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April 3, 2000

VIA HAND DELIVERY

Jonathan G. Katz, Secretary
Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549

Re: Notice of Filing of Proposed Option Market Linkage Plans by the American Stock Exchange, Chicago Board Options Exchange, Pacific Exchange, and Philadelphia Stock Exchange, File No. 4-429

Dear Mr. Katz:

Interactive Brokers LLC[1] respectfully submits these comments on the proposed linkage plans submitted by the options exchanges pursuant to the Commission's January 19, 1999 order.

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[1] Interactive Brokers is a member The Timber Hill Group, which includes Timber Hill LLC, Interactive Brokers LLC and other affiliates who, through the use of proprietary communications technology, trade standardized derivative investment products on organized securities and futures exchanges worldwide. Timber Hill LLC is registered with the Commission as a broker-dealer and is a member in good standing of the Chicago Board Options Exchange, American Stock Exchange, National Association of Securities Dealers, Philadelphia Stock Exchange and Pacific Exchange. Interactive Brokers is a registered broker-dealer and engages exclusively in agency trading. It is a member in good standing of the Chicago Board Options Exchange, American Stock Exchange, Philadelphia Stock Exchange and Pacific Exchange, where it offers execution of customer orders in all option classes.

At the outset, we commend the Commission for addressing the difficult issues that arise when the same securities are traded across multiple trading venues, and for engaging the industry and the public to try to create a market structure that will capture the benefits of multiple, competing marketplaces while at the same time providing customers with best price execution of their orders notwithstanding a potentially decentralized trading environment. Unfortunately, the linkage plans proposed by the options exchanges do not seem designed to serve the interests of options customers, but rather to perpetuate, as much as possible, existing practices which protect exchange market makers and specialists from vigorous competition, both from customers and from professionals on other exchanges.

We set forth below our responses to the issues raised by the Commission's request for comment. First, we address the many significant flaws in the linkage proposals submitted by the exchanges. As the Commission noted in its order requiring the exchanges to submit a linkage plan, the danger in inviting the exchanges to design such a centralized linkage is that their "joint activity [might] have a negative impact on competition," creating a greater problem than the one linkage is intended to solve.[2] Particularly with respect to the linkage plan submitted by the Chicago Board Options Exchange ("CBOE") and the American Stock Exchange ("Amex") and joined by the newly-approved International Securities Exchange ("the majority plan"), this danger may soon be realized. As discussed below, although under the majority plan customers may be more likely to have their orders executed at the national best bid and offer ("NBBO"), that NBBO will not be the product of vigorous price competition, spreads will become artificially wide under the plan, and customers will not have a very good chance of their orders "interacting directly without the intervention of intermediaries." *See* Commission Request for Comment on Issues Relating to Market Fragmentation, Exch. Act. Rel. 34-42450, 65 Fed. Reg.

at 10577 (Feb. 23, 2000)("Market Fragmentation Release"). And although the Philadelphia Stock Exchange ("PHLX") and Pacific Exchange ("PCX") price/time priority plans are preferable to the anti-competitive "step-up and match" regime of the majority plan, there are also significant problems with the PHLX and PCX approach.

After discussing the drawbacks of the linkage plans proposed by the exchanges, we set forth an alternative plan based on three fundamental principles that should form the basis for the competitive, national options market of the future:

1. **Orders Must Be Routed to Exchanges that <u>Display</u> the Best Price;**
2. ***<u>Within</u>*** **Each Market Center, Price/Time Priority Must Be Maintained; and**
3. **All Quotes or Guarantees to Trade Must Be Posted as Firm, Executable Orders Accessible to All Market Participants.**

As shown below, these three essential elements, operating together, will result in a marketplace that will have all the practical advantages of a central limit order book (or inter-exchange price/time priority system), without any of its limitations, and will ensure vigorous price competition while also retaining incentives for separate market centers to compete to provide innovative products, technology and services.

