) • Account ID (position 171-202): add new field • Filler (position 228-229) add filler • Filler (position 256-257) add filler • Filler (position 294-303) add filler • Shift all records appropriately

2A	<p>Updated following positions in Record Type 2A – Reports with 1 Contra</p> <ul style="list-style-type: none"> • Activity ID (position 44-52): cease population • Leaves Quantity: expanded to 9 bytes (position 66-74) • Contra Quantity: expanded to 9 bytes (position 142-150) • Filler (position 164-183) add filler • Shift all records appropriately
3A	<p>Updated following positions in Record Type 3A – Admin Reponses</p> <ul style="list-style-type: none"> • Activity ID (position 44-52): cease population • Admin Quantity: expanded to 9 bytes (position 76-84) • Broker Algo expanded to 16 bytes (position 105-120), combined with Broker Algo Overflow) • Cancel Order Quantity: expanded to 9 bytes (position 195-203) • Filler (position 204-223) add filler • Shift all records appropriately
3B	<p>Updated following positions in Record Type 3B – e-Quote Link Message</p> <ul style="list-style-type: none"> • Admin Price Code (position 61): Added field • Admin Price (position 62-73): Added field • eQuote Order Quantity (position 76-84): Added field • Filler (position 85-88): Reduce to 4 bytes • Filler (position 147-159) add filler • Shift all records appropriately

	<table border="1"><tr><td data-bbox="534 191 690 590">3C</td><td data-bbox="690 191 1430 590">Updated following positions in Record Type 3C – eQuote Order Extension<ul style="list-style-type: none">• Filler (position 83-84): add filler• Filler (position 99-100): add filler• Minimum Trade Size (position 102-108): Added new field• Filler (position 109-213): expand filler• Shift all records appropriately</td></tr></table>	3C	Updated following positions in Record Type 3C – eQuote Order Extension <ul style="list-style-type: none">• Filler (position 83-84): add filler• Filler (position 99-100): add filler• Minimum Trade Size (position 102-108): Added new field• Filler (position 109-213): expand filler• Shift all records appropriately
3C	Updated following positions in Record Type 3C – eQuote Order Extension <ul style="list-style-type: none">• Filler (position 83-84): add filler• Filler (position 99-100): add filler• Minimum Trade Size (position 102-108): Added new field• Filler (position 109-213): expand filler• Shift all records appropriately		

Introductory Notes

Overview

This document describes the formats for the Merged Order Log Machine Readable Output (MRO) Files.

At the end of each business day, NYSE Euronext provides to customers upon request a detailed account of that customer's order information, administrative messages and execution reports in both NYSE and NYSE/Amex Listed Securities that were processed during the day at its point-of-sale and/or its Floor Broker Systems. The output is known as the Merged Order Log and is available in both print-image and machine readable output form. Customers are entitled to one free output (file or print-image).

Four different versions of the output are available:

Badge: Any message containing a broker badge will appear on this output. Normally any activity sent to eBroker or BBSS.

Agency ID: Any message containing a Agency ID will appear on this output. Normally any activity routed through BBSS.

Clearing Firm: Any message containing a specific Clearing Firm (multiple EF Mnemonics can be associated with one specific clearing firm)

Entering Firm: Any message containing a specific Entering Firm Mnemonic

Autoroute products

Autoroute Product numbers for the Merged Order Log outputs are listed below:

Output	MRO Format	Print-Image Format
Badge	#06200574	#06201028
BBSS Agency ID	#06010578	#06010166
Clearing Firm	#062200564	#06010641
Entering Firm	#06220527	#06222466

Note: The print-image formats are not described in this document.

CR character

In these formats, **CR** denotes the one-byte carriage return character (binary '0000 1101' or hexadecimal '0D').

LF character In these formats, **LF** denotes the one-byte line-feed character (binary '0010 0011 or hexadecimal '25'). For ASCII recipients, LF = binary 0000 1010 x'0A'.

ETX character In these formats, **ETX** denotes the one-byte end-of-text character (binary '0000 0011' or hexadecimal '03').

Notation for field format and length Field format and length are shown in COBOL notation:

A(x) – alphabetic field of length x
X(x) – alphanumeric field of length x
9(x) – numeric field of length x

Continued on next page

Introductory Notes, Continued

Contacts

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Business questions:

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-

MRO Record Type 1A – Order without Miscellaneous Text

Record type 1A Record type 1A shall be used for orders without miscellaneous text.
 – Order w/o
 Lines 3F/4

Field Name	Position Start-End	Format (Length)	Field Value
RECORD TYPE	1-2	X(2)	1A = Order without Line 3F/4 information
ENTERING FIRM TAG 115 (ONBEHALFOFCOMPI D)	3-6	A(4)	Entering Firm alpha
CLEARING NUMBER TAG 439 (CLEARING FIRM)	7-10	9(4)	Entering Firm's clearing number
SYMBOL TAG 55 (SYMBOL) TAG 65 (SYMBOLSFX)	11-21	X(11)	Listed security symbol – space between base and suffix, no special characters
LOT INDICATOR	22-22	X(1)	1=Odd lot 2=Round lot 3=Partial round lot
FILLER	23-25	X(3)	Spaces
TURNAROUND NUMBER	26-31	X(6)	System assigned Turnaround number (e.g., AA9999 or 123456)
BRANCH SEQUENCE TAG 11 (CIORDID) (FIRST 8 BYTES OF TAG 11) FOR DOT PARTIAL ORDERS (1B), USE TAG 9451 (PARENT ORDER BRANCH CODE, SEQUENCE NUMBER AND DATE)	32-40	A(4)9(5)	BRANCH and BRANCH SEQUENCE NUMBER A(4) – BRANCH alpha represents the Branch office that entered the order for the entering firm 9(5) – BRANCH SEQUENCE NUMBER is assigned by a branch office to each order transmitted to the NYSE

COMMON FIELDS – ON ALL RECORDS

Field Name	Position Start-End	Format (Length)	Field Value
DESIGNATED MARKET MAKER UNIT	41-43	9(3)	Unit number of the Designated Market Maker for the Security Symbol

Continued on next page

MRO Record Type 1A – Order without Miscellaneous Text, Continued

Record type 1A – Order w/o Lines 3F/4 (continued)

