



INVESTMENT  
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April 21, 2010

**VIA ELECTRONIC MAIL**

Ms. Elizabeth M. Murphy  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549-1090

**Re: Concept Release on Equity Market Structure (File No. S7-02-10)**

Dear Ms. Murphy,

Investment Technology Group, Inc. (“ITG” or the “Firm”) appreciates the opportunity to comment on the issues raised in the concept release on equity market structure recently published by the Securities and Exchange Commission (“SEC” or the “Commission”).<sup>1</sup> The Concept Release requests comment on a wide variety of issues, including the performance of the equity markets, especially with regard to the needs of long-term investors, and the impact of high frequency trading strategies and non-displayed liquidity on the equity markets.<sup>2</sup>

ITG is an independent agency brokerage and financial technology firm that partners with asset managers globally to improve performance throughout the investment process. ITG operates an alternative trading system (“ATS”) called POSIT<sup>®</sup> that conducts matches of unpriced orders from institutional investors and broker-dealers on a confidential (*i.e.*, non-displayed) basis.<sup>3</sup> We also offer portfolio construction and optimization services, pre-trade analytics,

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<sup>1</sup> See Securities Exchange Act Release No. 34-61358 (Jan. 14, 2010), 75 F.R. 3594 (Jan. 21, 2010) (“Concept Release”).

<sup>2</sup> The Concept Release is part of the SEC’s comprehensive review of national market structure, which includes proposed rules regarding dark pools of liquidity, flash orders, and risk management controls of broker-dealers with market access.

<sup>3</sup> POSIT Match matches orders on a periodic basis, and POSIT NOW matches orders on a continuous basis.

execution management and connectivity, and post-trade processing services to clients. As an agency broker, technology provider, and operator of an ATS, ITG has a diverse background from which to comment on the Concept Release.

As an initial matter, ITG commends the Commission for its continued focus on ensuring the integrity of the equities markets. As discussed below, we believe that there is little cause for concern, because the U.S. equity markets are healthier now than ever before. However, there have been significant changes in our markets in recent years and we believe the time is right for the current review.

Our comments focus largely on the market for non-displayed liquidity in equity securities and, specifically, the role of ATSS in meeting the needs of investors. As described in more detail below, it is critical that market participants have choices about where to execute orders, and that such choices include liquidity sources specifically tailored to their needs. We strongly support a regulatory structure in which ATS operators have a reasonable amount of discretion to determine who should have access to their systems in order to meet the needs of their primary clientele. In a related manner, ITG cautions against any regulatory measures designed to restrict non-displayed liquidity pools without strong evidence that trading in non-displayed markets is harming the displayed markets. Furthermore, we view with skepticism and concern regulation – such as the “trade at” concept discussed in the Concept Release – that would significantly dictate the manner in which firms must trade. Finally, we generally support continuation of rules that preclude sub-penny quotations (while not prohibiting sub-penny trading).

#### I. Current State of the U.S. Equity Markets

As noted, we believe that the U.S. equity markets are strong and require few, if any, new regulatory initiatives. In the last seven years, bid-ask spreads have narrowed and liquidity has increased in the equity markets.<sup>4</sup> Trading volume has increased from nearly three billion shares per day in 2003 to nearly ten billion shares per day in 2009.<sup>5</sup> In addition, trading costs are lower<sup>6</sup> and execution speeds have increased.<sup>7</sup> In fact, institutional trading costs in the United States are

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<sup>4</sup> See Angel, James J., Lawrence E. Harris, and Chester S. Spratt, *Equity Trading in the 21<sup>st</sup> Century* (Feb. 23, 2010), available at <http://www.knight.com/newsRoom/pdfs/EquityTradinginthe21stCentury.pdf>.

<sup>5</sup> *Id.*

<sup>6</sup> Trading costs in the United States fell steadily until the financial crisis in 2008, and are again declining. See ITG Global Trading Cost Review Q4 2009 at 1 (Mar. 15, 2010), available at [http://www.itg.com/news\\_events/papers/ITGGlobalTradingCostReview\\_2009Q4.pdf](http://www.itg.com/news_events/papers/ITGGlobalTradingCostReview_2009Q4.pdf).