I. <u>Defects In the Proposed Linkage Plans.</u>

A. <u>The Majority "Step-Up and Match" Plan Will Eliminate Competition on Price and Deny Customers the Benefits of Multiple Listing.</u>

The central foundation of the majority linkage plan is that exchanges would have the right to step up and match more competitive prices posted by other exchanges in order to fill incoming customer orders. Thus, even if an exchange initially receiving a customer's order was not posting the best price in the national market, that exchange would have the right to execute the trade at the NBBO, or route the order away through the linkage. Hand in hand with step-up

[2] Exch. Act. Rel. 34-42029 (Oct. 19, 1999).

and match rules come internalization or payment for order flow arrangements, whereby broker-dealers route orders to affiliates or to market makers who share with those broker-dealers some portion of the profits from executing their captive order flow, while at the same time guaranteeing "best" execution at the NBBO. As the Commission noted in its recent concept release on market fragmentation: "[A] market maker with access to directed order flow often may merely match the displayed prices of other centers and leave the displayed trading interest unsatisfied. The profits that can be earned by a market maker trading at favorable prices with directed order flow can then be shared with the brokers that routed the orders." 65 Fed. Reg. at 10583.

The Commission should be hesitant to place its imprimatur on a linkage system based on step-up and match rules and internalization/payment for order flow. First, by allowing a system in which a substantial portion of trades likely will take place at prices different than those posted publicly by the market maker executing the trade, the majority plan would severely undermine the Commission's fundamental goal of a transparent national options market. Indeed, when the industry should be moving toward a system where market makers post real, competitive prices *and* the size in which they are willing to trade, the majority linkage plan would require neither (since market makers are not required to post size and are allowed to trade at prices they never posted).

In addition to lack of transparency, a linkage system based on step-up will remove the incentive of customers or of market makers who cannot internalize or pay as richly for order flow to post more competitive prices than those offered by the dominant market makers for a particular option class. The Commission stated the problem succinctly in its Market Fragmentation Release:

> "[T]he market center to which an order is initially routed is permitted to match the best price and execute the order internally. Indeed, the executing market center need not ever have displayed the best price.… [T]he market participant (whether investor or dealer) who publicly displays an order or quotation at a better price than anyone else is offering is not entitled to any assurance that the order or quotation will interact with the next trading interest on the other side of the market."

65 Fed. Reg. at 10583. This is a frightening scenario: <u>If exchanges can post uncompetitive markets and simply guarantee to step up to NBBO ***after*** receiving orders, market share will not be determined by price competition but by direct or indirect payment for order flow. Ultimately, the result will be fewer competitors and wider markets and the benefits of multiple listing will disappear</u>.[3]

Indeed, a step-up and match system creates a strong incentive for market makers to post ***worse*** prices. For example, a market maker lowering his bid increases the chance that other, competing exchanges, will also lower their bids and that whichever exchange gets the next customer order to sell at the market will be able to pay a lower price to that customer. On the other hand, if not all exchanges follow the market maker's lower bid, nothing is lost because the exchange receiving an order simply may step up and match the better away price. Thus, a

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[3] This is why guarantees among exchanges to trade at a single national price would constitute a violation of the antitrust laws absent Commission approval immunizing them from liability. See e.g., Falls City Industries, Inc. v. Vanco Beverage, Inc., 460 U.S. 428, 441 (1983) (citing FTC v. A.E. Staley MFG Co., 324 U.S. 746 (1945) (setting prices according to a single scheme by its nature precludes independent pricing in response to normal competitive forces and is therefore illegal)).

market center that quotes a wide market increases its chance of profiting from trading that wide market, without any negative consequences.[4] A system that rewards the ability of market makers to internalize orders or pay broker dealers for order flow rather than rewarding them for posting better prices is not in the best interests of customers.

