Interactive Brokers

Interactive Brokers Order Routing and Payment for Order Flow Disclosure

1. IB's Order Routing System: IB does not sell its order flow to another broker to handle and route. Instead, IB has built a real-time, high-speed Best Execution Order Routing System (SmartRoutingSM), which is designed to optimize execution price, speed and total cost of execution for stocks and options. IB constantly changes and enhances the SmartRouting system to adapt to changes in markets, new exchanges, new trading rules, etc. IB's SmartRouting system continually scans competing market centers and automatically seeks to route orders to the best market, taking into account factors such as quote size, quote price, exchange or ATS transaction fees or rebates and the availability of price improvement (execution at a better price than the National Best Bid or Offer (NBBO). The IB SmartRouting system continually reevaluates market conditions and prices for pending IB customer orders and dynamically re-routes orders as necessary.

For some products, IB customers may directly route their orders to a particular market of their choice, although IB recommends that our customers use the IB SmartRouting system.

IB also operates an Alternative Trading System (ATS) in accordance with SEC Regulation ATS, on which it executes IB customer trades against each other or against one or more professional liquidity providers who send orders into the IB ATS. Order executions on IB's ATS are faster, eliminate exchange fees and may offer price improvement compared to the NBBO. Statistical information regarding the quality of executions for orders effected through IB's ATS (e.g., average execution speed, percentage of orders receiving price improvement, etc.) are available on the IB website at www.interactivebrokers.com or may be downloaded at: http://www.interactivebrokers.com/en/general/about/IBKR_ATS_605_Reports.php

- 2. Compliance with Regulation NMS: For U.S. stocks, IB's SmartRouting system is designed to comply with Reg NMS and with our duty as a broker-dealer to provide best execution for customer orders. IB's SmartRouting system connects to and receives market data feeds directly from most or all exchanges and public market centers. The IB SmartRouting system also has access to ATS's. Therefore IB can attempt to route an order directly to the most favorable overall market(s) taking into account relevant conditions. If an order is not executed immediately, IB's system then monitors the open order and in most cases will cancel and reroute it if market conditions or prices change and another market center becomes more favorable for the order. If an order is too large to be executed at the best price at a single exchange or market center, IB's SmartRouting system generally will split the order and send it to multiple destinations to attempt to get the fastest fill at the most favorable price.
- 3. Intermarket Sweep Orders for U.S. National Market System Stocks: Because IB's system monitors the available markets and is designed to send orders to the markets posting the best price, orders routed to exchanges by the IB SmartRouting system generally will be marked as "Intermarket Sweep Order" (ISO), meaning that an exchange that receives such an order will be able to execute the order in reliance that the IB system did not identify any better prices for the order, or that other orders sent at or around the same time by IB have already taken out any better quotes on other exchanges or market centers. IB has certain processes in place to monitor its connections to various exchanges and market centers, the quality of its market data feeds and the quality of its order executions. If an exchange system or the IB system is experiencing technical problems, or if IB is

not connected to the market that is posting the best price, IB may route an order to an exchange without marking the order as ISO. This will allow the receiving market to re-route the order to a market offering a better price, if necessary.

- 4. Orders Sent Near the Opening of Trading: Please note that markets can be especially volatile near the opening of a trading session, with prices and available volume often changing rapidly and with data feeds from various markets potentially being slow or temporarily unavailable. IB cannot guarantee that orders sent near the opening of trading necessarily will receive the best posted price. You may want to consider the use of limit orders at the open, although market orders should be used if you want a higher certainty of getting a fill.
- 5. Order Conversion and Designation: Interactive Brokers may convert certain order types or apply conditions to certain IB customer orders in order to facilitate an execution. For example, IB may simulate certain order types using order designations. Simulated order types may be used in cases where an exchange does not offer an order type or in cases where IB has decided not to offer a certain order type offered "natively" by an exchange. In addition, orders may be sent Immediate or Cancel, Fill-Or-Kill, All-Or-None, etc. in order to facilitate an immediate automatic execution, consistent with the objectives of the customer order. To protect customer orders from significant and rapidly changing prices, IB may simulate market orders on exchanges by establishing an execution cap at a percentage beyond the inside bid/ask. While this cap is set at a level intended to balance the objectives of execution certainty and minimized price risk, there exists a remote possibility that an execution will be delayed or may not take place. In addition, IB is required by exchanges and regulators to maintain "filters" in its systems that prevent executions at prices that might be deemed to be disruptive to an orderly market (or exchanges may have such filters in their systems). These filters may cause an otherwise marketable order not to be executed or to be delayed in execution, even if the customer might want the order to be executed at a certain price immediately. In accordance with our regulatory obligations as a broker, IB may also cap the size of your order to a quantity in line with the normal volume in the product.
- 6. Important Characteristics and Risks of Using Stop Orders: A Stop Order i.e., a Stop (Market) Order is an instruction to buy or sell at the market price once your trigger ("stop") price is reached. Please note that a Stop Order is not guaranteed a specific execution price and may execute significantly away from its stop price, especially in volatile and/or illiquid markets. Stop Orders may be triggered by a sharp move in price that might be temporary. If your Stop Order is triggered under these circumstances, you may buy or sell at an undesirable price. Sell Stop Orders may make price declines worse during times of extreme volatility. If triggered during a sharp price decline, a Sell Stop Order also is more likely to result in an execution well below the stop price. Placing a limit price on a Stop Order may help manage some of these risks. A Stop Order with a limit price a Stop (Limit) Order becomes a limit order when the stock reaches the stop price. By using a Stop (Limit) Order instead of a regular Stop Order, you will receive more certainty regarding the execution price, but there is the possibility that your order will not be executed at all if your limit price is not available in the market when the order is triggered.
- 7. Important Characteristics and Risks of Using Market Orders: Please note that a Market Order is an instruction to execute your order at any price available in the market. A Market Order is not guaranteed a specific execution price and may execute at an undesirable price. If you would like greater control over the execution prices you receive, please submit your order using a Limit Order, which is an instruction to execute your order at or better than the specified limit price.
- 8. Payment for Orders, Dark Pools, Liquidity Provider and Affiliate Relationships: Interactive Brokers does not sell its order flow to another broker to handle and route. Through its SmartRouting system, IB evaluates each individual order and determines the best execution venue(s), from the perspective of the customer, where that order may be executed.
 - A. Dark Pool and ATS Executions for Stock and ETF Orders: IB maintains connections to "dark pool" ATS's (including the IB ATS) that execute a portion of IB customer stock orders. IB customers benefit from IB's access to dark pools. Dark pools provide a source of substantial additional liquidity. Dark pools charge no execution fees or lower execution