<sup>7</sup> See Angel, James J., Lawrence E. Harris, and Chester S. Spratt, *Equity Trading in the 21<sup>st</sup> Century* (Feb. 23, 2010), available at <http://www.knight.com/newsRoom/pdfs/EquityTradinginthe21stCentury.pdf>.

among the lowest in the world.<sup>8</sup> It is particularly telling that during the fall of 2008 – one of the most volatile periods in recent memory – the U.S. equity markets performed well.<sup>9</sup>

## II. Fair Access Requirement

Pursuant to Rule 301(b)(5) of Regulation ATS, an ATS meeting certain thresholds is required to (i) establish written standards for access to trading on its system, and (ii) not unreasonably prohibit or limit any person in respect to access to services offered by the ATS by applying the standards in an unfair or discriminatory manner.<sup>10</sup> This requirement is generally referred to as the fair access requirement.

### A. The Five Percent Threshold

The fair access requirement applies only when an ATS is responsible for five percent or more of the average daily trading volume (“ADTV”) in an NMS stock during at least four of the preceding six calendar months (the “Five Percent Threshold”).<sup>11</sup> Among other things, the Concept Release asks whether the Commission should be concerned that ATSs are not required to offer fair access until the Five Percent Threshold is met, whereas national securities exchanges are required to offer broad access to all registered broker-dealers. The Concept Release also asks whether the Five Percent Threshold should be reduced.

ITG strongly supports the continued inclusion of a volume threshold in the fair access requirement for ATSs, and believes that the current Five Percent Threshold is appropriate. The Five Percent Threshold strikes an appropriate balance between making significant sources of liquidity available to a broad set of market participants and allowing ATSs without significant order flow in an NMS stock more flexibility to consider their particular clientele when making business decisions about access. As the SEC has acknowledged, new, sophisticated trading strategies have proliferated in recent years.<sup>12</sup> Many clients care deeply about the type of investors they may trade with, as the strategies of the counterparties may have an effect on the

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<sup>8</sup> See ITG Global Trading Cost Review Q4 2009 at 10 (Mar. 15, 2010), available at [http://www.itg.com/news\\_events/papers/ITGGlobalTradingCostReview\\_2009Q4.pdf](http://www.itg.com/news_events/papers/ITGGlobalTradingCostReview_2009Q4.pdf).

<sup>9</sup> The SEC has acknowledged that the U.S. equity markets performed well in the autumn of 2008. See Concept Release, 75 F.R. at 3611; see also James A. Brigagliano, Speech at Trader Forum 2009 Fall Workshop (Oct. 8, 2009), available at <http://www.sec.gov/news/speech/2009/spch100809jab.htm> (“the structures of the U.S.-listed securities markets held together and performed well when the chips were down ... the markets for U.S.-listed securities have remained open and transparent ... buyers and sellers could see current prices and expect to execute their trades promptly at the prices they saw on their screens”).

<sup>10</sup> 17 C.F.R. 240.301(b)(5). In addition, Rule 301(b)(5) requires an ATS to make and keep records of all grants, denials, and limitations of access and to report that information to the Commission on Form ATS-R. *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> The SEC notes in the Concept Release that “[o]ne of the most significant market structure developments in recent years is high frequency trading.” 75 F.R. at 3606. Some commentators argue that the proliferation of new, sophisticated trading strategies is driven by technological advances. See Emrich, Simon, Using Smarter Algorithms vs. Smarter Use of Algorithms, Institutional Investor Journals (Spring 2010) (noting increased computing power, decreased latency, and broader data availability).

client's ability to successfully achieve its trading objectives. We believe that eliminating the volume threshold for fair access would materially impact the business models of many ATSs, thereby significantly diminishing the ability of their institutional clients to determine the best way to effect their trading strategies.

