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Nicole Puccio
Branch Chief
Securities and Exchange Commission
100 F Street, NE, Washington, DC 20549–2521

Re: Interactive Brokers Group Regulatory Proposals and Comments on the Commission's Strategic Plan for Fiscal Years 2018-2022 (SEC Rel. No. 34-83463)

Dear Ms. Puccio:

This letter is to comment on the Commission's draft Strategic Plan for Fiscal Years 2018-2022 and to set forth several proposals to improve regulation of US capital markets and broker-dealers. We thank the Commission for providing us the opportunity to comment.

About Interactive Brokers Group:

Interactive Brokers Group is a global online brokerage firm headquartered in the US that provides trade execution and custody of securities and other investment products on over 120 markets in over 25 countries. We service both retail and high net worth individual investors, hedge funds, professional traders, financial advisors and hundreds of introducing brokers who execute and clear their clients' trades on our platform. Interactive Brokers executes nearly 800,000 trades per day and our clients' equity exceeds $134 billion. Interactive Brokers is publicly traded on Nasdaq under the symbol "IBKR."

General Comment on the Commission's Draft Strategic Plan:

US financial services and financial technology companies represent an enormous opportunity to grow U.S. exports, facilitate foreign capital inflows into our markets, and create higher income jobs. The Commission and the self-regulatory organizations (SROs) it oversees play a very important role in providing strong and credible oversight of US capital markets so that US and foreign investors feel safe in investing in companies and securities trading on US markets. Preventing fraud and intentional misconduct and protecting and properly accounting for assets held by US financial institutions are crucial to maintaining investor confidence.

We could not agree more with the Commission's primary goal as stated in the draft Strategic Plan, which is to "focus on the long-term interests of Main Street investors" and to "pursue enforcement and examination initiatives focused on identifying and addressing misconduct that impacts retail investors."

To that end, we would suggest that the Commission follow a two-pronged approach: emphasizing safety and fair dealing on the one hand and promoting efficient, low cost and affordable access to securities and financial markets on the other.

The Commission is rightly focused on preventing investors from losing money through fraud or misconduct by intermediaries or other market participants. But the Commission should also focus on the money lost by investors due to out-of-control compliance costs, frivolous claims, and the defense of repetitive regulatory inquiries across the industry on minor administrative matters (as these costs that have been imposed on the industry in recent years ultimately are borne by investors).

It does not appear that financial regulators in recent years have considered these latter costs at all in determining how to regulate markets and intermediaries. Over the past 10 years or so we have seen an increasing proliferation of vague and unclear rules and standards on various regulatory topics with only a tenuous relationship to the core goal of customer and market protection. This has been combined with a "broken windows" policing strategy by financial regulators of bringing cases on many minor or technical administrative violations that do not involve misconduct or any adverse impact on retail investors.

This aggressive enforcement of unclear administrative and technical rules with the seeming primary intention of collecting fines has caused investors to lose some of the cost efficiency they should be capturing through advances in technology. In addition, the recent regulatory approach has discouraged industry participants from further expansion into new geographic areas, exchanges and products, hampering what should be a strong US export: our safe and innovative financial markets.

<u>Specific Proposals:</u>

1. Regulate Based on Clear, Objective and Transparent Rules.

Commission and SRO rules should be clear, objective and transparent so that they can be understood easily by compliance staff and, to the extent possible, automated into computer logic so that maximum compliance and investor cost savings can be achieved. Complex and unclear rules, obscure guidance and lore known only to select insiders, and vague and discretionary standards harm the industry, increase costs and reduce ultimate compliance.

It has been common in recent years for Commission regulatory and enforcement staff essentially to create new rules and standards based on after-the-fact interpretations or enforcement actions. These new standards are often without support in the language of the actual rules passed by the Commission and are imposed without following required notice and comment rulemaking procedures (and often seemingly without involvement of the Commission itself). For example, Exchange Act Rule 15c3-5 (the Market Access rule) requires firms to have procedures "reasonably designed to . . . [p]revent the entry of erroneous orders, by rejecting orders that exceed appropriate price or size parameters . . ." Although the rule merely requires procedures to be "reasonable," SRO enforcement and audit staff have used the Market Access rule to micromanage through fines and enforcement actions exactly how broker-dealer routing systems should work in various complex and specific circumstances (none of which are addressed in the rule or in any written guidance). This and many other "reasonableness" rules thus very quickly become strict liability rules in which the broker-dealer's behavior is measured against standards that are developed by SRO or Commission enforcement staff on the fly months or years after the fact.