fees than exchanges. Dark pools also provide fast executions and the possibility of executions at prices more favorable than the prevailing NBBO.

IB receives rebate payments for routing certain IB customer orders to dark pools. IB shares the benefit with IB customers as follows: As of April 2016, for customers using the Fixed commission schedule, customers pay no venue transaction fee and IB reduces the IB commission to \$.004 per share from \$.005 per share (a 20% commission savings). For IB customers using the Tiered commission schedule, customers pay no venue transaction fee and IB passes roughly 50% of the average rebates received from all dark pools/ATS's and liquidity providers to customers whose orders are routed to any such venue.

B. Liquidity Provider Relationships in the IB ATS: IB has entered arrangements with certain institutions under which such institutions may send orders to the IB ATS at or near the NBBO. These orders are held within the IB system and are not displayed in the national market. If an IB customer order could be immediately executed against such an order held in the IB system (at the NBBO or at a better price than the NBBO), the orders may be crossed and the execution reported to the National Market System. This arrangement provides extra potential liquidity (size) for IB customer orders and leads to faster executions (since the orders do not have to be routed out to an exchange), as well as providing the possibility of price improvement (since the orders may be executed at a better price than available on an exchange).

IB may receive payment in the form of commissions or commission equivalents from the liquidity providers for these executions in the IB ATS. IB shares the benefit with IB customers in the same manner as described above (Fixed commission schedule customers receive a commission reduction to \$.004 per share from \$.005 per share and Tiered commission schedule customers receive roughly 50% of any average payments received from all dark pools/ATS's and liquidity providers to customers whose orders are routed to the IB ATS).

- C. Routing of Certain Non-Marketable Stock and ETF Orders: When IB receives a nonmarketable customer order, IB may route some portion of the order for display on a public market and may retain the remaining portion of the order on IB's ATS, where it may be matched against a conditional order of a liquidity provider that has committed to trade against the remaining portion of the customer order in the event that the portion of the customer order that was routed to a public market is executed. When a liquidity provider has been committed to trade against a portion of a customer order as described above, such liquidity provider cannot cancel its order (or the portion of its order that has been committed to trade against the customer order if the publicly-displayed portion of the customer order is executed). If the liquidity provider attempts to cancel some or all of the committed size, it will receive a message rejecting the cancellation (i.e., the liquidity provider will be told that there is an IB customer order that the liquidity provider is committed to trade against). The liquidity provider is not told the size or price of the customer order. This arrangement provides potential additional liquidity for IB customer orders. In addition, IB will share with the customer a portion of the commission or commission equivalent IB receives from the liquidity provider for these executions, reducing the total cost of execution to the customer.
- D. Tiered Commission Structure: Under IB's Tiered commission model, IB passes to Tiered commission customers some or all of certain rebate payments IB receives for executing stock orders, although the Tiered commission model is not intended to be a direct pass-through of exchange and third-party fees and rebates. For example, IB may receive enhanced rebate payments for exceeding volume thresholds on particular markets, but typically will not directly pass these enhancements to customers. Likewise IB does not pass to customers all of the rebates IB may receive for orders executed in dark pools, or orders in pink or OTCBB stocks.