The final, serious problem with the majority step-up and match linkage plan is that the plan does not specify any time limit during which the exchange receiving an incoming customer order must decide whether to step up and match or route the order away. The majority plan states that the market maker receiving a customer order must make "reasonable efforts to probe the market to achieve a satisfactory execution of a Customer order" and should "attempt to execute it at the receiving exchange", but no time frame is provided for this process.[5]

This obviously is of great concern. The market maker at the receiving exchange has every incentive to hold on to a customer order as long as it can without acting, hoping that another order will take out the better price on the away market or that the away market will fade to the worse price offered by the receiving exchange. By delaying handling an order under these circumstances, the receiving market maker can defer having to choose to step up to a price better than it has posted, or to route the order away and lose an execution. Meanwhile, the customer may lose the opportunity to have its trade executed at the more attractive price offered by the

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[4] In its January 19, 2000 letter to the Commission noting its assent to the majority plan, the International Securities Exchange states that some "specified protection" might be appropriate where it is a customer order that is first at the best bid or offer and yet goes unexecuted because a market maker on another exchange has stepped up and traded with an order that would have matched the customer's booked order. While offering protection to customers in these situations may make step-up and match rules seem somewhat less unpalatable, it will do nothing to address the greater problem: that step-up and match rules reward market makers for posting less competitive prices. Although customers occasionally will narrow the spread and should be rewarded for doing so, this is not yet a substitute for the liquidity provided by professional market makers seeking executions.

[5] *See* Majority Linkage Plan at § 7(a)(ii)(A)(2).

away market. Market makers should not be given the right to defer execution of customer orders indefinitely when they know that better prices are available at an away market. This is an invitation to mischief that will not go unaccepted, and it will be nearly impossible for exchanges to prevent or punish the resulting abuse to customers.

In this regard, far preferable to the step-up and match system offered by the majority plan would be the rule proposed by the PCX, according to which if the exchange initially receiving an order was not posting the best price when the order was received, that exchange automatically would have to generate a P/A order for execution of the customer's order at an away market posting the best price.

B. The Linkage Plans Provide a Veiled Incentive for Market Makers and Specialists to Initiate Trade-Throughs and to Ignore Linkage Orders

Neither the majority linkage plan nor the PHLX or PCX plans provide any real deterrent for initiating trade-throughs or ignoring linkage orders, and in fact tacitly encourage such behavior. With respect to trade-throughs, the exchanges' linkage plans require a customer or participant aggrieved by a trade-through to make a complaint within three minutes of the time that the report of the transaction constituting the trade-through is disseminated over OPRA.[6] A number of provisions establish the compensation to be paid to the aggrieved party, but the worst that can happen for a party initiating a trade-through is to have to make the aggrieved party whole. There appears to be no penalty for initiating a trade-through, or even for initiating repeated trade-throughs. Violators of the trade-through rules thus will often enjoy the benefit of initiating trade-throughs, and only occasionally (and at worst) will have to return their ill-gotten gains.

[6] *See e.g.*, Majority Linkage Plan at § 8(c)(iii)(H).

Because of the three minute time limit within which to make a complaint, and because of the time and effort involved to do so, many customers or linkage participants will not timely complain about trade-throughs. Moreover, it can be expected that participants complaining of trade-throughs will be treated with derision by other linkage participants, further reducing their incentive to raise trade-through complaints. Linkage participants therefore will know that they can profit from whichever trade-throughs go unmentioned or untimely reported, while simply paying back any extra profits earned from trade-throughs that actually result in a timely complaint.

This is unacceptable. Any linkage plan approved by the Commission should include a serious deterrent for trade-throughs and a comprehensive mechanism for detecting trade-throughs and enforcing trade-through penalties. We propose that any party initiating a trade-through be fined $100.00 per contract, in addition to making the parties whole on the underlying trade. We also propose that the three minute time limit for complaints regarding trade-throughs be extended to thirty minutes and that exchanges bear the responsibility to detect trade-throughs; although we note that building systems to monitor the markets and notify the relevant parties in the event of a trade-through would be a task not less burdensome than simply building a system to route orders to the best market in the first place, avoiding these problems. *See* Essential Element of a Truly Competitive National Options Market, *infra*. In any event, unless participants initiating trade-throughs routinely incur out-of-pocket costs greater than simply the amount they must pay in satisfaction thereof, trade-throughs will continue to be commonplace.