Field Name	Position Start-End	Format (Length)	Field Value
FILLER	44-52	X(9)	Spaces
POSS DUPE TAG 43 (POSSDUPFLAG) OR TAG 97 (POSSRESENDFLAG)	53-53	X(1)	1 = Poss Dupe D = Rule 902 E = Poss Dupe Rule 902 F = Auto Execution G = Poss Dupe of Auto-Execution H = Non-auto Execution I = Poss Dupe of Non-auto Execution Otherwise 0 or Space
BOOTH/BOOKED INDICATOR	54-54	X(1)	0 = Post 1 = Booth 2 = Booked
ORDER TIME	55-60	9(6)	Time at which the order or Makes message was entered: HHMMSS
ORDER DATE TAG 11 (CLORDID) (LAST 8 BYTES OF RECORD)	61-68	X(8)	Date on which the order or Makes message was entered: CCYYMMDD

MRO Record Type 1A – Order without Miscellaneous Text,

Continued

Record type 1A – Order w/o Lines 3F/4 (continued)

Field Name	Position Start-End	Format (Length)	Field Value
ORDER STATUS TAG 39 (ORDSTATUS – APPLICABLE FOR VALUES C, R, AND X)	69-69	X(1)	C = Cancel from a Cancel/Replace 2-part order H = Order reconstructed from an e-Broker message K = Makes order message M = Missing order O = Order present P = Prior date order R = Replacing order from a Cancel/Replace 2-part order X = Cancel order Y = Order reconstructed from a Makes order message
ORDER TYPE TAG 40 (ORDTYPE)	70-70	X(1)	0 = MKT (Market) 1 = LMT (Limit) 2 = STP (Stop) 4 = MOC (Market on Close) C = Close D = LOC (Limit on Close)

Continued on next page

MRO Record Type 1A – Order without Miscellaneous Text, Continued

Record type 1A – Order w/o Lines 3F/4 (continued)

Field Name	Position Start-End	Format (Length)	Field Value
ORDER INSTRUCTION TAG 54 (SIDE)	71-71	X(1)	1 = BUY 2 = SL (Sell long) 3 = SSHT (Sell Short) 4 = SSHT EXEMPT (Sell Short Exempt) 5 = BUY MINUS 6 = SL PLUS (Sell Plus) 7 = Buy Minus Zero Plus
ORDER ENTRY METHOD	72-72	9(1)	System that was used to enter the order 0 = CCG 1 = GTM 2 = Display Book 3 = BBSS
TIME IN FORCE TAG 59 (TIMEINFORCE)	73-73	X(1)	1 = Day (good for current day) market 2 = GTC (good till canceled) market 3 = OPG (execute on opening) 4 = GTC limit 5 = OC (immediate or cancel) 6 = FOK (fill or kill) 7 = Day limit
ORDER QUANTITY TAG 38 (ORDERQTY)	74-82	9(9)	Number of shares in the order

Continued on next page

MRO Record Type 1A – Order without Miscellaneous Text, Continued

Record type 1A – Order w/o Lines 3F/4 (continued)

Field Name	Position Start-End	Format (Length)	Field Value
LIMIT PRICE CODE	83-83	X(1)	0-9 – Number of decimal digit(s) in the Limit Price
LIMIT PRICE TAG 44 (PRICE)	84-95	9(12)	Populated only for Limit Order or Stop Limit Order Format is 9(12-n)9(n) where: n represents Limit Price Code value – denoting the number of decimal digit(s) in the Limit Price 9(12-n) represents dollar digits 9(n) represents the decimal digits e.g., 33.50 is represented as 000000003350 with Limit Price Code = 2
STOP PRICE CODE	96-96	X(1)	0-9 – Number of decimal digit(s) in the Stop Price
STOP PRICE TAG 99 (STOPPX)	97-108	9(12)	Populated only for Stop Order or Stop Limit Order <i>see LIMIT PRICE for format</i>
SETTLEMENT TERMS TAG 63 (SETTLMNTTYP)	109-111	X(3)	C = Cash ND = Next Day nnn = number of days Sellers Option (002-060) Spaces = Regular Settlement

Continued on next page

MRO Record Type 1A – Order without Miscellaneous Text, Continued

Record type 1A – Order w/o Lines 3F/4 (continued)

Field Name	Position Start-End	Format (Length)	Field Value
ACCOUNT TYPE TAG 47 (RULE 80A)	112-112	X(1)	A = Agency B = Short exempt transaction for other agency customer accounts C = Program trade, non-index arbitrage for Member/Member Organization D = Program trade, index arbitrage for Member/Member Organization E = Registered Equity Market Maker trades F = Short exempt transaction for proprietary account H = Short exempt transaction for account of individual investor I = Individual investor J = Proprietary Algorithmic Program Trading K = Agency Algorithmic Program Trading L = Short exempt transaction for the account of a market-maker M = Program Trade, index arbitrage as agent for other member N = Program Trade, non-index arbitrage agent for other member O = Competing dealer trades P = Principal Q = Error account R = Competing dealer trades S = Designated Market Maker trades T = Competing dealer trades U = Program trade, index arbitrage for Other Agency W = All other orders as agent for other member X = Short exempt transaction for account of unaffiliated member's competing market-maker Y = Program trade, non-index arbitrage for Other Agency

Continued on next page

MRO Record Type 1A – Order without Miscellaneous Text, Continued

Record type 1A – Order w/o Lines 3F/4 (continued)

Field Name	Position Start-End	Format (Length)	Field Value
SELL CONVERSION INDICATOR	113-113	X(1)	Indicator for conversion from sell short to sell short exempt (for Clearing Firm and Entering Firm MROs only) 0 = No conversion or N/A 3 = Convert for all sessions Note: This field pertains to orders with ORDER INSTRUCTION 3 (SSHT) and 4 (SSHT EXEMPT) only .
CANCEL TURNAROUND NUMBER	114-119	X(6)	For cancel and replace orders – System assigned Turnaround number (e.g., AA9999 or 123456)
CANCEL BRANCH SEQUENCE TAG 41 (ORIGCLORDID)	120-128	X(4)9(5)	For cancel and replace orders – Firm assigned Branch Sequence of the order that was canceled (e.g., AAAA99999)
SPECIAL ORDER INDICATOR TAG 9487 (ROUTINGINSTRUCTION)	129-129	X(1)	5 = DOT order from e-Broker 6 = Closing offset order (future value) 7= ISO (Intermarket Sweep Order; do not ship) 8 = SOC (Reg NMS immediate or cancel; do not ship) order 9 = DNS (Do Not Ship) P = DOT order from e-Broker/SOC order– see values 5 and 8 Q = DOT order from e-Broker/DNS order – see values 5 and 9 R = e-Broker closing offset order (future value) Otherwise 0 or Space

Continued on next page

MRO Record Type 1A – Order without Miscellaneous Text, Continued

Record type 1A – Order w/o Lines 3F/4 (continued)

