

## GLOSSARY OF SELECTED TRADING AND MARKET STRUCTURE TERMS

**Algorithm** refers to a mathematical formula that is used in a computer program to execute trades automatically based on a particular strategy. High frequency traders use algorithms, or “algos,” to execute their trading strategies.

**Ask** refers to the selling, or offer, price for a security – the price at which a seller is offering to sell a security.

**ATS** refers to an “alternative trading system” that acts as a venue for trading securities and is subject to regulation under Regulation NMS. Alternative trading systems are typically electronic trading systems involving multiple parties (although manual interdealer broker systems are also ATSS). ATSS are required to register with the SEC as broker-dealers and as alternative trading systems, and are subject to requirements for quoting, fair access, systems reliability and information confidentiality at differing thresholds of market share. They also cannot call themselves exchanges.

**Best Execution** refers to the regulatory obligation of a broker-dealer to achieve the best execution for its customer, taking into account price and other facts and circumstances (such as speed of execution).

**Bid** refers to the buying price for a security -- the price at which a buyer is willing to bid to buy a security.

**Co-location** refers to the practice of exchanges, ATSS or third parties providing space for the servers of market participants in the same data center housing the matching engines of the trading center. Co-location is favored by high frequency traders because it affords lower latency in the transmission of the order from the trader to the market center.

**Consolidated Tape** refers to the consolidated system that collects and distributes reports of trades that are executed on registered exchanges, ATSS, and over-the-counter.

**CSA** refers to a commission sharing arrangement in which fund managers unbundle commissions by instructing an executing broker to pay portions of its commissions to research providers.

**Dark Pools** refers narrowly to ATSS that do not display bids and offers in the public quotation stream. More broadly, Dark Pools refers to sources of liquidity not reflected in public quotes, such as dark orders on exchanges and internalization of orders by a broker-dealer.

**Decimalization** refers to the transition from quoting stock prices in 1/16ths or 1/8ths of a dollar to quoting in pennies, or decimals. The transition to decimal pricing occurred in 2000.

**Direct Market Access** refers to the practice of a broker-dealer providing its client with the ability to route orders directly to a market using the broker-dealer’s market participant identifier, or MPID. Direct Market Access sometimes refers only to orders that are routed through a broker-dealer’s systems for credit and regulatory checks before routing to the market; in this context, orders that are not routed through the broker-dealer’s systems are referred to as sponsored access or naked access.

**ECN** refers to an “electronic communications network,” which is an ATS used in part by market makers that displays orders within its system. ECNs do not include dark crossing systems or over-the-counter market makers trading as principal with customers.

**Exchange** refers to a national securities exchange registered with the SEC. Examples include the New York Stock Exchange and Nasdaq. Exchanges are subject to greater regulatory oversight than ATSS. Originally, all equity securities were traded on an exchange or in the over the counter market.

**Flash Orders** refers to a practice whereby a trading center will for a few milliseconds show to subscribers customer buy orders priced at the national best offer, or customer sell orders priced at the national best bid. Subscribers with fast electronic connections can then execute the orders at the flash price. If the order is not immediately executed, it is withdrawn without exposure to the entire marketplace, or is routed to other exchanges. Flash orders are only tangentially related to high frequency trading.

**High Frequency Trading** refers to automated trading by complex algorithms that enter and often cancel orders frequently, often thousands of times a minute. Many firms that engage in high frequency trading seek to end the day with little or no exposure to the market. Various strategies are used, including statistical arbitrage, market making and event-based strategies. In general, the term is vague and probably has different meanings to different people.

**Implementation Shortfall** refers to the difference between the price of a security that triggered the decision to buy or sell and the final net execution price (*i.e.*, including commissions, taxes, etc.) for a trade. This is sometimes referred to as the “slippage.”

**Indication of Interest** refers to an order that requires further agreement before it can be executed. There is significant debate as to the point at which an Indication of Interest, or IOI, should be treated as “actionable,” *i.e.* as a firm order, thereby requiring a facts and circumstances analysis in many cases.

**Limit Order** refers to an order to execute a transaction at a specified price. Marketable limit orders are buy limit orders at or above the national best offer to sell, and sell limit orders at or below the national best bid to buy. Non-marketable limit orders are buy limit orders below the national best offer, and sell limit orders above the national best bid.

**Locked and Crossed Market** refers to a national best bid to buy that is at the same price as the national best offer to sell (Locked Market) or at a higher price than the national best offer to sell (Crossed Market). Exchanges are required by Regulation NMS to have rules to deter and correct locked and crossed markets. Locked and crossed markets occur when a quote is temporarily inaccessible, or when the quotes have access fees that discourage hitting the quote.

**Market Maker** refers to a party that provides liquidity to the market by buying at the bid and selling at the offer. Market makers that are registered with trading centers operate with certain obligations to the market. Some high frequency traders, although not registered as market makers, use a market maker trading strategy, profiting from the spread between the bid and the offer.

**Naked Access** refers to direct market access where the non-broker-dealer connects directly to the market without first having its orders pass through the broker-dealer’s system, including its risk management controls.

**Naked Short Sale** refers to a short sale where the seller does not borrow or otherwise have available to deliver the shares that are sold short.

**Order Handling Rules** refers to the set of rules that require broker-dealers to display quotes and certain limit orders received from customers, and that resulted in ECNs displaying their quotes publicly.

**Offer** refers to the offer to sell, or the price at which a seller is willing to sell a security.

**Quote** refers to a price disseminated to others at which a party is willing to buy or sell a security. Under Regulation NMS most quotes are required to be displayed publicly as a part of the consolidated quote stream.

**Regulation ATS** refers to the regulatory scheme for “alternative trading systems” adopted in 1998. Regulation ATS requires alternative trading systems to comply with some of the core regulatory obligations applicable to registered exchanges, with heightened obligations that are triggered by market share thresholds.

**Regulation NMS** refers to the new regulatory scheme for equity trading markets adopted in 2005. The major requirement of the rule is the prohibition on trade-throughs.

**Short Sale** refers to selling a security that is not owned by the seller. The seller hopes to profit from the decline in the market value of the security by purchasing the security at a lower price than it was sold and using the purchased security to return to the original lender of the security.

**Sponsored Access** usually is synonymous with **Naked Access**.

**Spread** refers to the difference in price between a bid to buy and an offer to sell.

**Trade-through** refers to transacting an order on one market center when a more advantageous price is available at another market center, i.e. “trading-through” the order. The order protection rule of Regulation NMS requires a trading center to establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent trade-throughs, subject to numerous exceptions.

**Upstairs Market** refers to the market for trades executed internally by a broker-dealer or over-the-counter with another broker-dealer rather than on an exchange. Dark Pools have been analogized to the “upstairs market” for block trading that was prominent in the era of stock exchange dominance.

**VWAP** refers to the volume weighted average price for some specified period of time. Investors sometimes seek VWAP executions to assure they are not receiving below-average execution of their larger orders.