The Commission should ensure that rules and standards are clear, announced in advance, and enacted in a manner consistent with the Administrative Procedure Act. To the extent that specific situations arise under particular rules and need to be clarified or modified by Commission or SRO staff, this is understandable but this should be done on a cooperative and prospective basis through clear written guidance, not through *ex post facto* fines and enforcement actions.

2. Emphasize Strict Enforcement of Rules Protecting Clients and Their Assets but Work Cooperatively with Firms to Address Harmless and Minor Administrative Violations.

The Commission and SROs like FINRA should continue to focus aggressively on detecting and penalizing fraud and intentional misconduct. Likewise, the Commission and FINRA should continue to devote significant resources to enforcing capital requirements, segregation and client asset protection rules. It is critical that retail investors be protected from fraud and that their assets be strictly protected and accounted for (this includes the many foreign investors who view the US as a safe haven and who invest in US businesses and help grow our economy).

On the other hand, aggressive and entrepreneurial policing of minor and technical administrative rule violations should be de-emphasized in favor of having Commission and SRO examination staff work cooperatively with industry participants to fix lesser administrative problems (or rule interpretation problems) on a prospective basis. Backward-looking, formal enforcement investigations and fines in matters that do not involve intentional misconduct or harm to investors are extraordinarily time consuming and costly both for the regulator and the firms, and detract from more important work that could be done by everyone involved. Moreover, these inquiries demoralize honest and hardworking compliance staff, and ultimately reduce confidence in our markets because these repetitive minor cases make everyone look like crooks. While it fills the coffers of the SROs, this approach of aggressively investigating and penalizing inadvertent or technical missteps provides little benefit to retail investors yet raises their cost to invest, because financial firms must pass along compliance costs to their clients as much as they can.

Instead, regulators should partner with broker-dealers and exchanges to build and modernize the industry so that investors can benefit from the efficiency, costs savings and investor protection available through technology and automation.

3. Implement Rules Centrally at the Market or Clearing House Level Using Automation as Much as Possible.

For the sake of economic efficiency, rules should be enforced centrally and programmatically as much as possible, higher up in the processing chain. For example, exchanges should program their central matching engines to reject orders that would cause erroneous, out-of-price-range trades, instead of the exchanges and the Commission passing vague rules requiring member firms each to have to design and program their own order filters based on unclear or nonexistent standards (which, as noted, only get clarified by repetitive enforcement cases against multiple member firms after the fact).

Likewise, naked short selling abuses and failures to deliver on short sales should be penalized at DTC with gradually increasing daily fines for each security and broker, instead of the current, incredibly complex body of computer code and compliance procedures and staff resources currently required of each broker to comply with Reg SHO. Reg SHO is over 10 years old, with hundreds of pages of FAQs, interpretative guidance, no action letters and the like, and it is still being clarified, revised and patched (over previous patches) by Commission staff. Reg. SHO alone has spawned an entire industry of lawyers, consultants, vendors, enforcement and compliance staff. Investors are paying for this.

4. Anti-Money Laundering Rules Should Be Clarified and Enforced to Prevent Criminality and Terrorist Financing but Not to Discourage Foreign Investment in US Markets.

Although the Department of the Treasury largely controls the direction of AML regulation, enforcement staff at the SROs and the Commission increasingly use very broad AML rules to launch investigations and enforcement cases against broker dealers – largely based on after-the-fact reviews of months or years of emails and transactions and then second guessing whether a broker dealer should have filed Suspicious Activity Reports regarding certain transactions or clients. Likewise, SRO examiners and senior management have taken the position, both privately during audits and publicly in various speeches, that foreign clients and cross border transactions are, in broad categories, inherently suspicious. This has caused US brokers severely to curtail their offerings to many classes of foreign clients because the regulatory risk is too great – even if the clear majority of these clients would be proper and lawful investors on US markets. Overzealous enforcement of AML rules and simplistic, overbroad interpretations of what constitutes "suspicious" transactions and "red flags" discourages US brokerage firms from expanding their services abroad and forces them to push business into their foreign affiliates (which hurts US jobs and tax revenue and discourages capital flows into US markets).

There is a happy medium that should be reached between preventing criminality and terrorist financing while at the same time not unduly hampering foreign client access to US markets and financial services. The current approach of essentially forcing private financial institutions to become de facto police agencies is misguided. Instead, all transactions should be reported on a real-time basis (with beneficial owner identifiers) to a centralized registry operated by the federal government and actual law enforcement agencies should do the bulk of reviewing the transactions for indicia of criminality.