Field Name	Position Start-End	Format (Length)	Field Value
FILLER	130-130	X(1)	Space
DO NOT INDICATOR TAG 18 (EXECINST)	131-131	X(1)	1 = DNI (Do Not Increase) 2 = DNR (Do Not Reduce) Otherwise 0 or Space
FILLER	132-134	X(3)	Spaces
ENTERING BOOTH ID TAG 143 (TARGETLOCATIONID – DESTINATION FROM FLOOR)	135-137	X(3)	Agency ID of Entering Booth
DESTINATION BOOTH ID TAG 143 (TARGETLOCATIONID – DESTINATION FROM FIRM)	138-140	X(3)	Agency ID of Destination Booth
ASOF INDICATOR	141-141	X(1)	As-of data order indicator: Y = Yes N = No
ORDER WRITE-IN DATE	142-146	X(5)	As-of order date – YYDDD (modified Julian date format)
PRIMARY MARKET	147	9(1)	0 = NYSE 1 = NYSE AMEX 2 = NYSE AMEX NASDAQ - UTP
FILLER	148-149	X(2)	Spaces
ORDER WRITE-IN TIME	150-155	X(6)	As-of order time – HHMMSS
DBTIME	156-165	X(10)	Designated Market Maker Display Time – HHMMSStttt
FILLER	166-170	X(5)	Spaces
ACCOUNT ID TAG 1	171-202	X(32)	The 32-byte tag that firms can choose to populate with their own order or customer identification information.

Field Name	Position Start-End	Format (Length)	Field Value
MESSAGE INDICATOR	203-203	X(1)	2 = e-Quote 3 = g-Quote 4 = d-Quote 5 = Reserve Order
FILLER	204-207	X(4)	Spaces (used in 1C record for e-Quote type)
RESERVE PUBLISH QUANTITY TAG 111 (MAXFLOOR)	208-214	9(7)	Blank = non-reserve 0 = Zero-Publish Quantity Qty = Publish Quantity
FILLER	215-216	X(2)	Spaces
LEAVES QUANTITY	217-225	9(9)	Quantity on a GTC order at the beginning of the activity date.
FILLER	226-245	X(20)	Spaces
INTRODUCING BROKER TAG 9448 (INTRODUCING BADGEID)	246-249	X(4)	Broker Badge that sent the order.
FILLER	250-256	X(7)	Spaces
END OF RECORD	257-257	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 1B – Orders with Miscellaneous Text

Record type 1B Record type 1B shall be used for orders with miscellaneous text.
 – Orders with
 Lines 3F/4

Field Name		Position Start-End	Format (Length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	1B = Order with Line 3F/4 information
	<i>Common Fields</i>	3-43	X(41)	<i>See structures described in Record Type 1A</i>
<i>Fields from position 44 to 245 are the same as Record Type 1A</i>		44-245	X(193)	<i>See structures described in Record Type 1A</i>
FILLER		246-260	X(15)	Spaces
LENGTH OF MISCELLANEOUS TEXT		261-263	9(3)	Variable length of the miscellaneous text that follows
MISCELLANEOUS TEXT		264-320	X(57)	<i>See formats below</i>
END OF RECORD		321-321	X(1)	ETX = 1-byte end-of-text character

Continued on next page

MRO Record Type 1B – Orders with Miscellaneous Text, Continued

*Miscellaneous
text –DOT
orders from e-
Broker*

Field Name	Position Start-End	Format (Length)	Field Value
SLASHES	255-256	X(2)	“/ /”
INTRODUCING BROKER TAG 9448 (INTRODUCING BADGEID)	257-260	X(4)	Introducing Broker Badge ID
FILLER	261-261	X(1)	Spaces
BILL TO TAG 9449 (BILLTO)	262-265	X(4)	
LINE FEED	266-267	X(2)	LF LF
ENTERING FIRM TAG 115 (ONBEHALFOFCOMPID)	268-271	X(4)	Entering firm mnemonic
FILLER	272-272	X(1)	Spaces
CHILD ORDER BRANCH TAG 11 (CLORDID)	273-276	X(4)	Branch code for DOT orders from e-Broker
FILLER	277-277	X(1)	Spaces
CHILD ORDER SEQUENCE TAG 11 (CLORDID)	278-282	X(5)	Branch sequence for DOT orders from e-Broker
FILLER	283-283	X(1)	Spaces
PARENT ORDER TURNAROUND NUMBER 9452 (PARENT ORDER TA)	284-289	X(6)	The turnaround number of the parent order associated with this DOT order

Field Name	Position Start-End	Format (Length)	Field Value
LINE FEED	290-291	X(2)	LF LF
FILLER	292-311	X(20)	Spaces

MRO Record Type 1B – Orders with Miscellaneous Text, Continued

Miscellaneous text - Free-form Lines 3F/4

The following format is used for all other orders with “free-form” Lines 3F/4 data.

Field Name	Position Start-End	Format (Length)	Field Value
LINES3F/4 DATA	255-311	X(57)	<p>Line 3F data and/or Line 4 data, in two contiguous variable-length text fields, left justified and padded with spaces.</p> <ul style="list-style-type: none"> Line 3F data, when present, consist of two slashes (/ /), up to 25 data characters and two Line Feed characters (LF LF) Line 4 data, when present, consist of up to 27 data characters and a single Line Feed character (LF) <p>e.g., //data25LFLFdata27LF or //data25LFLF or data27LF</p>

MRO Record Type 1C – e-Quote Order

Record type 1C Record type 1C shall be used for e-Quote orders.
 – e-Quote
 Order

Field Name		Position Start-End	Format (Length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	1C = e-Quote Order
	<i>Common Fields</i>	3-43	X(41)	<i>See structures described in Record Type 1A</i>
<i>Fields from position 44 to 202 are the same as Record Type 1A</i>		44-202	X(125)	<i>See structures described in Record Type 1A</i>
E-QUOTE INDICATOR		203-203	X(1)	2 – e-Quote without discretion or pegging 3 – G-Quote 4 – e-Quote with discretion and/or pegging
E-QUOTE TYPE ¹ TAG 9478 (EQUOTE TYPE)		204-207	X(4)	EQAA = Simple e-Quote without discretion or pegging EQBB = Reserve e-Quote without discretion or pegging EQGA = Simple G-Order EQDA = Simple e-Quote with discretion and/or pegging EQDB = Reserve e-Quote with discretion and/or pegging EQCR = (cross order - future use)

Continued on next page

¹ The e-Quote Type is located in the same position as the Competing Designated Market Maker / Sponsoring Firm field in Record Type 1A.

