

Securrex

Trade-Through Presentation

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DISCLAIMER: The information presented is for educational purposes and does not constitute legal advice or legal opinions.

Regulation National Market System (or Reg NMS)

Regulation National Market System (or Reg NMS) is a US financial regulation promulgated and described by the United States Securities and Exchange Commission (SEC) as "a series of initiatives designed to modernize and strengthen the National Market System for equity securities." It was established in 2007. Its aim was to foster both "competition among individual markets and competition among individual orders" in order to promote efficient and fair price formation across securities markets. Some of the more notable rules include:

- Order Protection (or Trade Through) Rule - provides inter market price priority for quotations that are immediately and automatically accessible (Rule 611)
- Access Rule - addresses access to market data such as quotations (Rule 610)
- Sub-Penny Rule - establishes minimum pricing increments (Rule 612)
- Market Data Rules:
 - a) Allocation amendment – institutes a new Market Data Revenue Allocation Formula,
 - b) Governance amendment – creates advisory committees, c) Distribution and Display Rules – governing market data (Rule 600, 601 & 603).

Definition of Trade-Through

A stock market order that is not executed at the best possible price according to quoted prices at other exchanges. Regulations to protect against trade-throughs were first passed in the 1970s and were later upgraded via Rule 611 of Regulation NMS, which passed in 2007.

Rule 611, otherwise known as the Order Protection Rule, aims to ensure that both institutional and retail investors get the best possible price for a given trade by comparing quotes on multiple exchanges. If a better price is quoted elsewhere, the trade must be routed there for execution, and not "traded through" at its current exchange.

Investment Advisers Act of 1940: Duty of Best Execution

Investment Advisers Must Seek to Obtain the Best Price and Execution for Their Clients' Securities Transactions. As a fiduciary, you are required to act in the best interests of your advisory clients, and to seek to obtain the best price and execution for their securities transactions. The term best execution means seeking the best price for a security in the marketplace as well as ensuring that, in executing client transactions, clients do not incur unnecessary brokerage costs and charges.

FINRA Rule 5310: Best Execution and Inter-positioning

(a)(1) In any transaction for or with a customer or a customer of another broker-dealer, a member and persons associated with a member shall use reasonable diligence to ascertain the best market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions. Among the factors that will be considered in determining whether a member has used "reasonable diligence" are:

- (A) the character of the market for the security (e.g., price, volatility, relative liquidity, and pressure on available communications);
- (B) the size and type of transaction;
- (C) the number of markets checked;
- (D) accessibility of the quotation; and
- (E) the terms and conditions of the order which result in the transaction, as communicated to the member and persons associated with the member.

SEC Rule 611 - Order Protection Rule

- a) Reasonable policies and procedures.
1. A trading center shall establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent trade-throughs on that trading center of protected quotations in NMS stocks that do not fall within an exception set forth in paragraph (b) of this section and, if relying on such an exception, that are reasonably designed to assure compliance with the terms of the exception.
 2. A trading center shall regularly surveil to ascertain the effectiveness of the policies and procedures required by paragraph (a)(1) of this section and shall take prompt action to remedy deficiencies in such policies and procedures.
- b) Exceptions.
1. The transaction that constituted the trade-through was effected when the trading center displaying the protected quotation that was traded through was experiencing a failure, material delay, or malfunction of its systems or equipment.
 2. The transaction that constituted the trade-through was not a "regular way" contract.
 3. The transaction that constituted the trade-through was a single-priced opening, reopening, or closing transaction by the trading center.
 4. The transaction that constituted the trade-through was executed at a time when a protected bid was priced higher than a protected offer in the NMS stock.
 5. The transaction that constituted the trade-through was the execution of an order identified as an inter-market sweep order.
 6. The transaction that constituted the trade-through was effected by a trading center that simultaneously routed an inter-market sweep order to execute against the full displayed size of any protected quotation in the NMS stock that was traded through.
 7. The transaction that constituted the trade-through was the execution of an order at a price that was not based, directly or indirectly, on the quoted price of the NMS stock at the time of execution and for which the material terms were not reasonably determinable at the time the commitment to execute the order was made.
 8. The trading center displaying the protected quotation that was traded through had displayed, within one second prior to execution of the transaction that constituted the trade-through, a best bid or best offer, as applicable, for the NMS stock with a price that was equal or inferior to the price of the trade-through transaction.
 9. The transaction that constituted the trade-through was the execution by a trading center of an order for which, at the time of receipt of the order, the trading center had guaranteed an execution at no worse than a specified price (a stopped order), where:
 - i. The stopped order was for the account of a customer;
 - ii. The customer agreed to the specified price on an order-by-order basis; and
 - iii. The price of the trade-through transaction was, for a stopped buy order, lower than the national best bid in the NMS stock at the time of execution or, for a stopped sell order, higher than the national best offer in the NMS stock at the time of execution.
- c) Intermarket sweep orders. The trading center, broker, or dealer responsible for the routing of an intermarket sweep order shall take reasonable steps to establish that such order meets the requirements set forth in Rule 242.600(b)(30).
- d) Exemptions. The Commission, by order, may exempt from the provisions of this section, either unconditionally or on specified terms and conditions, any person, security, transaction, quotation, or order, or any class or classes of persons, securities, quotations, or orders, if the Commission determines that such exemption is necessary or appropriate in the public interest, and is consistent with the protection of investors.