This approach is consistent with the third goal in the draft Strategic Plan: for the Commission to "elevate the SEC's performance by enhancing analytical capabilities" and to "enhance [the Commission's] analytics of market and industry data to prevent, detect and prosecute improper behavior."

5. The Commission Should Address Payment for Order Flow and Internalization by Requiring Exchanges and Brokers to Publish Simple, Standardized Measures of Total Execution Costs.

Another way of reducing investors' expenses would be by promoting competition among firms through transparency -- requiring accurate disclosure of fees and charges and execution cost.

Best execution and payment for order flow are significant topics of importance to the Main Street investors who the Commission rightly focuses on protecting in the draft Strategic Plan. The Commission has struggled for decades with how to treat payment for order flow and internalization schemes in the context of the best execution of retail customer orders. Class action plaintiff's lawyers and state regulators recently have become active in this area.

The Commission's focus on transparency is the correct approach, but the problem is that the various disclosures currently required by market centers and brokers are too complex and disjointed to be helpful to the retail investing public.

Exchanges and market centers are required to report complex and elaborate quality of execution statistics, and brokers are required to report where they route orders and what economic arrangements affect their order routing decisions, but clients cannot as a practical matter piece this all together to get a clear understanding of execution quality or cost.

Likewise, when brokers advertise "free commissions," clients cannot in any easy way evaluate the real cost of these free commissions in reduced execution quality for their orders (brokers who advertise free commissions are getting revenue from somewhere, after all).

We propose that every exchange, ATS/dark pool and internalizer calculate and publish to the public the all-in cost of all trades executed relative to the daily Volume-Weighted Average Price by trade money. This is a simple calculation and a clear simple measure of total execution cost that would automatically account for the total fees and rebates charged/paid by the market, bid-offer spread, market impact and any other costs incurred. In addition to publicly posting the all-in cost of all trades executed on the market, the market center could privately make the same data available to each broker trading on the market (for just that broker's trades).

Brokers, in turn, would perform a similar calculation across all venues they trade on and for all orders for all customers and would publish that number (brokers would not be required to calculate a separate all-in cost for each customer because the sample size of trades compared to VWAP likely would be too small to make the calculation meaningful). Again, this total cost of execution would by definition include commissions, regulatory and exchange fees, bid-offer spread and market impact and would allow customers for the first time to see the actual transaction costs incurred on average to trade through a particular broker.[1]

Since the mid-1980s the concept of the daily Volume-Weighted Average Price has become ubiquitous and VWAP is now a standard measuring tool for knowledgeable clients and in the academic community for evaluating execution quality. The virtue of the simple calculation that we describe above is that it accounts for all the factors that affect execution cost - including the quality of the execution price, commissions, fees, rebates, etc. This should simplify the debate and eliminate the war of words, accusations and innuendos about various payment schemes, dark pools and broker and marketplace models. Simple data is best, and the simple statistics described above will allow customers to understand exactly how much they are paying in commissions and other execution costs for the trade execution services their brokers are providing. Customers can then weigh these execution costs against the value of any other services their brokers are providing. Further information on this proposal is attached at Appendix I.

6. The Commission Should Balance the Potential Harms and Benefits to Retail Investors from High Frequency Trading by Requiring a 10-200 ms. Random Holding Period for Liquidity-Removing Orders on US Equity and Option Exchanges.

The recurring controversies in recent years regarding High Frequency Trading ("HFT") and market structure have generated mistrust in the markets and potentially reduced participation by retail investors. Whether HFTs abuse markets or strengthen them is an impossible question to answer because HFTs do both. A solution is required that both retains HFT participation to the extent that it is productive (*i.e.,* to the extent it adds liquidity and facilitates price discovery) but eliminates abusive HFT trading. To make markets more stable and liquid, the Commission should encourage participation by investors and liquidity providers and discourage abusive ultra-short term strategies that are based solely on the ability to get an order to a market a few milliseconds faster than others.

The Commission should consider requiring U.S. equity and option trading venues to hold any order that would remove liquidity for a random period lasting between 10 and 200 milliseconds before releasing it to the matching engine. Slowing down liquidity-removing orders for a minimum of 10 milliseconds would reduce the occurrence of price spikes, "mini-crashes" and runaway markets, because liquidity-providing systems would have more opportunity to intercede. More importantly, a minimum 10 millisecond delay would encourage the providers of liquidity to do so because they would know that they will have time to adjust their quotes following sudden events. Accordingly, they could provide liquidity in much greater size with less chance of getting scalped by HFTs. With a random delay of 10 to 200 milliseconds, ultra-fast HFTs could not with any certainty rely on being able to hit or lift displayed bids or offers faster than somewhat slower participants, and therefore HFTs would have much less incentive to engage in strategies that have no investment purpose except to jump ahead of others by a few milliseconds.