MRO Record Type 1C – e-Quote Order, Continued

Field Name	Position Start-End	Format (Length)	Field Value
CEILING/FLOOR PRICE CODE TAG 9562 (CEILINGFLOORPRICE)	208-208	X(1)	0-9 – Number of decimal digit(s) in the Ceiling/Floor Price; zero if not present Badge MRO only
CEILING/FLOOR PRICE TAG 9562 (CEILINGFLOORPRICE)	209-220	X(12)	Highest price (for a buy) or lowest price (for a sell) to which the e-Quote may peg; zero if not present Badge MRO only
MINIMUM PEG QUANTITY TAG 9563 (MINIMUM PEGGING QUANTITY)	221-227	X(7)	Smallest size quote to which the e-Quote is willing to peg; zero if not present Badge MRO only
FILLER	228-229	X(2)	Spaces
MAXIMUM PEG QUANTITY TAG 9564 (MAXIMUM PEGGING QUANTITY)	230-236	X(7)	Largest size quote to which the e-Quote is willing to peg; zero if not present Badge MRO only
INTRODUCING BROKER ² TAG 9448 (INTRODUCING BADGEID)	237-240	X(4)	Introducing Broker Badge ID
PEGGING INDICATOR TAG 9561 (PEGGING INDICATOR)	241-241	X(1)	Y = Pegged to the NYSE BBO N = Not pegged to the NYSE BBO Badge MRO only
BILL TO ³	242-245	X(4)	Bill-to information

² Introducing Broker Badge appears in Record Type 1B for DOT orders from e-Broker.

³ Bill-to field appears in Record Type 1B for DOT orders from e-Broker.

ALGO INDICATOR TAG 9449 (BILLTO)	246-246	X(1)	1 = Algo e-Quote
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MRO Record Type 1C – e-Quote Order, Continued

Field Name	Position Start-End	Format (Length)	Field Value
DISPLAY INDICATOR TAG 9479 (DISPLAYINDICATOR)	247-247	X(1)	Y = Display e-Quote N = Non-display e-Quote
FILLER	248-248	X(1)	Space
PUBLISH QUANTITY TAG 9480 (RESERVE PUBLISH QUANTITY)	249-255	9(7)	For reserve e-Quotes (see e-Quote type), the quantity that is published and included in the quote at the BBO
FILLER	256-257	X(2)	Spaces
LAYER LINK ID TAG 9482 (LAYER LINK ID)	258-267	X(10)	For HHD e-Quotes and G-Quotes: Identifier that is associates all the price points (layers) of an e-Quote For manual e-Quote: Spaces
FILLER	268-268	X(1)	Space
E-QUOTE ID TAG 9481 (E-QUOTE ID)	269-278	X(10)	For HHD e-Quotes and G-Quotes: Identifier that is unique within broker badge for each e-Quote For manual e-Quote: Spaces
ALGO BRANCH/SEQUENCE TAG 11 (CLORDID) FIRST 9 BYTES OF THE RECORD	279-287	A(4) 9(5)	Branch and Sequence Number from the Algo e-Quote A(4) – Branch Alpha from Algo 9(5) – Sequence number assigned by Algo
PARENT TA	288-293	X(6)	System assigned Turnaround number of the parent order associated with this Algo e- Quote
FILLER	294-303	X(10)	Spaces
END OF RECORD	304-304	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 2A – Reports with 1 Contra

Record type 2A Record type 2A shall be used for reports with one contra, as planned on
– Reports with December 6, 2000.
1 Contra

Field Name		Position Start-End	Format (length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	2A = Report with one contra
	<i>Common Fields</i>	3-24	X(41)	<i>See structures described in Record Type 1A</i>
BILLING TIER (FOR FUTURE USE)		25-25	X (1)	To be defined Note: For future use
TURNAROUND NUMBER		26-31	X(6)	System assigned Turnaround number (e.g., AA9999 or 123456)
BRANCH SEQUENCE TAG 11 (CIORDID) (FIRST 8 BYTES OF TAG 11) FOR DOT PARTIAL ORDERS (1B), USE TAG 9451 (PARENT ORDER BRANCH CODE, SEQUENCE NUMBER AND DATE)		32-40	A(4)9(5)	BRANCH and BRANCH SEQUENCE NUMBER A(4) – BRANCH alpha represents the Branch office that entered the order for the entering firm 9(5) – BRANCH SEQUENCE NUMBER is assigned by a branch office to each order transmitted to the NYSE
DESIGNATED MARKET MAKER UNIT		41-43	9(3)	Unit number of the Designated Market Maker for the Security Symbol
FILLER		44-52	X(9)	Internal Use

Field Name	Position Start-End	Format (length)	Field Value
POSS DUPE TAG 43 (POSSDUPFLAG) OR TAG 97 (POSSRESENDFLAG)	53-53	X(1)	1 = Poss Dupe Otherwise 0 or Space
BOOTH/BOOKED INDICATOR	54-54	X(1)	0 = Post 1 = Booth 2 = Booked
REPORT MESSAGE TIME TAG 60 (TRANSACTIONTIME)	55-60	9(6)	Time at which the report was sent: HHMMSS

Continued on next page

MRO Record Type 2A – Reports with 1 Contra, Continued

Record type 2A – Reports with 1 Contra (continued)

Field Name	Position Start-End	Format (length)	Field Value
(ERC) TYPE TAG 9425 (STATUSRESP)	61-61	X(1)	0 = Regular Execution Report 1 = Report Change for Execution Report; may include update to Memo A/B 2 = Price Correction for Execution Report 4 = Bust of Execution Report A = Report Change w/Price Correction for Exec. Report; may include update to Memo A/B Note: ERC Types 0-4, A, and G may be used for Verbal Reports (identified by Contra 'VBL')
E-QUOTE EXECUTION TYPE	62-62	X(1)	0 – Executed without discretion or pegging 1 – Executed with discretion 2 – Executed with pegging 3 – Executed with discretion and pegging Non-zero values on Badge MRO only
PRINCIPAL INDICATOR	63-63	X(1)	0 = non-Principal 1 = Principal
FILLER	64-64	X(1)	Space
UNIT OF TRADE	65-65	X(1)	0 = 100 share unit 1 = 50 share unit 2 = 25 share unit 3 = 10 share unit 4 = 1 share unit
LEAVES QUANTITY TAG 151 (LEAVESQTY)	66-74	9(9)	Remaining unexecuted quantity of order
EXECUTING BROKER NUMBER TAG 76 (EXECBROKER)	75-78	9(4)	The badge number of the executing broker