To the extent the Commission considers any modification of the fair access requirement under Regulation ATS, we suggest that it modify the threshold so that fair access is triggered not on a stock-by-stock basis, but when an ATS becomes responsible for five percent or more of the ADTV of all NMS stocks. Such an approach would be easier to track and implement for ATSs than the current stock-by-stock approach.

#### B. Fair Access Standards

As noted above, once the fair access requirement is triggered, an ATS must establish fair and reasonable written standards for granting access to trading on its system. Historically, the Commission has viewed objective standards, such as minimum capital or credit requirements, as fair and reasonable.<sup>13</sup> The SEC also has recognized the ability of ATS operators to provide institutional subscribers with the ability to indicate that they do not want to execute against broker-dealer subscribers, so long as this option is based on objective and fairly applied standards.<sup>14</sup> At the time Regulation ATS was adopted, the SEC stated that a denial of access might be unreasonable if it were based solely on the trading strategy of a potential participant.<sup>15</sup>

ITG believes that the Commission should revisit the fair access standards applicable to ATSs that trigger the Five Percent Threshold. Although the propriety of conditioning access based on the trading strategy of a market participant was questioned in 1998, there are strong arguments for granting ATS operators greater discretion over access to their systems today. Many new, sophisticated trading strategies have been introduced in the intervening thirteen years. These strategies are not limited to broker-dealers; today, broker-dealers, hedge funds, and other proprietary traders all may engage in a variety of similar trading strategies. As a result, the ability of an ATS operator to address the concerns of its primary client base by permitting them to elect not to interact with registered broker-dealers is not as effective as it was in the past.<sup>16</sup>

The SEC itself has recognized the issues that may arise in connection with the use of certain trading strategies, and indeed has sought comment on whether additional regulation is needed in some instances. For example, the Concept Release asks whether certain high frequency trading strategies such as order anticipation and/or momentum ignition strategies

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<sup>13</sup> See Regulation ATS Adopting Release, Securities Exchange Act Rel. No. 34-40760 (Dec. 8, 1998).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> For example, in 2005 Liquidnet received an exemption from the fair access requirement on the basis that it needed to deny access to certain subscribers or potential subscribers whose trading strategies, in its view, could cause institutional customers to abandon the system. See Order Granting Exemption to Liquidnet, Inc. from Certain Provisions of Regulation ATS, Securities Exchange Act Rel. No. 34-52514 (Sept. 25, 2005).

significantly detract from market quality and, if so, whether there are regulatory tools that would address any related concerns.<sup>17</sup> Without advocating whether or how, as a general matter, the Commission should impose specific regulations on particular trading strategies, we do believe that ATS subscribers concerned about the impact of particular trading strategies on their portfolio executions should have alternatives about where and with whom to trade. Many ATS buy-side clients are wary of other potential ATS subscribers that may engage in strategies designed to identify their trading interest and to trade against such interest to their disadvantage.<sup>18</sup> Therefore, we believe it is necessary and appropriate for the Commission to expand its interpretation of what may constitute a fair and reasonable standard for fair access to allow ATS operators to restrict access to their systems on the basis of activity that is detrimental to the interests of other system subscribers.

### C. Fair Access Exclusion

Regardless of any change the Commission may determine to make to the fair access threshold, we believe it is important that the SEC preserve the exclusion from fair access under Rule 301(b)(5)(iii) of Regulation ATS. This exclusion for “passive pricing” ATSS applies to systems that match customer orders that are not displayed to any person other than an ATS employee, and that execute such orders at a price disseminated by an effective transaction reporting plan or derived from such plan. The Commission has recognized that fair access to “passive pricing” system is much less important than fair access to systems in which price discovery occurs, even if the “passive pricing” system has significant trading volume.<sup>19</sup> We believe the current exclusion operates well and encourage the Commission to maintain it in any amendments it might make to the fair access requirement.