On the other hand, where HFTs are acting as liquidity providers, the Commission and other market observers have recognized the benefit that they provide in normal markets, but have seen

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[1] Note: These statistics would reveal the cost levied by each execution venue and broker but of course would not reveal anything to the public about how much particular customers paid or what any customer's positions were.

that during periods of market turmoil, HFT liquidity often disappears. A delay in processing liquidity-taking orders from 10 to 200 milliseconds would protect HFTs (like other liquidity providers) from being exposed via their resting quotes during sudden volatility, by giving them a reasonable time properly to adjust those quotes before being hit by incoming orders. This would encourage them to quote in greater size, it would reduce price spikes and mini-crashes, and it would restore investor confidence.

The short, random delay in processing liquidity-taking orders would also reduce the costly technology arms race, in which hundreds of millions of dollars are spent to gain a few milliseconds of speed. Those technology costs are borne by investors in the form of wider spreads, execution price slippage and higher commissions.

Further detail on this proposal is attached as Appendix II.

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We thank the Commission again for the opportunity to comment on the draft Strategic Plan and we would be happy to provide further information if that would be helpful.

Sincerely,

Thomas Peterffy
Chairman, Interactive Brokers Group

David M. Battan
Executive Vice President, Legal
Interactive Brokers Group

APPENDIX I

Proposal to Require Brokers, Exchanges and Alternative Trading Systems to Calculate Simple Cost of Execution Statistics

We propose that the Commission consider requiring all broker-dealers, exchanges and ATS's to calculate simple monthly statistics comparing all-in execution cost to the daily Volume-Weighted Average Price ("VWAP") value for all executions for each month.

Market Centers: In addition to publicly posting the all-in cost of all trades executed on the market (based on the calculation described below), the market center would privately make the same data available to each broker trading on the market (for just that broker's trades).

Brokers: Brokers in turn would perform a similar calculation across all venues they trade on and for all orders for all customers and would publish that number on their websites each month.

The simple steps described below provide for the calculation of a *single number* that represents the all-in execution costs paid to execute trades on a market center or through a broker on average over a month (or any significant time period):

1. Trade Money: On each trading day, for all purchases and sales of Reg. NMS stocks[2], calculate the total shares bought, the total shares sold, the total money paid for all purchases, and the total money received for all sales. The Trade Money is the amount paid or received, including the execution price plus all commissions and fees[3] paid by the participants/customers (and rebates paid back to the participants/customers).

2. VWAP Money: Obtain the daily Volume-Weighted Average Price ("VWAP") for all the stocks purchased or sold on the day. Use this to calculate the total VWAP Money for purchases and for sales.[4] This is the money that would have been paid or received if all trades had been executed at the VWAP, and the customers/participants had paid no commissions or fees, and received no rebates.

3. Execution Cost: Take the total VWAP Money for sales minus the total Trade Money for sales, and the total Trade Money for purchases minus the total VWAP Money for

[2] For data calculated by brokers, the data would exclude all customers who execute 5,000 or more trades per day on average. Customers who execute more than 5,000 trades per day are likely to be HFTs or firms acting as market makers and taking the other side of customer trades. The profits of these types of high volume traders (if included in the broker's statistics) would likely counterbalance the execution costs borne by other customers of the firm – *i.e.,* masking the costs paid by the firm's non-HFT customers.

[3] Fees would include any per-transaction fees charged by the exchanges or broker or fees passed on to the customer by the broker (*e.g.,* regulatory fees, exchange fees, clearing fees, etc.). Likewise, any rebate credited to the customer would be included. Calculations at the market center level would include all fees and rebates paid to/from the market center.

[4] *I.e.,* separately for purchases and sales, calculate the total, over all stocks, of the product of the total shares purchased or sold in each stock and the stock's VWAP price.

purchases. The sum of these two numbers will show the total all-in execution cost incurred in all the stocks purchased or sold on that day. Note that this is not done on a stock-by-stock basis but rather for all Reg. NMS stock purchases and sales on the day.

4. Percentage Execution Cost: Calculate the monthly Trade Money and Execution Cost by summing the daily values. Compute the percentage of monthly Execution Cost compared to the monthly Trade Money.[5] This single number is a measure of the total all-in execution cost paid over the month.