MRO Record Type 2A – Reports with 1 Contra, Continued

Record type 2A – Reports with 1 Contra (continued)

Field Name	Position Start-End	Format (length)	Field Value
EXECUTION PRICE CODE	79-79	X(1)	0-9 – Number of decimal digit(s) in the Execution price
EXECUTION PRICE TAG 31 (LASTPX)	80-91	9(12)	Populated for all reports: Format is 9(12-n)9(n) where: n represents Execution Price Code value – denoting the number of decimal digit(s) in the Execution Price 9(12-n) represents dollar digits 9(n) represents the decimal digits e.g., 33.50 is represented as 000000003350 with Limit Price Code = 2
OMNIBUS CLEARING INDICATOR	92-92	9(1)	0 = N/A 1 = TOD 2 = LOC 3 = LMT 9 = CRS
BUST TIME TAG 60 (TRANSACTIONTIME)	93-98	X(6)	Time at which the report was busted: HHMMSS
EXPANDED ACTIVITY ID TAG 9579 (EXPERCREFERENCENUMBER)	99-108	X(10)	X(5) Reference number, connects all activity for non-verbal report (taken from sequence number of original report) X (5) Sequence number – starts at 00001 for the first activity and increases by 1 for each subsequent activity
ORIGINAL REPORT TIME	109-114	X(6)	For Execution Report Corrections (ERC), the time of the original report that was corrected: HHMMSS

MRO Record Type 2A – Reports with 1 Contra, Continued

Record type 2A – Reports with 1 Contra (continued)

Field Name	Position Start-End	Format (length)	Field Value
LAST REPORT FLAG	115-115	X(1)	L = Last image for a corrected report
SOURCE OF REPORT	116-116	X(1)	1 = GTM 2 = Display Book 3 = BBSS 4 = SDBK 5 = PRIN to Crowd Report (AWO) 6 = PRIN to Away Market (AWO) 7 = Away Market (AWO) Name Change 8 = PRIN to OARS/MOC/Block (YB) Report (AWO) 9 = Hand-Held Report (Ink Indicator)
EXECUTION TYPE (NX INDICATOR) TAG 9430 (NYSEDIRECT+)	117-117	X(1)	0 = Not an automatic execution 1 = Automatic execution 4 = BBSS Auto-Generated Report Indicator
DESTINATION BOOTH ID TAG 143 (TARGETLOCATIONID)	118-120	X(3)	
ORIGINATING BOOTH ID TAG 143 (TARGETLOCATIONID)	121-123	X(3)	
OPENING TIME	124-129	X(6)	Opening time of the stock – HHMMSS (used for contra flag calculations)
OPENING TIME INDICATOR	130-130	X(1)	Indicates source of opening time: 0 – Default time (093500) was used 2 – OARS time was used
DISPLAY BOOK LINK ID TAG 9483 (DBKLINKID)	131-136	X(6)	Identifier that links all the reports in a trade

Field Name	Position Start-End	Format (length)	Field Value
ORIGINAL ERC TYPE	137-137	X(1)	0 = Regular Execution Report 1 = Report Change for Execution Report; may include update to Memo A/B 2 = Price Correction for Execution Report 4 = Bust of Execution Report A = Report Change w/Price Correction for Exec. Report; may include update to Memo A/B

MRO Record Type 2A – Reports with 1 Contra, Continued

Record type 2A – Reports with 1 Contra (continued)

	Field Name	Position Start-End	Format (length)	Field Value
1 ST CONTRA INFORMATION	CONTRA MNEMONIC(1) TAG 375 (CONTRABROKER)	138-141	X(4)	Firm on the other side of the trade (VBL = Verbal Report)
	CONTRA QUANTITY(1) TAG 437 (CONTRA TRADEQTY)	142-150	9(9)	Number of shares taken by the above Contra Firm
	CONTRA BADGE(1) TAG 337 (CONTRA TRADER)	149-154	X(4)	Badge number of the broker of the contra firm; otherwise Spaces ⁴
	CONTRA WRITE-IN TIME(1) TAG 438 (CONTRA TRADETIME)	153-160	X(6)	Time at which the trade takes place, HHMMSS; otherwise Spaces

⁴ On the Badge MRO, the Contra Badge will be 0001 for e-Quotes.

Field Name	Position Start-End	Format (length)	Field Value
LIQUIDITY INDICATOR (1) TAG 9570 (EXECAWAYMKTID - ALPHA) OR TAG 9578 (BILLING INDICATOR - NUMERIC)	161-161	X(1)	B = Boston C = National D = NASD F = 3 rd Party Algo Executed NYSE (future use) G = 3 rd Party Algo Executed AWAY (future use) I = ISE J = EDGA (future use) K = EDGX (future use) M = Chicago P = Arca T = Nasdaq W = CBOE X = Philadelphia Y = BATS (future use) Z = BATS N = New York (executed from NYSE MatchPoint) Blank = N/A 1 = TAKER 2 = PROVIDER 3 = BLENDED 4 = OPENING PRIOR DAY 5 = OPENING 6 = CLOSING 7 = CLOSING MOC/LOC 8 = DMM 9 = ODDLOT
VENDOR DESTINATION	162-163	X(2)	MP = MatchPoint
FILLER	164-183	X(20)	Spaces
END OF RECORD	184-184	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 2B – Reports with 2 Contras

Record type 2B Record type 2B shall be used for reports with two contras.
 – **Reports with**
2 Contras

Field Name		Position Start-End	Format (length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	2B = Report with two contras
	<i>Common Fields</i>	3-43	X(41)	<i>See structures described in Record Type 1A</i>
<i>Miscellaneous Report Fields</i>		44-135	X(92)	<i>See structures described in Record Type 2</i>
1 ST CONTRA INFORMATION		136-157	X(22)	<i>See structures described in Record Type 2A</i>
2 ND CONTRA INFORMATION	CONTRA MNEMONIC(2)	158-161	X(4)	<i>Same structures as 1st CONTRA INFORMATION, described in Record Type 2A</i>
	CONTRA QUANTITY(2)	162-168	9(7)	
	CONTRA BADGE(2)	169-172	X(4)	
	CONTRA WRITE-IN TIME(2)	173-178	X(6)	
FILLER		179-191	X(13)	Spaces
END OF RECORD		192-192	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 2C – Reports with 3 Contras

Record type 2C Record type 2C shall be used for reports with three contras.
 – Reports with
 3 Contras