In addition to the proposed linkage plans' lenient treatment of trade-throughs, there also is little deterrent for participants to ignore linkage orders. The rules provide only that a party sending a linkage order may ignore any response to that order that is received 30 seconds after transmission of the linkage order.[7] Although there is a catch-all provision allowing linkage participants to seek compensation for another participant's "action or fail[ure] to take action under the plan," the time and effort in seeking compensation -- and the lack of penalty for offenders or repeat offenders -- would seem to make resort to this provision unusual except in rare circumstances. Again, in order to ensure that participants abide by their responsibility to respond to linkage orders, there should be a monetary penalty of $100.00 per contract for failing to respond within thirty seconds, and participating exchanges should be responsible for monitoring response to linkage orders.

C. The Linkage Plans Contain No Objective Criteria for Declaring Non-Firm Markets.

Closely related to the foregoing, none of the linkage plans provide any objective criteria to establish when it is appropriate for a participating exchange to declare that its quotes are Non-Firm. *See e.g.*, CBOE Linkage Plan at § 10(a)("Each Participant shall retain its authority to halt or suspend trading in its market or declare market conditions to be Non-Firm *whenever such Participant deems such action to be necessary or appropriate*)(emphasis added).

The Commission should not allow participating exchanges totally unfettered discretion to declare Non-Firm markets, thereby depriving customers of important protections until the exchange decides to declare a market firm again. When a market is Non-Firm, customers lose the protection of firm quote rules and of trade-through rules[8], and it is difficult or impossible for broker-dealers to ensure best execution of their orders. Further, most or all options exchanges allow their automatic execution systems to be disabled during Non-Firm trading conditions, depriving customers of the benefits of automatic execution at firm posted prices, and

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[7] *See e.g.*, Majority Linkage Plan at § 7(a)(iii).

[8] *See, e.g.*, CBOE Linkage Plan at § 8(c)(iii)(C).

contravening the Commission's policy that "***as a general rule, automatic execution systems should remain operational at all times***."[9]

Non-Firm market conditions should be increasingly rare as specialists and market makers implement new technology to increase the efficiency and automation of their markets. However, market makers and specialists will have little incentive to improve their systems or add personnel in order to handle faster markets if they can simply ask for a Non-Firm market to be declared and then have an even greater opportunity for profit because customer protection rules and automatic execution are thereafter suspended.

Instead of declaring Non-Firm markets, it would be sufficient protection for market makers to relax maximum quote width requirements during fast markets. For that matter, if step-up and match is not allowed and price competition prevails, maximum quote width requirements may be dropped altogether, as they are frequently inappropriate for high gamma or long-term options even during regular market conditions. If this is not acceptable, the linkage plan approved by the Commission at least should contain specific, objective standards that must be satisfied before a linkage participant could declare markets to be Non-Firm.

D. The Linkage Plans Arbitrarily Restrict Principal Trading

The linkage plans offered by the exchanges would severely restrict access to the proposed linkage, and do nothing to address existing exchange rules that artificially restrict market participants' ability to trade with each other. The linkage plans thus perpetuate the current "two-tiered" market in which market makers are willing to trade with customers at firm posted prices but employ trade or fade rules and various other devices to avoid or delay trading with each other

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[9] *See* Exch. Act. Rel. 34-38792, 64 S.E.C. Docket 2158 (June 30, 1997)(permanently approving automatic execution system of the Philadelphia Stock Exchange)(emphasis added).

and with broker-dealers trading proprietary accounts. This results in phantom quotes, crossed and locked markets, and all the other problems that have fragmented the market and have slowed the introduction of more efficient trading mechanisms.

First, both the majority and the PHLX and PCX linkage plans would restrict principal trading through the linkage to "Eligible Market Makers," which are those market makers assigned to and providing two-sided quotations in an eligible options class and participating in their exchange's automatic execution system. Moreover, the majority linkage plan puts a strict limit on the volume that an Eligible Market Maker can transact through the system. If a market maker transacts more than 20% of its volume in an eligible option class in a calendar quarter via the linkage, that market maker will be barred from using the linkage for the following quarter.