In the event the Commission does not expand the interpretation of what may constitute a fair and reasonable standard for fair access, as described in Section II.B. above, the need to preserve the “passive pricing” exclusion of Regulation ATS becomes even more pronounced. As noted, it is imperative that ATS subscribers have choices about where and with whom to execute trades, and the exclusion allows a system that meets specific guidelines to serve as an additional liquidity source in a manner that addresses the concerns of its primary client base.

### III. Non-Displayed Liquidity

The Commission also requested comment on the effect of non-displayed liquidity (*i.e.*, non-displayed ATS volume and internalization) on order execution quality and public price discovery. As an initial matter, we reiterate our earlier comments regarding non-displayed

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<sup>17</sup> See Concept Release, 75 F.R. 3609-10.

<sup>18</sup> See ITG, Understanding and Avoiding Adverse Selection in Dark Pools (Nov. 2009), available at [http://www.itg.com/news\\_events/papers/AdverseSelectionDarkPools\\_113009F.pdf](http://www.itg.com/news_events/papers/AdverseSelectionDarkPools_113009F.pdf); see also Order Granting Exemption to Liquidnet, Inc. from Certain Provisions of Regulation ATS, Securities Exchange Act Rel. No. 34-52514 (Sept. 25, 2005) (noting that ATS subscribers need to have confidence that their trading interest in an ATS will not be misused or abused by other participants).

<sup>19</sup> See Regulation ATS Adopting Release, Securities Exchange Act Rel. No. 34-40760 (Dec. 8, 1998).

liquidity. As described more fully in ITG's letter dated February 22, 2010, the Firm supports the Commission's proposals to enhance transparency by requiring ATs that selectively display actionable trading interest to disseminate that interest to the public, and to promote fair access to this type of trading interest. Our prior comment letter does, however, recommend certain changes to improve the operation of the proposed rules and address certain ambiguities, and we reaffirm those suggestions here.<sup>20</sup>

With respect to the Concept Release's questions about non-displayed liquidity, as noted at the outset of this comment letter, the U.S. equity markets are strong. According to researchers, the availability of multiple trading venues, including exchanges, ECNs, and sources of non-displayed liquidity, has had no negative impact on the markets.<sup>21</sup> In fact, research shows that both long-term and short-term investors have benefitted from the recent innovations in trading systems.<sup>22</sup> We are aware of no empirical evidence supporting the proposition that non-displayed liquidity has adversely impacted public quotes.

The conclusion that there has been no market harm, despite the recent increase in ATS activity, is not surprising when you consider the underlying data. The total equity order flow executed in non-displayed markets (versus the percentage executed in quoting markets) has remained relatively constant.<sup>23</sup> It is only the dispersion of non-displayed liquidity that has changed in recent years. Increases in the percentage of non-displayed order flow executed through ATs have been offset by a decrease in the percentage of non-displayed order flow executed via internalization.<sup>24</sup>

Given the lack of evidence of any negative impact on displayed markets from non-displayed liquidity, we have serious questions about the necessity and/or propriety of regulatory limitations on non-displayed markets. To avoid disrupting legitimate trading strategies designed

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<sup>20</sup> See Letter from P. Mats Goebels, ITG, to Elizabeth M. Murphy, SEC (Feb. 22, 2010), available at <http://www.itg.com/wp-content/uploads/2009/12/ITG-SEC-Letter-02.23.10.pdf>.

<sup>21</sup> O'Hara, Maureen and Mao Ye, *Is Market Fragmentation Harming Market Quality?* (Mar. 2009), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1356839](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1356839).

<sup>22</sup> Angel, James J., Lawrence E. Harris, and Chester S. Spratt, *Equity Trading in the 21<sup>st</sup> Century* (Feb. 23, 2010), available at <http://www.knight.com/newsRoom/pdfs/EquityTradinginthe21stCentury.pdf>.