Field Name		Position Start-End	Format (length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	2C = Report with three contras
	<i>Common Fields</i>	3-43	X(41)	<i>See structures described in Record Type 1A</i>
<i>Miscellaneous Report Fields</i>		44-135	X(92)	<i>See structures described in Record Type 2A</i>
1 ST CONTRA INFORMATION		136-157	X(22)	<i>See structures described in Record Type 2A</i>
2 ND CONTRA INFORMATION		158-179	X(22)	<i>Same structures as 1st CONTRA INFORMATION</i>
3 RD CONTRA INFORMATION	CONTRA MNEMONIC(3)	180-183	X(4)	<i>Same structures as 1st CONTRA INFORMATION, described in Record Type 2A</i>
	CONTRA QUANTITY(3)	184-190	9(7)	
	CONTRA BADGE(3)	191-194	X(4)	
	CONTRA WRITE-IN TIME(3)	195-200	X(6)	
FILLER		201-223	X(23)	Spaces
END OF RECORD		224-224	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 2D – Reports with 4 Contras

Record type 2D Record type 2D shall be used for reports with four contras.
 – Reports with
 4 Contras

Field Name		Position Start-End	Format (length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	2D = Report with four contras
	<i>Common Fields</i>	3-43	X(41)	<i>See structures described in Record Type 1A</i>
<i>Miscellaneous Report Fields</i>		44-135	X(92)	<i>See structures described in Record Type 2A</i>
1 ST CONTRA INFORMATION		136-157	X(22)	<i>See structures described in Record Type 2A</i>
2 ND CONTRA INFORMATION		158-179	X(22)	<i>Same structures as 1st CONTRA INFORMATION</i>
3 RD CONTRA INFORMATION		180-201	X(22)	<i>Same structures as 1st CONTRA INFORMATION</i>
4 TH CONTRA INFORMATION	CONTRA MNEMONIC(4)	202-205	X(4)	<i>Same structures as 1st CONTRA INFORMATION, described in Record Type 2A</i>
	CONTRA QUANTITY(4)	206-212	9(7)	
	CONTRA BADGE(4)	213-216	X(4)	
	CONTRA WRITE-IN TIME(4)	217-222	X(6)	
FILLER		223-223	X(1)	Spaces
END OF RECORD		224-224	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 2E – Reports with 5 Contras

Record type 2E Record type 2E shall be used for reports with five contras.
**– Reports with
 5 Contras**

Field Name		Position Start-End	Format (length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	2E = Report with five contras
	<i>Common Fields</i>	3-43	X(41)	<i>See structures described in Record Type 1A</i>
<i>Miscellaneous Report Fields</i>		44-135	X(92)	<i>See structures described in Record Type 2A</i>
1 ST CONTRA INFORMATION		136-157	X(22)	<i>See structures described in Record Type 2A</i>
2 ND CONTRA INFORMATION		158-179	X(22)	<i>Same structures as 1st CONTRA INFORMATION</i>
3 RD CONTRA INFORMATION		180-201	X(22)	<i>Same structures as 1st CONTRA INFORMATION</i>
4 TH CONTRA INFORMATION		202-223	X(22)	<i>Same structures as 1st CONTRA INFORMATION</i>
5 TH CONTRA INFORMATION	CONTRA MNEMONIC(5)	224-227	X(4)	<i>Same structures as 1st CONTRA INFORMATION, described in Record Type 2A</i>
	CONTRA QUANTITY(5)	228-234	9(7)	
	CONTRA BADGE(5)	235-238	X(4)	
	CONTRA WRITE-IN TIME(5)	239-244	X(6)	
FILLER		245-255	X(11)	Spaces
END OF RECORD		256-256	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 3A – Admin Responses

Record type 3A Record type 3A shall be used for admin response messages.
 – Admin Responses

Field Name		Position Start-End	Format (length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	3A = Admin Response
	<i>Common Fields</i> ⁵	3-43	X(41)	<i>See structures described in Record Type 1A</i>
FILLER		44-52	X(9)	Internal Use
POSS DUPE TAG 43 (POSSDUPFLAG) OR TAG 97 (POSSRESENDFLAG)		53-53	X(1)	1 = Poss Dupe Otherwise 0 or Space

⁵ For Designated Market Maker records on the Clearing Firm MRO, Entering Firm (positions 3-6) and Clearing number (positions 7-10) will be set to LMT and 0789, respectively, for e-Quotes.

, MRO Record Type 3A – Admin Responses Continued

Field Name	Position Start-End	Format (length)	Field Value
BOOTH/BOOKED INDICATOR	54-54	X(1)	0 = Post 1 = Booth 2 = Booked
RESPONSE TIME TAG 60 (TRANSACTIONTIME)	55-60	9(6)	Time at which an Admin Response was sent: HHMMSS
ADMIN PRICE CODE	61-61	X(1)	0-9 = number of decimal digit(s) in the Admin Price Note: This is an obsolete value. Save for future use.
ADMIN PRICE TAG 44 (PRICE)	62-73	9(12)	Populated for selected Admin Responses, e.g., Admin Types 3 and 4 Format is 9(12-n)9(n) where: n represents the Admin Price Code value– denoting the number of decimal digit(s) in the Admin Price 9(12-n) represents the dollar digits 9(n) represents the decimal digits e.g., 33.50 is represented as 000000003350 with Admin Price Code = 2 Note: This is an obsolete value. Save for future use.
ADMIN TYPE TAG 58 (TEXT)	74-74	X(1)	1 = UR OUT 9 = DELETE A = AUTO CXL C = HELD PENDING PRICE CONFIRM E = e-Broker L = Part of e-Quote/ Removed from e-Quote

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MRO Record Type 3A – Admin Responses Continued

Field Name	Position Start-End	Format (length)	Field Value
ADMIN SUBTYPE	75-75	X(1)	<p>For ADMIN TYPE 1 1 = Done for Day (future use)</p> <p>For ADMIN TYPE = E 1 = Order accepted 2 = Order rejected 3 = Order called back 4 = Cancel request confirmed 5 = Cancel replace request confirmed 6 = Replacement order accepted 7 = Makes accepted</p> <p>For ADMIN TYPE = E (Badge MRO only) 8 = Order sent A = Sent DOT (book) L = Nothing done O = Cancel confirmed P = Sent OPG Q = Sent e-Quote R = Algo Order Accepted S = Algo Confirm Cancel T = Algo Confirm Cancel/Replace</p> <p>For ADMIN TYPE = L (Badge MRO only) C = Underlying order currently in e-Quote R = Underlying order removed from e-Quote</p>