E. Options: Interactive Brokers does not sell its option orders to another broker to handle and route. Rather, IB employs its SmartRouting system to try to achieve the best execution for customer option orders. The SmartRouting system attempts to achieve an execution price at NBBO or better than the NBBO by utilizing relationships with affiliates and other liquidity providers, who may provide price improvement through the various auction and price improvement mechanisms offered under U.S. option exchange rules.

Interactive Brokers' affiliate Timber Hill LLC (Timber Hill) is a significant market maker on U.S. options exchanges. If Timber Hill is offering the best price in the national market or is willing to provide an execution at a better price for an IB customer than the NBBO, IB generally will route the order to an options exchange where Timber Hill is more likely to trade with the order. This will benefit the customer -- who receives an execution at NBBO or better - and will also benefit Timber Hill, which increases its market share in options contracts, from which it attempts to earn a market making spread.

In cases where the customer is eligible for a rebate for the order under IB's Tiered commission schedule, if routing to an exchange where Timber Hill is active would reduce the rebate to be paid to the customer (or increase a fee paid by the customer) compared to a different exchange, IB generally will adjust the rebate paid to the customer (or the fee paid by the customer) to match the higher rebate (or lower fee), although IB does not guarantee this. As a specialist on various options exchanges, Timber Hill may be responsible for allocating payments for orders that are generated in its assigned options classes, depending on the design of the applicable exchange's SEC-approved payment plan. Consistent with these plans, Timber Hill pays such funds to Interactive Brokers.

IB also maintains relationships with other liquidity providers who may provide executions at the NBBO or a better price than the NBBO for IB customer option orders. These relationships benefit IB customers, who may receive price improvement for their options orders. IB may receive payment in the form of commissions or other payments from the liquidity providers for these executions.

Several options exchanges impose "maker-taker" fees and rebates, in which exchange members are charged for orders that take liquidity (i.e., marketable orders that trade against a posted quote or limit order) and receive a rebate for orders that add liquidity to the exchange (i.e., non-marketable limit orders that are posted and then trade against incoming marketable orders), or vice versa. The charges imposed or rebates offered by these exchanges affect the total cost of execution, and IB's SmartRouting System takes this into account in determining where to route option orders - trying to minimize the costs that customers incur. In addition, if multiple exchanges are quoting at the NBBO for an option order and IB has discretion as to where to send the order or a portion of it, IB generally will "break the tie" by sending the order to an exchange where it will receive the most payment for the order.

Under certain circumstances, IB may route a marketable option order to an exchange that is not currently posting the NBBO but which may be willing to execute the order at the NBBO. Generally, IB will do this in order to avoid or reduce the fee for executing the order, compared to routing to a different exchange. IB generally will share the economic benefit of routing orders in this manner with customers in the form of reduced execution fees, although IB does not guarantee that it will share such benefit. In addition, in the limited circumstances where IB routes orders in this manner, IB generally guarantees a fill at the NBBO at the time the order was routed.

Under IB's Tiered commission model, IB passes to Tiered commission customers some or all of certain rebate payments IB receives for executing option orders, although the Tiered commission model is not intended to be a direct pass-through of exchange and third-party fees and rebates. For example, IB may receive enhanced rebate payments for exceeding volume thresholds on particular markets, but typically will not directly pass these enhancements to customers. Likewise IB does not pass to customers all of the rebates IB

may receive for liquidity taking orders, complex orders or orders executed in price improvement auctions. Traditional exchange payment for order flow programs result in payments to specialists or primary market makers, some portion of which may be paid on to IB. IB does not pass these payments directly to customers.

- Affiliate Investments in Exchanges: An affiliate or affiliates of Interactive Brokers LLC own(s)
 minority interests in OneChicago (security futures exchange), ISE Stock Exchange, CBOE Stock
 Exchange and a substantial, minority investment in the Boston Options Exchange Group LLC,
 which operates the BOX Options Exchange.
- 10. Quarterly Order Routing Reports and Other Order Routing Information Available upon Request: U.S. Securities and Exchange Commission rules require all brokerage firms to make publicly available quarterly reports describing their order routing practices. IB's quarterly order routing reports are available on the IB website at www.interactivebrokers.com, or you can contact IB Customer Service.

In addition to the basic quarterly reports, under Rule 606 of SEC Regulation NMS, a broker-dealer is required upon a customer request to provide information regarding the identity of the market center to which the customer's orders were routed in the six months prior to the request; whether the order was a directed or non-directed order, and the time of the transaction, if any, that resulted from such order. Please contact the IB Customer Service Desk in writing through the information on the IB website at interactivebrokers.com/help if you wish to receive the foregoing routing information for any order(s) within the past six months. Please type "Request for Order Routing Information" in the subject line of your request and please include your name, user id and account number as well as the date of the order, the security, the quantity, and any other information necessary to identify the order (e.g., the time of day if there were several similar orders that day.)

As long as consistent with applicable securities laws and regulations, we may share anonymized account information or anonymized delayed order information with third parties (and/or share such information among our affiliates) for the purpose of analysis, research, market data compilation, product creation, establishing order routing and execution relationships, or for any other lawful purpose.