5. Lastly, break down the Percentage Execution Cost into two categories: i) Commissions and Fees; and ii) All Other.[6] This will enable customers to see how much they are paying in *direct* commissions and fees versus how much they are paying in *indirect* execution costs (price improvement or dis-improvement, spread, etc.).

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[5] This is done by taking the sum of the daily execution costs and dividing by the sum of the daily sale and purchase Trade Money.

[6] Commissions and Fees is defined as the total over the month of all commissions plus all fees minus all rebates, all divided by the total Trade Money. All Other is defined as the Percentage Execution Cost minus the Commissions and Fees.

APPENDIX II

Proposal to Address High Frequency Trading

The Commission should consider mandating that U.S. equity and option trading venues hold any order that would remove liquidity for a random period lasting between 10 and 200 milliseconds before releasing it to the matching engine.

Why a Minimum 10 Millisecond Delay in Processing Liquidity-Removing Orders?

Slowing down liquidity-removing orders for a minimum of 10 milliseconds would reduce the occurrence of price spikes, "mini-crashes" and runaway markets, because liquidity-providing systems would have more opportunity to intercede. More importantly, a minimum 10 millisecond delay would encourage the providers of liquidity to do so because they would know that they will have time to adjust their quotes following sudden events. Accordingly, they could provide liquidity in much greater size with less chance of getting scalped by HFTs.

Why Randomize the Delay?

If the delay in processing liquidity-taking orders was not randomized (*e.g.,* if it were fixed at 80 milliseconds or some other duration), the first person sending out an order would trade first, no matter how long the delay is. Thus, HFTs would still have all the advantages that they currently have compared to other liquidity takers.

On the other hand, with a *random* delay of 10 to 200 milliseconds, ultra-fast HFTs could not with any certainty rely on being able to hit or lift displayed bids or offers faster than somewhat slower participants, and therefore HFTs would have much less incentive to engage in strategies that have no investment purpose except to jump ahead of others by a few milliseconds.

Why Should the Random Delay Range from 10 to 200 Milliseconds?

200 milliseconds are one fifth of a second -- half the blink of an eye -- and about the longest time still not noticeable by humans. Thus, liquidity-removing orders could be delayed randomly for between 10 and 200 milliseconds without an evident slowing of the markets. And since the delay would be at most 200 milliseconds, brokerage firms and liquidity providers would still have to maintain reasonably fast and technologically up-to-date systems: *i.e.*, the markets would retain the speed and efficiency that they have gained from electronic trading (and the protection from manual handling errors and fraud) and yet the millisecond-level gaming of the system would cease. [7]

If HFT "A" is faster than Mutual Fund "B" by X milliseconds, it is possible to calculate how likely it is for A to trade before B under the existing system and under the above proposal:

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[7] The rule implementing this proposal would also need to include a requirement that exchanges and broker-dealers implement surveillance programs to detect and prevent customers from sending in multiple, duplicative liquidity-removing orders for the sole purpose of trying to get an advantageous position in the randomized execution queue (e.g., an HFT wishing to trade 1000 shares sends in 500 orders of 100 shares each so that a few of the orders end up at the front of the random queue. After execution of 10 orders for 100 shares each, the HFT cancels the remaining 490).

Milliseconds by Which HFT A's Systems are Faster than Mutual Fund B's Systems (or B's Broker's Systems)	**Percentage of Time HFT A Will Trade Ahead of Mutual Fund B Under Current Market Structure**	**Percentage of Time HFT A Will Trade Ahead of Mutual Fund B if Both Orders Are Randomly Delayed from 10 ms. to 200 ms.**
1 ms. faster	100%	50.5%
2 ms. faster	100%	51%
3 ms. faster	100%	51.6%
4 ms. faster	100%	52.1%
5 ms. faster	100%	52.6%
10 ms. faster	100%	55.1%
50 ms. faster	100%	72.9
190 ms. faster	100%	100%

As the table above illustrates, with a random delay in processing liquidity-taking orders there will still be a slight advantage to having faster systems but it will be greatly reduced and HFT front-running strategies will be seriously impaired. Spending enormous sums of money to gain a 2 or 3 millisecond advantage would be eliminated. For example, even if an HFT's systems were 10 milliseconds faster than a mutual fund trying to do the same trade, the HFT would only trade ahead of the mutual fund around 55% of the time (rather than 100% of the time as in the current market structure). Under the proposal set forth herein, brokers for retail and institutional customers will simply have to make sure that their systems are within 10 or 20 milliseconds as fast as HFT systems. This is already the case and it is reasonable to expect this going forward (the fastest systems can go no lower than 0).