The exchanges have not set forth any rationale for the limitations they place on principal trading through the linkage, nor are these restrictions consistent with an open, accessible and efficient market. If market makers on a given exchange are willing to trade at a certain price, they should be willing to trade with all comers at that price, including market makers on other exchanges. Combined with the step-up and match rules and internalization/payment for order flow practices described above, the arbitrary 20% ceiling for principal trading through the linkage will put tremendous pressure on less well-established market making firms, who will be limited in their ability to hit bids and lift offers from away market makers because the volume of their own customer order flow may not support such trading under the 80-20 rule. Indeed the rule seems specifically intended to put smaller players at a competitive disadvantage and is not justified by any valid public policy.

In this regard, the PCX plan is again preferable to the majority plan, because it would allow for essentially unlimited principal trading through the linkage. Under the PCX plan, principal orders could be sent through the linkage at any time in order to unlock or uncross a market. Principal trading through the linkage essentially would be unrestricted because, by definition, an order sent by a market maker on one exchange that is executable against a market maker on another exchange unlocks or uncrosses the market. For example, if a market maker on Exchange A is offering at 3 ¼, and a market maker on Exchange B is willing to pay (bid) 3 ¼, the market would lock unless the trade could take place via a principal order transmitted through the linkage (because without the ability to execute the principal trade via the linkage, the market maker on Exchange B would post its bid of 3 ¼, locking the market). If the Commission adopts the approach suggested by the PCX, it should make this implicit point clear: that all principal trades between market makers on different exchanges resolve a locked market – whether or not the market maker happens to post the locking quote before sending the principal order through the linkage.

E. The Linkage Plans Do Not Sufficiently Address Problems Arising from Locked or Crossed Markets

Although the PCX plan would allow unlimited principal trading through the linkage to resolve locked or crossed markets, none of the linkage plans include any provision requiring resolution of locked or crossed markets, and the majority plan contains a number of elements that would hinder resolution of locked or crossed markets. Moreover, none of the linkage plans would repeal unfair and anti-competitive exchange rules under which customer orders are rejected from automatic execution systems (losing firm quote treatment) and rerouted to exchange floors for execution when markets are crossed or locked.

The exchanges state that they will in the future submit rules to the Commission providing that: "(1) if an Eligible Market Maker should lock or cross a market, that Eligible Market Maker will unlock, uncross or direct a Principal Order through the Linkage to trade against the bid or offer that was locked or crossed; and (2) if a member other then an Eligible Market Maker should lock or cross a market, that member will unlock or uncross the market."[10] This is unsatisfactory. Due to an increase in the number of multiply-listed options, locked or crossed markets have become a persistent problem. Exchanges have responded by enacting rules that suspend their automatic execution systems and "kick" customer orders out to the floor for manual execution when markets are crossed or locked.[11] As many commenters, including Interactive Brokers, have noted, these "auto-ex kickout rules" wreak havoc on broker-dealers' electronic order routing systems, which rely on the availability of exchange auto-ex systems to secure best execution of their customers' orders at firm, posted prices.[12] When customer orders are rerouted to the floor for execution, they lose the benefit of firm quote treatment and are exposed to market risk until they can be handled by floor brokers. Customers also lose the ability to cancel or modify their orders or reroute them to another exchange displaying a better price if their order has been routed out of an auto-ex system and onto the floor.

Any linkage plan approved by the Commission should provide that any market participant posting a locking or crossing quote (including market makers, customers or broker-dealers) would automatically execute against the posted market for the maximum auto-quote size and continue to do so every fifteen seconds until the market is unlocked. This would very simply solve the problem of market makers maintaining locked or crossed markets by ignoring principal orders sent through the linkage.

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[10] *See e.g.,* Majority Linkage Plan at § 7(a)(i)(C).

[11] *See* PCX Rule 6.87 (h)-(j); CBOE Rule 6.8, Interp. 2.

[12] *See e.g.,* Comment Letter of Interactive Brokers on Proposed Rule Change and Amendment No. 1 by the Chicago Board Options Exchange, Inc. Governing the Operation of Its Retail Automatic Execution System, File No. 99-57 (Dec. 12, 1999).