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MRO Record Type 3A – Admin Responses Continued

Field Name	Position Start-End	Format (length)	Field Value
ADMIN QUANTITY	76-84	9(9)	Shares associated with an Admin (Shares Ahead, Cancel Quantity,)
FILLER	85-90	X(6)	Internal Use
E-BROKER DEVICE NUMBER (BROKER BADGE) TAG 76 (EXECBROKER)	91-94	9(4)	e-Broker Device (broker's badge number)
EXPANDED RESPONSE TIME	95-104	9(10)	HHMMSSttttt – admin response time in hours, minutes seconds and ten-thousandths of seconds Populated for election messages and tick filing/re-filing messages

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MRO Record Type 3A – Admin Responses Continued

Field Name	Position Start-End	Format (length)	Field Value
BROKER ALGO	105-120	X(16)	Broker Algo vendor
E-QUOTE ID TAG 9481 (E-QUOTE ID)	121-130	X(10)	Unique identifier for an e-Quote within Broker Badge (Badge MRO only) Present on the following admin types: <ul style="list-style-type: none"> • Type E with subtype P – Sent e-Quote message • Type L – Part of e-Quote / Removed from e-Quote message
FILLER	131-135	X(5)	Spaces
EXPANDED ACTIVITY ID TAG 9579 (EXPERCREFERENCENUMBER)	136-145	X(10)	X(5) Reference number, connects all activity for non-verbal report(taken from sequence number of original report) X (5) Sequence number – starts at 00001 for the first activity and increases by 1 for each subsequent activity
ALGO STRATEGY	146-161	X(16)	Broker Algo strategy
FILLER	162-164	X(3)	Spaces

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MRO Record Type 3A – Admin Responses Continued

Field Name		Position Start-End	Format (length)	Field Value
CANCEL ORDER STATUS		165-165	X(1)	X – Admin contains cancel order data C – Admin contains cancel/replace order data Space – Admin without cancel or cancel/replace order data
For admins with cancel or cancel/replace order data	CANCEL BRANCH SEQUENCE	166-174	X(9)	Firm assigned Branch Sequence (e.g., AAAA99999) of the cancel or cancel/replace order
	FILLER	175-178	X(4)	Spaces
	CANCEL TURNAROUND NUMBER	179-184	X(6)	System assigned Turnaround number (e.g., AA9999 or 123456) of the cancel/replace order
	CANCEL ORDER TIME	185-194	X(10)	Time (HHMMSSSttt) of the cancel or cancel/replace order in hours, minutes seconds and ten-thousandths of seconds
	CANCEL ORDER QUANTITY TAG 9429 (CMSLEAVESQTY) TAG 9428 (CXLQTY) – ONLY ON DOT CANCELS	195-203	9(9)	Quantity on the cancel or cancel replace/order (right-justified and zero-filled, when populated)
FILLER		204-223	X(20)	Spaces
END OF RECORD		224-224	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 3B – e-Quote Link Message

Record type 3B Record type 3B shall be used for e-Quote link messages.
– e-Quote Link There shall be one message for each underlying order in each e-Quote.
Message Link messages appear only on the Badge MRO file.

Field Name		Position Start-End	Format (length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	3B = e-Quote Link Message
	<i>Common Fields</i>	3-43	X(41)	<i>See structures described in Record Type IA</i>
FILLER		44-52	X(9)	Internal Use
POSS DUPE TAG 43 (POSSDUPFLAG) OR TAG 97 (POSSRESENDFLAG)		53-53	X(1)	1 = Poss Dupe Otherwise 0 or Space
BOOTH/BOOKED INDICATOR		54-54	X(1)	0 = Post 1 = Booth 2 = Booked
LINK TIME		55-60	9(6)	Link time, truncated to HHMMSS
ADMIN PRICE CODE		61-61	X(1)	0-9 = number of decimal digit(s) in the Admin Price
ADMIN PRICE TAG 44 (PRICE)		62-73	9(12)	Populated for selected Admin Responses, e.g., Admin Types 3 and 4 Format is 9(12-n)9(n) where: n represents the Admin Price Code value – denoting the number of decimal digit(s) in the Admin Price 9(12-n) represents the dollar digits 9(n) represents the decimal digits e.g., 33.50 is represented as 000000003350 with Admin Price Code = 2
ADMIN TYPE		74-74	X(1)	K = e-Quote Link message

Field Name	Position Start-End	Format (length)	Field Value
ADMIN SUBTYPE	75-75	X(1)	Disposition code: C = Underlying order is currently in e-Quote R = Underlying order removed from e-Quote
EQUOTE ORDER QUANTITY	76-84	9(9)	Shares associated with an Admin (Shares Ahead, Cancel Quantity,)
FILLER	85-88	X(4)	Spaces
BROKER BADGE TAG143 (TARGETLOCATIONID)	89-92	X(4)	Introducing broker badge
EXPANDED LINK TIME	93-102	9(10)	Link Message time in hours, minutes, seconds and ten thousandths of seconds – HHMMSStttt
LAYER LINK ID TAG 9482 (LAYERLINKID)	103-112	X(10)	Identifier that associates all the price points (layers) of an e-Quote
E-QUOTE ID TAG 9481 (E-QUOTE ID)	113-122	X(10)	e-Quote identifier, unique within Broker Badge
UNDERLYING ORDER SEQUENCE NUMBER TAG 9451 (PARENT ORDER BRANCH CODE, SEQUENCE NUMBER AND DATE)	123-125	9(3)	Sequence of this underlying order in the link message
TOTAL UNDERLYING ORDERS	126-128	9(3)	Total number of underlying orders in the link message
ORDER LINK ID	129-141	X(13)	TA or Order ID of the underlying order (left-justified, blank padded)
UNDERLYING ORDER SOURCE	142-142	X(1)	B = BBSS P = Proprietary OMS
UNDERLYING FIRM TAG 9453 (PARENTFIRM)	143-146	X(4)	Mnemonic for the firm that entered the underlying order
FILLER	147-159	X(13)	Spaces
END OF RECORD	160-160	X(1)	ETX = 1-byte end-of-text character

MRO Record Type 3C – e-Quote Order Extension

Record type 3C Record type 3C shall be used for discretionary data for e-Quote orders.
– e-Quote
Order Badge MRO only
Extension