30 Most Traded Through Equities

RANK	SYMBOL	NAME	VOLUME	TRO RATE	INVESTOR HARM
1	C	CITIGROUP INC	367,661,004,171	17%	\$1,437,554,526.31
2	BAC	BANK of AMERICA CORP	254,660,556,536	18%	\$1,054,294,704.06
3	SPY	STANDARD & POORS DEPOSITARY	192,864,558,928	13%	\$576,665,031.19
4	GE	GENERAL ELECTRIC CO	95,426,368,341	19%	\$417,013,229.65
5	F	FORD MOTOR CO	89,801,535,036	15%	\$309,815,295.87
6	MSFT	MICROSOFT CORP	80,444,721,804	15%	\$277,534,290.22
7	WFC	WELLS FARGO & CO	63,748,369,745	17%	\$249,256,125.70
8	INTC	INTEL CORP	77,403,294,423	14%	\$249,238,608.04
9	CSCO	CISCO SYSTEMS INC	71,174,840,980	14%	\$229,182,987.96
10	JPM	JP MORGAN CHASE & CO	56,897,069,560	16%	\$209,381,215.98
11	S	SPRINT NEXTEL CORP	64,923,063,430	14%	\$209,052,264.24
12	XLF	SPDR FINANCIAL SECTOR ETF	109,006,589,653	8%	\$200,572,124.96
13	PFE	PFIZER INC	61,545,823,780	12%	\$169,866,473.63
14	SIRI	SIRIUS XM RADIO INC COMMON	79,739,321,018	8%	\$146,720,350.67
15	EEM	iShares MSCI EMERGING MK INC	79,504,317,954	8%	\$146,287,945.04
16	IWM	iShares TRUST RUSSELL 2000	84,090,959,256	7%	\$135,386,444.40
17	T	AT&T INC	36,542,200,957	14%	\$117,665,887.08
18	ORCL	ORACLE CORP	41,706,758,265	12%	\$115,110,652.81
19	AIG	AMERICAN INTL GROUP INC	41,186,892,313	10%	\$94,729,852.32
20	MS	MORGAN STANLEY	31,230,041,416	13%	\$93,377,823.83
21	DELL	DELL INC	32,052,501,858	12%	\$88,464,905.13
22	XOM	EXXONMOBIL	32,011,109,517	12%	\$88,350,662.27
23	YHOO	YAHOO! INC	31,789,253,504	12%	\$87,738,339.67
24	EMC	EMC CORP	31,496,431,477	12%	\$86,930,150.88
25	SDS	PROSHARES ULTRSHT S&P 500	34,123,106,771	11%	\$86,331,460.13
26	AA	ALCOA INC	34,073,267,009	10%	\$78,368,514.12
27	MU	MICRON TECH INC	25,397,134,171	13%	\$75,937,431.17
28	AMD	ADVANCED MICRO DEVICES	29,181,463,307	11%	\$73,829,102.17
29	FAS	DIREXION SHARE FINANCE BULL 3X	49,629,591,970	6%	\$68,488,836.92
30	RF	REGIONS FINANCIAL CORP	29,050,598,307	9%	\$60,134,738.50
Total					\$7,233,279,974.93

Best Execution—Failure to Comply With Requirements for Best Execution

FINRA Rule 2010 and NASD Rule 2320¹



Principal Considerations in Determining Sanctions	Monetary Sanction ²	Suspension, Bar or Other Sanctions
<p><i>See Principal Considerations in Introductory Section</i></p> <ol style="list-style-type: none"> Nature of the best execution violation; i.e., whether the execution was at an inferior price or was untimely. While the respondents are responsible for the systems that they use and the third-party vendors that they employ, the appropriate level of sanctions will depend on whether the respondent diligently chose, installed and tested a system that nevertheless malfunctioned; the frequency and thoroughness with which the respondent ensured that the system was operating in compliance with applicable rules; and the care that the respondent exercised in undertaking all necessary steps to correct systems-related malfunctions. The same considerations apply to a respondent that has relied on a third-party vendor's products or services. 	<p>Negligent Misconduct</p> <p>First Action³ Fine of \$5,000 to \$50,000.</p> <p>Second Action Fine of \$10,000 to \$100,000.</p> <p>Subsequent Actions Fine of \$10,000 to \$200,000.⁴</p> <p>Intentional or Reckless Misconduct</p> <p>Fine of \$20,000 to \$200,000.</p> <p>In egregious cases, consider a fine in excess of \$200,000.</p>	<p>Negligent Misconduct</p> <p>In egregious cases, consider suspending the responsible individual in any or all capacities and/or the firm with respect to any or all activities or functions for up to 30 business days.</p> <p>Intentional or Reckless Misconduct</p> <p>Suspend the responsible individual in any or all capacities and/or suspend firm with respect to any or all activities or functions for a period of 10 business days to two years.</p> <p>In egregious cases, consider barring the individual and/or expelling the firm.</p>

FIGURE 1 - 30 MOST TRADED-THROUGH EQUITIES

FINRA Reg NMS Trade-Through Report Card

The Reg NMS Trade-Through Report Card details the transactions in NMS securities that your firm reports to a Trade Reporting Facility or to FINRA's Alternative Display Facility at a price that traded through at least one protected best bid or offer at execution. The report card includes a rolling six months' worth of data, allowing firms to monitor trends of this activity over time. Video Tutorial: http://apps.finra.org/tutorials/Reg_NMS_Trade_Through_Report_Card_Online_Guide.htm

Reg NMS Trade Through Report Card						
Market Participant Name: ABC SECURITIES, INC						
Primary MPID: YYYY	Tier: 3 (Peer Group)		Month/Year: December 2008			
TRADE THROUGH PERIODS						
	December 2008	November 2008	October 2008	September 2008	August 2008	July 2008
TOTAL TRADE THROUGH STATISTICS						
Total # of Media Reported					386	553
Total					14	76
Firm % of Trade Through					63%	13.74%
Peer Group						

FIGURE 2 - FINRA REG NMS TRADE THROUGH REPORT CARD

	A	B	C	D	E	F	G	H	I	J	K	L	
	Execution	P-MPID	MPID	Reporting	B/S	Share	Qual	Issue Sym	Market Cls	Price	Contra MP	Contra Cap	Report
1	12/2/2008	YYYY	YYYY	P	B	13000	ABCD	NNM		8.7			13:10
2	12/3/2008	YYYY	YYYY	P	B	564	ZYX	CQS		26.7			12:22
3	12/8/2008	YYYY	YYYY	P	B	24400	MAMA	NNM		22.04			15:32
4	12/16/2008	YYYY	YYYY	P	B					19			14:14
5	12/25/2008	YYYY	YYYY	P	B					4			11:24
6	12/25/2008	YYYY	YYYY	P	B					1			11:08
7													
8													
9													
10													
11													