This solution would be similar to the approach offered by the Nasdaq market in its new proposal to enhance the national market system for Nasdaq stocks and to implement its new Order Collector Facility. See Exch. Act. Rel. 34-42166, 1999 Westlaw 1080624 (Nov. 22, 1999). Under that proposal, whenever a Nasdaq market maker posts a quote that would lock or cross the national Nasdaq market, that quote would be treated as a marketable limit order and would be executed against a market maker displaying the best bid or offer. Id. As Nasdaq has recognized, increased automatic execution of orders is a far better solution to issues arising from fast-moving markets than creating more and more exceptions to automatic execution.

Notwithstanding the exchanges' promise to submit appropriate rules to the Commission, it is difficult to see how locked or crossed markets can be quickly and easily resolved given the restricted nature of the linkage proposed by the exchanges. For example, in light of the size and eligibility restrictions for transmitting principal orders over the linkage, how will market makers access posted quotes so as not to lock or cross the market? How will an otherwise Eligible Market Maker unlock a market if it is prohibited from transmitting principal orders over the linkage because of violating the 80-20 rule? How will broker-dealers who are not eligible to use the linkage execute trades to avoid locking or crossing markets?

Locked or crossed markets only persist because of artificial restrictions enacted by exchanges to prevent various types of trading interests from interacting freely. By eliminating these restrictions and allowing all market participants to access firm, posted quotes on an equal basis, preferably via automatic execution, this problem will disappear.[13]

[13] *See* Essential Element of a Truly Competitive National Options Market, *infra*.

F. The Linkage Plans Do Not Repeal Exchange Trade or Fade Rules

A primary culprit in undermining transparency and impairing the free flow of liquidity in the options markets are exchange "trade or fade" rules, which provide that when a market maker or trading crowd is confronted with a marketable limit order from a registered broker-dealer, the market maker or crowd may disavow its published quotes and "fade" to lower bids or higher offers in order to avoid filling the order.[14] Trade or fade rules thus encourage the dissemination of what the industry refers to as "phantom" quotations, and create a two-tiered market with different actual prices depending on the status of the buyer or seller. The Commission's order requiring the exchanges to submit linkage plans called for the exchanges to repeal their trade or fade rules, but the exchanges appear to have ignored this admonition, and the linkage plans make no mention of repealing trade or fade.

The Commission has long been concerned about trade or fade rules, and even some in the exchange community have recognized the rules as "troublesome" and inconsistent with an open and transparent marketplace.[15] The rules have been upheld, however, as necessary to minimize trade-throughs in multiply listed options. According to the exchanges, trade-throughs were occurring not because better prices were in fact available at another exchange, but merely because the competing exchange had allowed its disseminated quotes to grow stale.[16] Trade or fade rules forced market makers to remove stale bids or offers in response to a broker-dealer's

[14] *See* CBOE Rule 8.51(b), PHLX Rule 1015(b), Amex Rule 958A (and Commentary .01), PSE Rule 6.37.

[15] *See* International Securities Exchange Response to Comments on its Application to Register as a National Securities Exchange at 29-30 (Sept. 23, 1999).

[16] *See* generally Exch. Act. Rel. No. 34-34431, 57 SEC Docket 591 (July 22, 1994).

attempt to hit or lift them (although, as we have argued in the past, a surer way to prevent market makers from posting stale quotes would be to force them to trade on those quotes).

In any event, when the Commission issued its order requiring the exchanges to formulate a linkage plan that would prevent trade-throughs, the Commission recognized that linkage would vitiate the exchanges' rationale for trade or fade rules:

> "As part of the implementation of uniform trade-through rules, the Options Exchanges should submit to the Commission proposed rule changes repealing existing trade-or-fade rules that become unnecessary with the adoption of trade-through rules." Exch. Act. Rel. 34-42029 (Oct. 19, 1999).

Although the linkage plans submitted by the exchanges provide for firm quote treatment of some principal orders *if* the counterparty is an Eligible Market Maker from another exchange and *if* the 80-20 rule is satisfied, the linkage plans make no mention of repealing exchange trade or fade rules and according firm quote treatment to broker-dealer orders in general. The Commission should not allow anti-competitive trade or fade rules to persist into the future when the rationale upon which they were approved no longer applies.