Field Name		Position Start-End	Format (Length)	Field Value
COMMON FIELDS	RECORD TYPE	1-2	X(2)	3C = e-Quote Order Message Extension
	<i>Common Fields</i>	3-43	X(41)	<i>See structures described in Record Type 1A</i>
<i>Fields from position 44 to 60 are the same as Record Type 1A</i>		44-60	X(17)	<i>See structures described in Record Type 1A, except 44-52 is internal use</i>
DISCRETIONARY PRICE RANGE CODE		61-61	9(1)	0-9 – Number of decimal digit(s) in the Discretionary Price Range
DISCRETIONARY PRICE RANGE TAG 9565 (DISCRETIONARY PRICE RANGE)		62-73	9(12)	Maximum discretion that may be used above (for a buy) or below (for a sell) a discretionary e-Quote's filed price (capped by the ceiling/floor price, when non-zero)
FILLER		74-75	X(2)	Spaces
OPPOSITE SIDE MINIMUM SIZE TAG 9568 (OPPOSITE SIDE MINIMUM VOLUME)		76-82	9(7)	Smallest size the discretionary e-Quote is willing to trade against with discretion; zero if not present
FILLER		83-84	X(2)	Spaces
OPPOSITE SIDE MAXIMUM SIZE TAG 9569 (OPPOSITE SIDE MAXIMUM VOLUME)		85-91	9(7)	Largest size the discretionary e-Quote is willing to trade against with discretion; zero if not present
MAXIMUM DISCRETIONARY VOLUME TAG 9566 (DISCRETIONARY MAX VOLUME)		92-98	9(7)	Total amount of volume e-Quote is willing to trade with pricing discretion over the life of the order

Field Name	Position Start-End	Format (Length)	Field Value
FILLER	99-100	X(2)	Spaces
ITS ALL INDICATOR TAG 9567 (ITS ALL INDICATOR)	101-101	X(1)	Y = Discretion may be used in away markets N = Discretion may be used in away markets only to facilitate a trade at the NYSE
MINIMUM TRADE SIZE	102-108	9(7)	Minimum quantity that must be guaranteed for d-Quote to trade with discretion
FILLER	109-213	X(105)	Spaces
END-OF-RECORD INDICATOR	214-214	X(1)	ETX = 1-byte end-of-text character

MRO Header Record

Header Record – All MROs The following header record shall be at the beginning of each transmission for all MRO products.

Note: See “Introductory Notes” for Autoroute Product numbers.

Field Name	Position Start-End	Format (length)	Field Value
HEADER IDENTIFIER	1-1	X(1)	“H”
DATE	2-9	X(8)	For the <i>Clearing Firm MRO</i> and <i>Entering Firm MRO</i> – MMDDCCYY For the <i>BBSS Agency ID MRO</i> and <i>Badge MRO</i> – CCYYMMDD
FILLER	10-10	X(1)	Space
HEADER TITLE	11-37	X(27)	For the <i>Clearing Firm MRO</i> : “2000 MRGED ORDER LOG START” For the <i>Entering Firm MRO</i> : “2000 BROKER MRO START” For the <i>BBSS Agency ID MRO</i> : “BOOTH AGENCY MRO – START” For the <i>Badge MRO</i> : “BADGE MRO – START ----”
FILLER	38-74	X(37)	Spaces
HEADER KEY FIELD	75-78	X(4)	For the <i>Clearing Firm MRO</i> and <i>Entering Firm MRO</i> : Entering Firm’s clearing number For the <i>BBSS Agency ID MRO</i> : Agency ID For the <i>Badge MRO</i> : Broker’s Badge Number
END OF RECORD	79-79	X(1)	ETX = 1-byte end-of-text character
FILLER	80-4096	X(4017)	Spaces

MRO Trailer Records

Trailer Record – Clearing Firm and Entering Firm MROs The following trailer record shall be at the end of each transmission for Clearing Firm and Entering Firm MROs.

Note: See “Introductory Notes” for Autoroute Product numbers.

Field Name	Position Start-End	Format (length)	Field Value
TRAILER IDENTIFIER	1-1	X(1)	“T”
DATE	2-9	X(8)	MMDDCCYY
FILLER	10	X(1)	Space
TRAILER TITLE	11-37	X(27)	For the <i>Clearing Firm MRO</i> : “2000 MRGED ORDER LOG END” For the <i>Entering Firm MRO</i> : “2000 BROKER MRO END”
FILLER	38-74	X(37)	Spaces
TRAILER KEY FIELD	75-78	X(4)	Entering Firm’s clearing number
FILLER	79-79	X(1)	Space
ORDER TOTAL	80-87	9(8)	Total number of orders on this file
FILLER	88-88	X(1)	Space
REPORT TOTAL	89-96	9(8)	Total number of reports on this file
FILLER	97-97	X(1)	Space
RESPONSE TOTAL	98-105	9(8)	Total number of responses on this file
FILLER	106-106	X(1)	Space
OTHER TOTAL	107-114	9(8)	Total number of rejects and/or freeze records on this file
FILLER	115-115	X(1)	Space
RECORD TOTAL	116-125	9(10)	Total number of records on this file
FILLER	126-126	X(1)	Space
END OF RECORD	127-127	X(1)	ETX = 1-byte end-of-text character
FILLER	128-4096	X(3969)	Spaces

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MRO Trailer Records, Continued

Trailer Record – **BBSS Agency ID and Badge MROs** The following trailer record shall be at the end of each transmission for the BBSS Agency ID and Badge MROs.
Note: See “Introductory Notes” for Autoroute Product numbers.

Field Name	Position Start-End	Format (length)	Field Value
TRAILER IDENTIFIER	1-1	X(1)	“T”
DATE	2-9	X(8)	MMDDCCYY
FILLER	10-10	X(1)	Space
TRAILER TITLE	11-37	X(27)	For the BBSS Agency ID MRO : “BOOTH AGENCY MRO – END” For the Badge MRO : “BADGE MRO - ---END----”
FILLER	38-74	X(37)	Spaces
TRAILER KEY FIELD	75-78	X(4)	For the BBSS Agency ID MRO : Booth Agency ID For the Badge MRO : Broker’s Badge Number
FILLER	79-79	X(1)	Space
ORDER TOTAL	80-87	9(8)	Total number of orders on this file
FILLER	88-88	X(1)	Space
REPORT TOTAL	89-96	9(8)	Total number of reports on this file
FILLER	97-97	X(1)	Space
RESPONSE TOTAL	98-105	9(8)	Total number of responses on this file
FILLER	106-106	X(1)	Space
RECORD TOTAL	107-116	9(10)	Total number of records on this file
FILLER	117-117	X(1)	Space
END OF RECORD	118-118	X(1)	ETX = 1-byte end-of-text character
FILLER	119-4096	X(3978)	Spaces