FIGURE 3 - FIRM TRANSACTION DATA

FINRA Electronic Blue Sheet System

SEC, FINRA and Intermarket Surveillance Group members utilize Electronic Blue Sheets (EBS) to analyze broker-dealers' trading activities. Blue sheets are records that are generated by firms at the request of regulators in connection with investigations of questionable trading. The blue sheets provide information such as the identity of an account holder for whom specific trades were executed and whether a transaction was a buy or a sell and long or short. Regulatory notice 12-47 enhanced the Blue Sheet format to require timestamps effective May 1, 2013. NO TIMESTAMPS ARE REQUIRED TO BE PROVIDED FOR ANY DATA REQUESTED PRIOR TO MAY 1, 2013.

US Equity Markets

US Equity Markets

20,672 Instruments listing on 6 Equity Exchanges and trading in 15 market centers.

National Best Bid Offer

50 Billion NBBO Top of the Order Book Quote Price Changes. Every Bid, Ask and Trade message from the NMS in sequence and time stamped with 25ms precision.

Trade Examinations

28 Billion Examinations in 25ms periods identified 376,143,896 exams with Trade-Throughs.

BATStreams 2008 - 2012	
Symbol By Session	11,725,452
Symbol By Month	582,443
Trading Sessions	1,259
US Listed Equities	
Symbols	20,672
Listing Exchanges	6
Trading Centers	15
BATStream Stats	
Messages	752,749,581,872
NBBO Ask Changes	25,048,641,047
NBBO Bid Changes	24,942,235,267
NMS Trade Reports	38,348,537,116
Volume	10,604,064,351,457
Notational Value	\$ 306,952,561,820,805
Market Averages	
Share Price	\$ 28.95
Trade Size	277
Trade Price	\$ 8,004.28
TRO Examination Periods	
25ms Trade Exams	27,989,669,492
Exams with TRO	376,143,896
TRO / SESSION	298,764
TRO Losses	\$ 16,030,256,422.34
TRO Losses per Day	\$ 12,732,530.92

Historic Market Data

11,725,452 Bid-Ask-Trade Symbol Streams covering 1,259 Sessions consolidated into 582,443 Monthly Symbol BATStream Databases.

National Market System

\$300+ Trillion traded in 38+ Billion transactions of 10+ Trillion shares from 2008 through 2012.

Investor TRO Losses

\$16 Billion in Trade-Through losses based on SEC estimate of 2.3 cents per share.

XOM@NYSE

LN-12

1st Letter - Exams with TRO per Session		RATING LETTER		2nd Letter - Volume of Exams with TRO	
TRO / SESSION	SYMBOLS	LETTER	TRO BARS	SYMBOLS	
0	2677	A	0	2677	
1	10393	B	1	2428	
2	2065	C	5	1329	
4	1457	D	10	2926	
8	1173	E	50	1138	
16	939	F	100	2745	
32	729	G	500	1045	
64	578	H	1000	2359	
128	346	I	5000	876	
256	193	J	10000	1764	
512	78	K	50000	542	
1024	29	L	100000	706	
2048	10	M	500000	99	
4096	4	N	1000000	37	
8192	1	O	5000000	1	
16384	0	P	10000000	0	