G. <u>Broker-Dealers Continue to Be Denied Access to Exchange Order Routing Systems Under the Linkage Plans.</u>

On a related note, none of the exchanges' proposed linkage plans would provide broker-dealers who are not Eligible Market Makers with any efficient mechanism to execute orders for their proprietary accounts, nor do the plans repeal existing exchange rules that place artificial barriers in the way of broker-dealer proprietary trading. For example, for most options series, most exchanges do not allow broker-dealer orders to be routed to exchange electronic order books. Instead, broker-dealer orders must be routed to printers on the floor and then represented in the crowd by a floor broker. These rules accomplish little but to protect market makers by artificially making it more costly and time consuming for broker-dealers to execute proprietary orders, or to post bids and offers that might equal or better those of the market makers.

The anti-competitive approach taken by the options exchanges in this regard is in contrast to steps taken by the Nasdaq market recently to make it easier for broker-dealers to execute proprietary trades for Nasdaq stocks. Under its recent proposal to enhance its order execution systems, Nasdaq will allow market makers, customers, and broker-dealers automatically to execute Nasdaq trades for up to 9900 shares. *See* Exch. Act. Rel. 34-42344, 65 Fed. Reg. 3987, 89 (Jan. 14, 2000). As the Commission noted in approving the Nasdaq plan:

> "[A]llowing automatic executions for broker-dealers' proprietary trades potentially may encourage broker-dealers to commit capital to the market, thereby adding to the depth and liquidity of the market for NNM securities." *Id.* at 3994.

Likewise, any exchange linkage plan approved by the Commission should allow broker-dealers easily to execute proprietary options trades, at firm posted prices and without being subject to artificial delays and roadblocks.

H. <u>Although Preferable to the Majority "Step-Up" Plan, the Price/Time Priority Plans Offered by the PHLX and PCX Are Also Flawed.</u>

The linkage plans submitted by the PHLX and the PCX are largely identical to the majority plan (and share many of the problems discussed above) except that they differ in one important request. As noted above, in varying degrees the PHLX and the PCX plans would require exchanges receiving incoming orders to execute those orders or route those orders to away exchanges, depending on which exchange was first in posting the best prevailing price. [17]

[17] The PCX plan is not based on strict price/time priority, but instead would allow an exchange receiving an order to execute that order even if that exchange was not first at the NBBO by giving price improvement to the order.

While price/time priority principles are far preferable to the step-up and match and internalization/payment for order flow model offered by the majority plan, the PHLX and PCX plans are also misplaced in placing the primary responsibility for order routing on a single, inter-exchange linkage system, rather than on the broker-dealers who currently receive and route customer orders. A single, exchange-sponsored and operated linkage system based on price/time priority would be tantamount to a national central limit order book, and would reduce the existing options exchanges to mere entry portals into the system. It is hard to imagine multiple exchanges surviving under this scenario, and the ultimate result therefore would be a reduction in competition and innovation in products, services and technology.

Indeed, notwithstanding the market fragmentation issues presented because multiple exchanges trade the same products, there are many benefits to the continued operation of multiple, independent markets. Aside from price competition, there is greater competition to develop new products, trading systems and other services. There is also greater redundancy in the system, so that if the services of one exchange are disrupted, trading can continue on other exchanges. Even with respect to their self-regulatory functions, having multiple exchanges with different approaches to regulatory oversight can foster innovation and the development of better exchange rules and policies.

On the other hand, a monolithic inter-exchange linkage through which all or substantially all customer orders would be routed in price/time priority would present all the problems of any regulated monopoly. The system would have a single failure point and would be susceptible to delays and outages. The system would be inflexible and resistant to change. With existing exchanges presumably merging or disappearing altogether there would be little incentive for the operator of the linkage to be responsive to the demands of members or customers because there would be nowhere else to trade. And once entrenched, it would be very difficult for new and innovative trading venues to be established to compete with the exchange or exchanges that control the linkage system.