<sup>23</sup> See Concept Release, 75 F.R. at 3613. In 2008, SEC Staff estimated that, since 2004, non-displayed liquidity had made up approximately 20% of total equity order flow. See Erik Sirri, Keynote Speech at SIFMA 2008 Dark Pools Symposium (Feb. 1, 2008), available at <http://www.sec.gov/news/speech/2008/spch020108ers.htm>. As of September 2009, the SEC estimates non-displayed liquidity at approximately 25% of total equity order flow. See Concept Release, 75 F.R. at 3597-98.

<sup>24</sup> See Erik Sirri, Keynote Speech at SIFMA 2008 Dark Pools Symposium (Feb. 1, 2008), available at <http://www.sec.gov/news/speech/2008/spch020108ers.htm> ("The bottom line is that the volume percentage of dark pools of liquidity operated by dark ATs and broker-dealer internalizers has remained [the same] ... What does seem clear is that dark ATs are increasing their share of trading volume, which necessarily means that the share of trading volume of broker-dealer internalizers is declining.").

to promote best execution,<sup>25</sup> we urge the SEC to refrain from taking any action that would reduce the availability of non-displayed liquidity through ATs unless and until there is evidence regarding harm to the public markets.<sup>26</sup>

#### IV. “Trade At” Rule

As noted above, we believe that the quality of the U.S. equity markets is high and that such markets have been unharmed by the increase in trading volume through ATs. Although order flow is more dispersed among trading centers displaying trading interest at the national best bid or national best offer, in the aggregate, there is a fair amount of size in most securities at the inside market (on average, thousands of shares at the aggregate bid and offer as compared to the average execution size in the low hundreds of shares), and technology is readily available to aggregate such liquidity. In addition, there often is additional non-displayed size at the inside market, and broker-dealers (including retail broker-dealers) have technology permitting them to reach such liquidity. Accordingly, we strongly believe that a so-called “trade at” rule is unnecessary, and would simply be a solution in search of a problem. Moreover, even if empirical data indicated that non-displayed liquidity adversely impacts public price discovery, we do not believe that a “trade at” rule would be advisable.

The “trade at” rule described in the Concept Release would prohibit any trading center from executing a trade at the national best bid and offer (“NBBO”) unless the trading center was displaying that price at the time it received the incoming contra-side order. A trading center not displaying the NBBO at the time it received an incoming contra-side order could either (a) execute the order with “significant” price improvement, or (b) route intermarket sweep orders to the full displayed size of NBBO quotations and then execute the balance of the order at the NBBO.

Innovation is a fundamental strength of the U.S. equity markets. Competition among ITG and other market participants to understand the needs of their clients and to develop new and better trading systems and strategies to best serve those needs has been a primary driver in the success of our markets. We are concerned that a “trade at” model is fundamentally at odds with the concept of multiple competing market centers that was mandated by Congress in the 1975 Act Amendments.<sup>27</sup> In fact, as conceived, the “trade at” rule would essentially dictate the

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<sup>25</sup> The SEC has acknowledged that non-displayed liquidity facilitates trading of large orders with minimized transaction costs. *See* Concept Release, 75 F.R. at 3599; *see also* Securities Exchange Act Rel. No. 60997 (Nov. 13, 2009) (“market participants that need to trade in large sizes, such as institutional investors, always have sought ways to minimize their transaction costs by completing their trades without prematurely revealing the full extent of their trading interest to the broader market”).

<sup>26</sup> We acknowledge that there may come a time when circumstances are clear that the Commission should take further action to ensure that non-displayed liquidity pools continue to be consistent with the underlying goals of the national market system – for example, if adopted, the Commission’s proposal to identify ATs in trade reports or the newly proposed system for large trader reporting might yield additional useful information about such trading venues – but ITG does not believe that information regarding the current status of the markets suggests the need for any action at this time.

<sup>27</sup> *See* Concept Release, 75 F.R. 3596 (“Congress ... mandate[d] a national market system composed of multiple competing markets that are linked through technology.”).

manner in which market centers must trade and thereby would chill the very innovation that has led to the strength of our equity markets. Furthermore, the rule would eliminate the discretion normally exercised by broker-dealers as part of their best execution obligations.