FIGURE 4 - TRO RATING SYSTEM

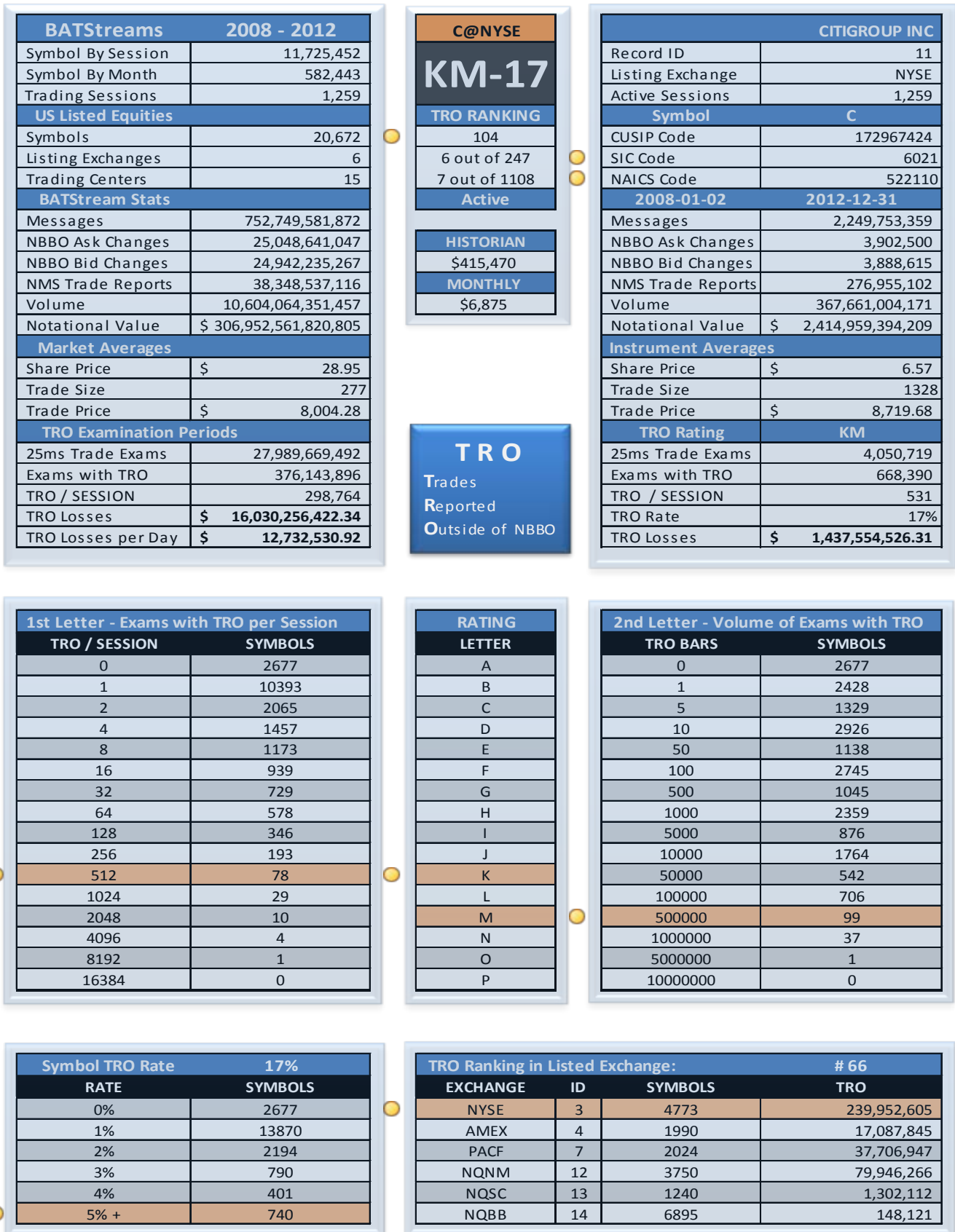


FIGURE 5 - TRO RATING REPORT

TRO Rating Report

CITIGROUP INC	
Record ID	11
Listing Exchange	NYSE
Active Sessions	1,259
Symbol	C
CUSIP Code	172967424
SIC Code	6021
NAICS Code	522110
2008-01-02	2012-12-31
Messages	2,249,753,359
NBBO Ask Changes	3,902,500
NBBO Bid Changes	3,888,615
NMS Trade Reports	276,955,102
Volume	367,661,004,171
Notational Value	\$ 2,414,959,394,209
Instrument Averages	
Share Price	\$ 6.57
Trade Size	1328
Trade Price	\$ 8,719.68
TRO Rating	KM
25ms Trade Exams	4,050,719
Exams with TRO	668,390
TRO / SESSION	531
TRO Rate	17%
TRO Losses	\$ 1,437,554,526.31

National Market System
National Best Bid Offer (NBBO) quotes and NMS Trade Reports.

Equity Symbol Identifier
Street Name, Listing Exchange, Trading Symbol, CUSIP, SIC and NAICS codes.

Trade Examinations
Examined in 25ms intervals identifying exam periods with Trades reporting outside NBBO.

Investor TRO Loss
Trade-Through losses based on SEC estimate of 2.3 cents per share at TRO rate.

TRO RATING
1st Letter - Exams with TRO per Session
2nd Letter - Volume of Exams with TRO
Number : TRO Rate % of Exams with TRO

C@NYSE	
KM-17	
TRO RANKING	
104	
6 out of 247	
7 out of 1108	
Active	
HISTORIAN	
\$415,470	
MONTHLY	
\$6,875	

TRO Ranking
All Symbols
SIC Code
NAICS Class

Market Historian Service
Historic Archive License
Monthly Subscription

TRO Rate

Symbol TRO Rate	17%
RATE	SYMBOLS
0%	2677
1%	13870
2%	2194
3%	790
4%	401
5% +	740

Exchange TRO Ranking

TRO Ranking in Listed Exchange:			# 66
EXCHANGE	ID	SYMBOLS	TRO
NYSE	3	4773	239,952,605
AMEX	4	1990	17,087,845
PACF	7	2024	37,706,947
NQNM	12	3750	79,946,266
NQSC	13	1240	1,302,112
NQBB	14	6895	148,121

FIGURE 6 - TRO RATING REFERENCE

Trade-Through Violations

Trades reporting outside of the *National Best Bid and Offers (NBBO)* as determined by the *National Market System (NMS)*.



Trade-Through - Exempt	Trade-Through - Non Exempt	Trade-Through Violations
(TRADEPRICE<BESTBID or TRADEPRICE>BESTASK) And TRADE CODED EXEMPT	(TRADEPRICE<BESTBID or TRADEPRICE>BESTASK) And TRADE CODED NON-EXEMPT	Trades Reported Outside NBBO Examination Range of preceding One Second (Flickering Quotation)

Trade-Through Violations are alleged to violate § 242.611 Order protection rule of Regulation NMS and Failure to Comply with Requirements for Best Execution FINRA Rule 2010 and Rule 5310.

METHODOLOGY

1. TRADES REPORTED OUTSIDE (TRO) OF THEIR INSTANT NBBO QUOTE (TRADEPRICE<NMSBESTBID OR TRADEPRICE>NMSBESTASK) ARE DIVIDED INTO EXEMPT AND NON-EXEMPT CODED TRADES.
2. NON-EXEMPT TRO TRADES ARE ANALYZED USING AN NBBO EXAMINATION RANGE (LOWEST BEST BID AND HIGHEST BEST ASK) OF A MINIMUM OF 1 SECOND PRECEDING THE TRADE TIME STAMP (IN SECONDS) UP TO THE TRADE MESSAGE SEQUENCE ID.
3. BECAUSE EXCHANGE TRADE TIME IS REPORTED IN SECONDS AND NOT MILLISECONDS THE MINIMUM EXAMINATION PERIOD RANGES FROM 1025 MS TO 1975 MS.
4. TRADES REPORTING OUTSIDE OF THE NBBO EXAMINATION RANGE ARE MARKED AS TRADE THROUGH VIOLATIONS AND FURTHER PROCESSED TO DETERMINE THE SIDE OF THE MARKET THAT WAS BREACHED, INVESTOR LOSS AND THE NBBO QUOTE STATUS AT THE INSTANT OF THE TRADE THROUGH.
5. TRADE THROUGH VIOLATION RECORDS AND REPORTS ARE SUBMITTED WITH THE NBBO EXAMINATION RANGE MESSAGE STREAM AS EVIDENCE.
6. THE NMS TRADE SEQUENCE IDENTIFIER IS PROVIDED FOR BLUE SHEETING RECORDS IN ORDER TO IDENTIFY THE PARTIES INVOLVED IN THE TRADE.

Trade Through Violations														
Symbol: AA - Alcoa														
Period: 2009-2012 CUSIP: 013817101														
Control		NBBO AT TIME OF TRADE MESSAGE RECEIPT				TRADE REPORT				Examination				
VIOLATION ID	TIMESTAMP	BID	ASK	TRADETIME	TRADEPR	TRADES	NMS_TRA	TIME	LOWBES	HIGHBES	SIDE	OFFC	INVESTOR LOSS	
V90102100400000657	2009-01-02 09:30:45.850	\$ 11.51	\$ 11.53	2009-01-02 09:30:45	\$ 11.5500	355300	3	21340	2700	\$ 11.39	\$ 11.53	BUY	\$ (0.02)	\$ (7,106.00)
V901051003930120543	2009-01-05 16:00:32.575	\$ 11.88	\$ 11.89	2009-01-05 16:00:32	\$ 11.8600	68500	3	11685832	3275	\$ 11.88	\$ 11.89	SELL	\$ (0.02)	\$ (1,370.00)
V901051003930120546	2009-01-05 16:00:34.775	\$ 11.88	\$ 11.89	2009-01-05 16:00:34	\$ 11.8600	807000	3	11685850	1950	\$ 11.88	\$ 11.89	SELL	\$ (0.02)	\$ (16,140.00)
V901061003920057675	2009-01-06 13:51:51.800	\$ 12.06	\$ 12.07	2009-01-06 13:51:51	\$ 12.0500	170000	1	7894890	2575	\$ 12.06	\$ 12.07	SELL	\$ (0.01)	\$ (1,700.00)
V901071003990003416	2009-01-07 09:31:05.225	\$ 10.85	\$ 10.86	2009-01-07 09:31:05	\$ 11.0000	12000	1	41450	1375	\$ 10.85	\$ 10.86	BUY	\$ (0.14)	\$ (1,680.00)
V901071003990003509	2009-01-07 09:31:08.750	\$ 10.81	\$ 10.82	2009-01-07 09:31:08	\$ 11.0100	10000	1	43141	1850	\$ 10.81	\$ 10.84	BUY	\$ (0.19)	\$ (1,900.00)
V901071003990004308	2009-01-07 09:31:27.750	\$ 10.99	\$ 11.00	2009-01-07 09:31:27	\$ 10.9100	20000	1	51998	1800	\$ 10.98	\$ 11.00	SELL	\$ (0.08)	\$ (1,600.00)
V901071003990039051	2009-01-07 10:11:55.725	\$ 11.19	\$ 11.20	2009-01-07 10:11:55	\$ 11.3000	120000	1	1713018	2475	\$ 11.19	\$ 11.20	BUY	\$ (0.10)	\$ (12,000.00)
V901071003990052751	2009-01-07 10:46:09.250	\$ 11.17	\$ 11.18	2009-01-07 10:46:09	\$ 11.1000	20000	5	3037453	1325	\$ 11.17	\$ 11.18	SELL	\$ (0.07)	\$ (1,400.00)
V901081003950000403	2009-01-08 09:30:39.875	\$ 10.68	\$ 10.70	2009-01-08 09:30:39	\$ 10.7100	213000	3	26019	2850	\$ 10.53	\$ 10.70	BUY	\$ (0.01)	\$ (2,130.00)
V901121004020010734	2009-01-12 09:44:00.975	\$ 10.03	\$ 10.03	2009-01-12 09:44:00	\$ 10.2500	5000	1	535081	2025	\$ 10.03	\$ 10.03	BUY	\$ (0.22)	\$ (1,100.00)
V901121004020013864	2009-01-12 09:50:39.975	\$ 10.14	\$ 10.15	2009-01-12 09:50:39	\$ 9.9250	11600	1	785230	2050	\$ 10.13	\$ 10.15	SELL	\$ (0.22)	\$ (2,494.00)
V901141003890000292	2009-01-14 09:30:02.325	\$ 9.29	\$ 9.30	2009-01-14 09:30:02	\$ 9.3700	177700	3	40790	1475	\$ 9.21	\$ 9.30	BUY	\$ (0.07)	\$ (12,439.00)
V901141003890119049	2009-01-14 16:00:14.950	\$ 9.00	\$ 9.02	2009-01-14 16:00:14	\$ 9.0300	683500	3	13310399	13025	\$ 9.00	\$ 9.02	BUY	\$ (0.01)	\$ (6,835.00)

FIGURE 7 - COMPREHENSIVE TRADE THROUGH REPORTING

Forensic Trade-Through Evidence

Forensic Evidence is supplied for each Trade-Through including Record Detail, BATStream Data and Ticker Tape view.