In addition to our philosophical objections to a “trade at” rule, we believe that the construction of such a rule would be prohibitively complicated. For example, how much price improvement should be enough to permit market participants not quoting at the NBBO at the time of order receipt to nonetheless execute an order? The Concept Release suggests that price improvement in the amount of the minimum increment should suffice. But, as demonstrated by the success of POSIT and similar systems, it is clear that even midpoint pricing in a minimum increment environment is significant to market participants. What additional system requirements would be needed in order for firms to demonstrate that they were quoting at the NBBO at the time of executing an order?

Finally, we are concerned about the potential cost implications of a “trade at” rule for investors. A “trade at” rule could result in market participants paying a higher all-in price for a transaction than intended. For example, if an order gets routed to another market as a result of the “trade at” rule, the transaction could involve access fees imposed by the away market.

In lieu of a “trade at” rule, ITG prefers the current trade-through approach of Rule 611 of Regulation NMS. Rule 611 balances the importance of encouraging public limit orders, maintaining broker-dealer discretion in meeting the obligation of best execution when handling customer orders, and preserving the incentive for market participants to develop new trading strategies and systems to meet the needs of their customers.

#### V. Sub-penny Issues

Pursuant to Rule 612 of Regulation NMS, exchanges, associations, ATSS and broker-dealers are precluded from displaying, ranking or accepting a bid, offer or order in an NMS stock in increments of less than a penny if the bid, offer or order price is equal to or greater than \$1.00 per share. In other words, market participants may not quote in increments less than a penny unless the stock is a low-priced stock. Notwithstanding these limitations on sub-penny quoting, broker-dealers are permitted to execute trades in sub-pennies.

ITG believes that Rule 612 generally works well in its current form, and we oppose moving to a system in which prices for all stocks can be quoted in sub-pennies. The current rule balances the need for flexibility in quoting with practical adverse consequences that might accompany sub-penny quoting, including increased message traffic; the significant cost to broker-dealers of storing, distributing, and integrating market data and the resulting costs for all market participants; and the difficulty of maintaining the utility of price based regulations (*e.g.*, short sale price test).

We understand that various exchanges have advocated expanding the ability of market participants to quote in sub-pennies.<sup>28</sup> As the Commission is aware, the issue of sub-penny quoting involves competitive, as well as market structure, implications. Despite our general skepticism about sub-penny quotations, we appreciate that, in certain limited circumstances, sub-penny quotations could be an appropriate market convention. In particular, stocks that have significant volume yet are priced over a dollar, and which trade continuously at a penny, could be good candidates for sub-penny quoting. However, in light of the potentially adverse consequences of expanded sub-penny quoting for the marketplace at large and its potential impact on the competitive landscape, we urge the Commission to request comment on the specifics of a targeted approach that would evaluate the utility of sub-penny quoting based on the typical spread of a stock, the price of a stock relative to market capitalization, or another appropriate test.<sup>29</sup>

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ITG appreciates the opportunity to comment on the Concept Release. If you have any questions related to our comments, please feel free to contact me.

Sincerely,



P. Mats Goebels  
Managing Director  
General Counsel  
Investment Technology Group, Inc.

cc: Hon. Mary L. Schapiro, Chairwoman  
Hon. Luis A. Aguilar, Commissioner  
Hon. Kathleen L. Casey, Commissioner  
Hon. Troy A. Paredes, Commissioner  
Hon. Elisse B. Walter, Commissioner  
Robert W. Cook, Division of Trading & Markets  
James Brigagliano, Division of Trading & Markets  
David Shillman, Division of Trading & Markets

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<sup>28</sup> See Bunge, Jacob, US Stock Exchanges To Petition SEC On Subpenny Pricing, Dow Jones Newswire (Jan. 25, 2010).

<sup>29</sup> We acknowledge that, in developing a test in this regard, each stock's eligibility for sub-penny pricing would need to be periodically reevaluated.