Instrument Identifier	SYMBOL	CSCO
	NAME	CISCO SYSTEMS
	CUSIP	17275R102
	SIC	3577
	NAICS	334119
	LISTING EXCHANGE	NASDAQ
Message Control Identifiers	VIOLATION ID	V1311141266390098487
	TIMESTAMP	2013-11-14 09:39:02.400
	SESSION ID	S1311140000055845432
	MESSAGE ID	M1311141266390407735
	QUOTE ID	Q1311141266390098441
	TRADE ID	T1311141266390090166
Trade Thru Investor Loss	EXAM PERIOD	2700 ms
	NBBO BID LOW	\$ 20.90
	NBBO ASK HIGH	\$ 20.91
	VIOLATED PARTY	Sell Side
	LOSS PER SHARE	\$ (0.0200)
	INVESTOR LOSS	\$ (200.0000)
NMS Trade Execution Report	NMS TRADE REPORT	157047
	TRADE TIME	2013-11-14 09:39:02
	TRADE PRICE	\$ 20.8800
	TRADE SIZE	10000
	TRADE EXCHANGE	NSX TRF
	TRADE CODE	Regular
NBBO at Time of Trade Report	BEST BID	\$ 20.90
	BID SIZE	10900
	BID EXCHANGE	Nasdaq Exchange
	BID CODE	Regular
	BEST ASK	\$ 20.91
	ASK SIZE	14100
	ASK EXCHANGE	Nasdaq Exchange
	ASK CODE	Regular

Time Stamped with 25ms Precision in Message Sequence Order.

55,845,432 Session Messages, 90,166 Trade Report and 407,735 Message for CSCO

NMS Trade Identifier is used to Blue Sheet regulatory records. Blue Sheets prior to April 2013 do not have time stamps. Forensic data supplements EBS providing time stamps from message sequence.

FIGURE 8 – TRADE-THROUGH FORENSIC EVIDENCE

Ticker Tape View

A Graphical representation of each NBBO Quote changes and NMS Trade execution report in message sequence order covering the duration of the Trade-Through examination time period.

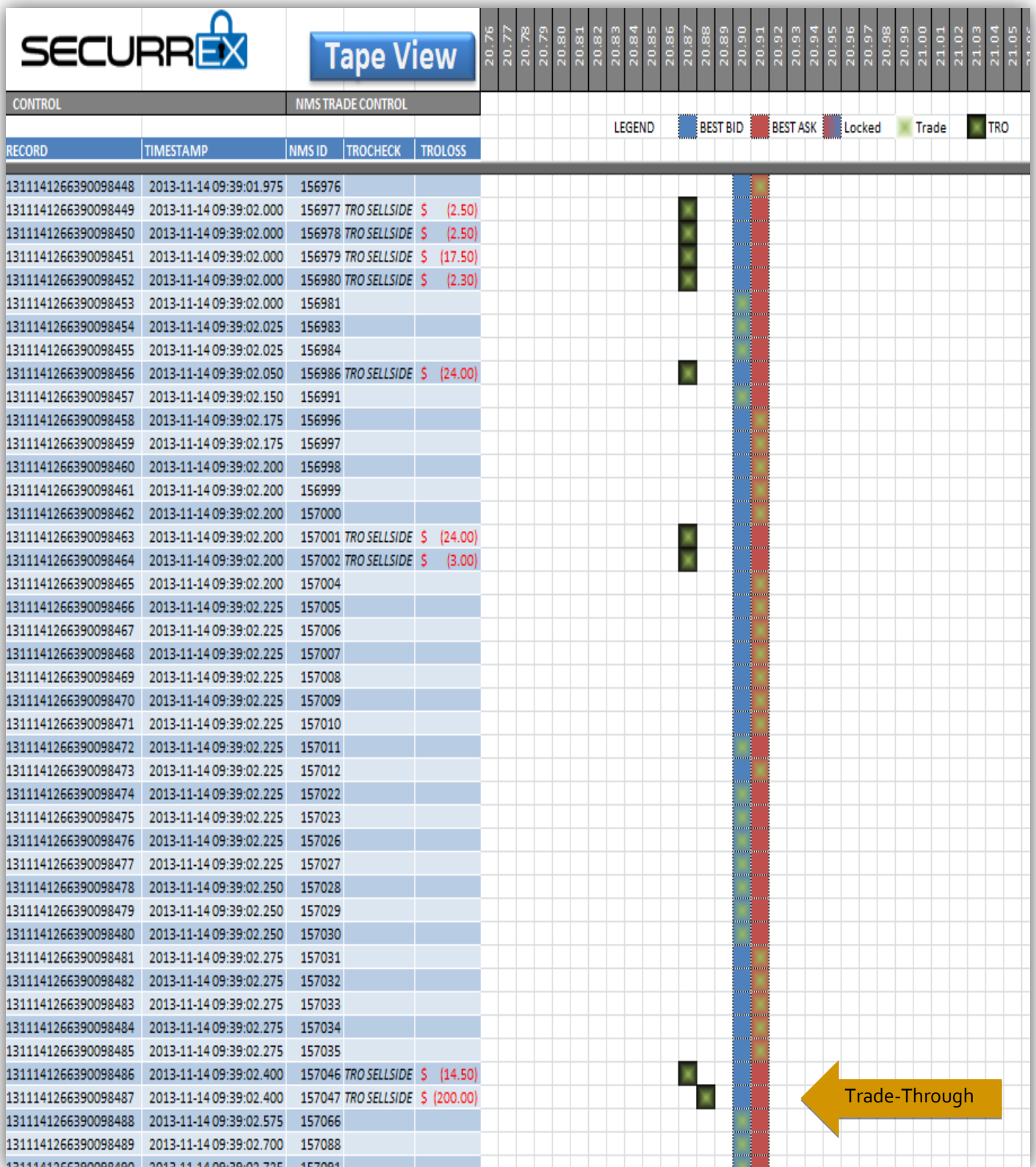


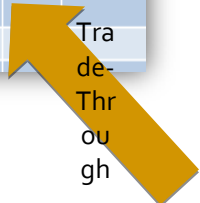
FIGURE 9 - TICKER TAPE VIEW

BAT Stream Data

Forensic evidence of Bid-Ask-Trade market data messages to support each Trade-Through claim.

CONTROL		BID STREAM			ASK STREAM			TRADE STREAM				FINRA			
RECORD	TIMESTAMP	BESTBID	BIDSIZE	BIDEXC	BESTASK	ASKSIZE	ASKEI	TRADETIME	PRICE	SIZE	EXCH	CODE	NMS ID	TROSID	TROLOSS
1311141266390098448	2013-11-14 09:39:01.975	20.90	11100	NQEX	20.91	6500	NQEX	2013-11-14 09:39:01	20.91	100	EDGE	0	156976		
1311141266390098449	2013-11-14 09:39:02.000	20.90	11500	NQEX	20.91	6500	NQEX	2013-11-14 09:39:01	20.875	100	NTRF	0	156977	SELL	\$ (2.50)
1311141266390098450	2013-11-14 09:39:02.000	20.90	11500	NQEX	20.91	6500	NQEX	2013-11-14 09:39:01	20.875	100	NTRF	0	156978	SELL	\$ (2.50)
1311141266390098451	2013-11-14 09:39:02.000	20.90	11500	NQEX	20.91	6500	NQEX	2013-11-14 09:39:01	20.875	700	NTRF	0	156979	SELL	\$ (17.50)
1311141266390098452	2013-11-14 09:39:02.000	20.90	11500	NQEX	20.91	6500	NQEX	2013-11-14 09:39:01	20.877	100	NTRF	0	156980	SELL	\$ (2.30)
1311141266390098453	2013-11-14 09:39:02.000	20.90	11500	NQEX	20.91	6500	NQEX	2013-11-14 09:39:01	20.9099	300	NQNX	0	156981		
1311141266390098454	2013-11-14 09:39:02.025	20.90	11500	NQEX	20.91	6500	NQEX	2013-11-14 09:39:01	20.9	400	NQNX	0	156983		
1311141266390098455	2013-11-14 09:39:02.025	20.90	11500	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.9	100	NQNX	0	156984		
1311141266390098456	2013-11-14 09:39:02.050	20.90	10700	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.87	800	NQNX	0	156986	SELL	\$ (24.00)
1311141266390098457	2013-11-14 09:39:02.150	20.90	10500	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.9075	1250	NQNX	0	156991		
1311141266390098458	2013-11-14 09:39:02.175	20.90	10500	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	100	PACF	0	156996		
1311141266390098459	2013-11-14 09:39:02.175	20.90	10500	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	300	PACF	0	156997		
1311141266390098460	2013-11-14 09:39:02.200	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	200	PACF	0	156998		
1311141266390098461	2013-11-14 09:39:02.200	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	300	PACF	95	156999		
1311141266390098462	2013-11-14 09:39:02.200	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	600	PACF	0	157000		
1311141266390098463	2013-11-14 09:39:02.200	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.87	800	NQNX	0	157001	SELL	\$ (24.00)
1311141266390098464	2013-11-14 09:39:02.200	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.87	100	NQNX	0	157002	SELL	\$ (3.00)
1311141266390098465	2013-11-14 09:39:02.200	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	1000	PACF	0	157004		
1311141266390098466	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	200	BOST	0	157005		
1311141266390098467	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	100	BOST	0	157006		
1311141266390098468	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	400	PACF	0	157007		
1311141266390098469	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	300	PACF	95	157008		
1311141266390098470	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	100	PACF	0	157009		
1311141266390098471	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	300	PACF	0	157010		
1311141266390098472	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.905	100	BATY	0	157011		
1311141266390098473	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.91	200	PACF	0	157012		
1311141266390098474	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.905	100	NQNX	0	157022		
1311141266390098475	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	13500	NQEX	2013-11-14 09:39:02	20.905	100	NQNX	0	157023		
1311141266390098476	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.905	100	NQNX	0	157026		
1311141266390098477	2013-11-14 09:39:02.225	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.905	100	NQNX	0	157027		
1311141266390098478	2013-11-14 09:39:02.250	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.905	100	NQNX	0	157028		
1311141266390098479	2013-11-14 09:39:02.250	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.9	200	BOST	0	157029		
1311141266390098480	2013-11-14 09:39:02.250	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.9	100	NQNX	0	157030		
1311141266390098481	2013-11-14 09:39:02.275	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.91	300	PACF	0	157031		
1311141266390098482	2013-11-14 09:39:02.275	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.91	200	PACF	0	157032		
1311141266390098483	2013-11-14 09:39:02.275	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.91	100	PACF	0	157033		
1311141266390098484	2013-11-14 09:39:02.275	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.91	300	PACF	0	157034		
1311141266390098485	2013-11-14 09:39:02.275	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.91	100	PACF	0	157035		
1311141266390098486	2013-11-14 09:39:02.400	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.871	500	NQNX	0	157046	SELL	\$ (14.50)
1311141266390098487	2013-11-14 09:39:02.400	20.90	10900	NQEX	20.91	14100	NQEX	2013-11-14 09:39:02	20.88	10000	NQNX	0	157047	SELL	\$ (200.00)
1311141266390098488	2013-11-14 09:39:02.575	20.90	10900	NQEX	20.91	15500	NQEX	2013-11-14 09:39:02	20.905	100	NQNX	0	157066		
1311141266390098489	2013-11-14 09:39:02.700	20.90	10900	NQEX	20.91	14500	NQEX	2013-11-14 09:39:02	20.905	100	EDGX	0	157088		

FIGURE 10 – BAT STREAM EVIDENTIARY DATA



Trade-Through

Exchange and Trade Reporting Facilities

ID	SHORT	EXCHANGE	EBS
1	NQEX	Nasdaq Exchange	D
2	NQAD	Nasdaq Alternative Display Facility	D
3	NYSE	New York Stock Exchange	A
4	AMEX	American Stock Exchange	B
5	CBOE	Chicago Board Options Exchange	K
6	ISEX	International Securities Exchange	I
7	PACF	NYSE ARCA (Pacific)	E
8	CINC	National Stock Exchange (Cincinnati)	G
9	PHIL	Philadelphia Stock Exchange	D
10	OPRA	Options Pricing Reporting Authority	Z
11	BOST	Boston Stock/Options Exchange	U
12	NQNM	Nasdaq Global+Select Market (NMS)	D
13	NQSC	Nasdaq Capital Market (SmallCap)	D
14	NQBB	Nasdaq Bulletin Board	D
15	NQPK	Nasdaq OTC	D
16	NOAG	Nasdaq Aggregate Quote	D
17	CHIC	Chicago Stock Exchange	C
18	TSE	Toronto Stock Exchange	O
19	CDNX	Canadian Venture Exchange	Z
20	CME	Chicago Mercantile Exchange	Z
21	NYBT	New York Board of Trade	I
22	NYBA	New York Board of Trade Alternate	I
23	COMX	COMEX (division of NYMEX)	Z
24	CBOT	Chicago Board of Trade	Z
25	NYMX	New York Mercantile Exchange	Z
26	KCBT	Kansas City Board of Trade	Z
27	MGEX	Minneapolis Grain Exchange	Z
28	WCE	Winnipeg Commodity Exchange	I
29	ONEC	OneChicago Exchange	Z
30	DOWJ	Dow Jones Indices	Z
31	NNEX	Nanex	Z
32	SIMX	Singapore Internat Monetary Exchange	Z
33	FTSE	London Stock Exchange	Z

ID	SHORT	EXCHANGE	EBS
34	EURX	Eurex	Z
35	ENXT	EuroNext	Z
36	DTN	Data Transmission Network	Z
37	LMT	London Metals Exchange Matched Trades	Z
38	LME	London Metals Exchange	Z
39	IPEX	Intercontinental Exchange (IPE)	I
40	MX	Montreal Stock Exchange	N
41	WSE	Winnipeg Stock Exchange	I
42	C2	CBOE C2 Option Exchange	K
43	MDAM	Mid-America Commodity Exchange	Z
44	CLRP	NYMEX Clearport	Z
45	BARK	Barclays	Z
46	TEN4	TenFore	Z
47	NOBX	OMXBX	F
48	HOTS	HotSpot Eurex US	Z
49	EUUS	Eurex US	Z
50	EUEU	Eurex EU	Z
51	ENCM	Euronext Commodities	Z
52	ENID	Euronext Index Derivatives	Z
53	ENIR	Euronext Interest Rates	Z
54	CFE	CBOE Futures Exchange	Z
55	PBOT	Philadelphia Board of Trade	D
56	HWTB	Hannover WTB Exchange	Z
57	NQNX	NSX Trade Reporting Facility	D
58	BTRF	BSE Trade Reporting Facility	Z
59	NTRF	NYSE Trade Reporting Facility	A
60	BATS	BATS Trading	H
61	NYLF	NYSE LIFFE metals contracts	A
62	PINK	Pink Sheets	S
63	BATY	BATS Trading	Y
64	EDGE	Direct Edge	P
65	EDGX	Direct Edge	V
66	RUSL	Russell Indexes	I

US Equities Exchanges

Exchange	API Specs	Market Structure	Fees	Rules	Rule Filings
NASDAQ	NASDAQ Specs	NASDAQ Order Types	NASDAQ Fees	NASDAQ Rules	NASDAQ Rule Filings
ARCA	ARCA Specs	ARCA Order Types	ARCA Fees	ARCA Rules	ARCA Rule Filings
NYSE	NYSE Specs	NYSE Order Types	NYSE Fees	NYSE Rules	NYSE Rule Filings
BATS (BZX)	BZX Specs	BATS User Manual	BZX Fees	BZX Rules	BZX Rule Filings
Direct Edge (EDGX)	EDGX Specs	EDGX Order Types	EDGX Fees	EDGX Rules	EDGX Rule Filings
Direct Edge (EDGA)	EDGA Specs	EDGA Order Types	EDGA Fees	EDGA Rules	EDGA Rule Filings
BATS (BYX)	BYX Specs	BATS User Manual	BYX Fees	BYX Rules	BYX Rule Filings
NASDAQ BX	NASDAQ BX Specs	NASDAQ BX Order Types	NASDAQ BX Fees	NASDAQ BX Rules	NASDAQ BX Rule Filings
NASDAQ PSX	NASDAQ PSX Specs	NASDAQ PSX Order Types	NASDAQ PSX Fees	NASDAQ PSX Rules	NASDAQ PSX Rule Filings
NSX	NSX Specs	NSX FAQ	NSX Fees	NSX Rules	NSX Rule Filings
NYSE AMEX	NYSE AMEX Specs	NYSE AMEX Fact Sheet	NYSE AMEX Fees	NYSE AMEX Rules	NYSE AMEX Rule Filings
CHX	CHX Specs	CHX Order Types	CHX Fees	CHX Rules	CHX Rule Filings
CBSX	CBSX Specs (login required)	CBSX Order Types	CBSX Fees	CBSX Rules	CBSX Rule Filings

US Options Exchanges

Exchange	API Specs	Market Structure	Fees	Rules	Rule Filings
PHLX	PHLX Specs	PHLX Contact Info	PHLX Pricing	PHLX Rules	PHLX Rule Filings
CBOE	CBOE Specs (login required)	CBOE Contact Form	CBOE Pricing	CBOE Rules	CBOE Rule Filings
ISE	ISE Specs (login required)	ISE Contact Form	ISE Pricing	ISE Rules	ISE Rule Filings
ARCA	ARCA Specs	ARCA Order Types	ARCA Pricing	ARCA Rules	ARCA Rule Filings
AMEX	AMEX Specs	AMEX Guide	AMEX Pricing	AMEX Rules	AMEX Rule Filings
NASDAQ	NASDAQ Specs	NASDAQ Order Types	NASDAQ Pricing	NASDAQ Rules	NASDAQ Rule Filings
BOX	BOX Specs (email for access)	BOX PIP	BOX Pricing	BOX Rules	BOX Rule Filings
BATS	BATS Specs	BATS Market Guide	BATS Pricing	BATS Rules	BATS Rule Filings
C2	C2 Specs (login required)	C2 Contact Form	C2 Pricing	C2 Rules	C2 Rule Filings