For these reasons, the Commission should continue to encourage the formation of different, vigorously competing market centers that would be linked, first, by broker-dealers routing orders to the best posted markets, and second by links that allow members of different exchanges to trade with each other. Multiple broker-dealer routing systems will provide higher capacity and redundancy than a single, centralized linkage system, and will provide the same customer protection benefits as a central limit order book, without its limitations. We describe this proposal more fully below.

II. Essential Elements of a Truly Competitive National Options Market

The Commission and the securities industry are at a crucial turning point. Increasingly rapid developments in telecommunications and computing technology, the transition from open outcry to automated electronic execution, and the proliferation of multiple trading venues for stocks and options will all have a profound effect on what the electronic markets of the future will look like and whether true competition and increased customer access to those markets will be realized. The judgments made by the Commission in facing market structure issues with respect to options trading may also serve as a precedent when the Commission considers action on the issues raised in its more general concept release on market fragmentation.

The Commission frequently has identified the central issue it faces along with the industry: how to balance the many benefits arising from competing marketplaces while minimizing the difficulties faced by public customers in seeking best execution of their orders across multiple, potentially isolated pools of liquidity:

> "[I]nvestor interests are best served by a market structure that, to the greatest extent possible, maintains the benefits of *both* an opportunity for interaction of all buying and selling interest in individual securities and fair competition among all types of market centers seeking to provide a forum for the execution of securities transactions." Market Fragmentation Concept Release, 65 Fed. Reg. at 10580.

The two solutions most commonly offered to this problem are both unsatisfactory. A central limit order book with price/time priority -- urged by many broker-dealers because it would essentially transfer their duty of best execution to the central book -- would reduce today's exchanges and ECNs to mere order entry portals. It is difficult to imagine the continued viability of multiple, competing marketplaces in such a system, or how those marketplaces would have the incentive or resources to develop new products (e.g., like the standardized stock options pioneered by the CBOE or the depositary receipt products pioneered by the Amex), technologies or services. There is a serious danger that a central limit order book ultimately would stifle innovation, would be unwieldy and difficult to administer, would be susceptible to failure, delays and outages, and would be resistant to change or improvement once entrenched (*see* OPRA capacity problems).

The other solution commonly offered for the potential problems arising from market fragmentation is an Intermarket Trading System ("ITS") -type linkage such as that offered in the majority plan, that would not include price/time priority but rather would allow a market participant receiving an order to step up and match the NBBO to execute that order. As discussed above, the Commission should regard with suspicion any linkage plan (such as the majority plan) that would foster *de facto* price fixing by allowing exchanges to display some price with an artificially wide spread while providing a guarantee to fill orders by stepping up to the NBBO. As we have shown, the highly profitable order flow therefrom would be allocated based on direct or veiled payment for order flow, exchange membership categories, or other allocation schemes, rather than member willingness to attract order flow with better prices.

Rather than create either a monolithic central limit order book or an ITS-type linkage based on anti-competitive step-up and payment for order flow practices, the Commission instead should encourage the continued formation of different, vigorously competing market centers, and make sure that the rules of such market centers do not prevent matching orders – whether from customers, market makers or other broker-dealers -- from trading against each other regardless of origin. These competing markets would be linked in two ways. First, pursuant to their duty of best execution, broker-dealers would route each customer order to the best market based on the price <u>displayed</u> at that market. Second, trade-throughs and crossed and locked markets would not persist because markets would be open to each others' quotes and would use electronic links to trade with each other to eliminate disparities in pricing.

The competitive national options market of the future should be based on three essential elements that, operating together, will create powerful incentives for increased liquidity, price competition, and best execution of customer orders, without the drawbacks of a central limit order book or ITS-type linkage:

1. **Orders Must Be Routed to Exchanges that <u>Display</u> the Best Price;**
2. ***<u>Within</u>* Each Market Center, Price/Time Priority Must Be Maintained; and**
3. **All Quotes or Guarantees to Trade Must Be Posted as Firm, Executable Orders Accessible to All Market Participants.**

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A. Orders Must Be Routed to Exchanges that Display the Best Price.

Broker-dealers should route customer orders to the best posted market, and an exchange that receives an order when it is not quoting the best price should immediately and automatically route the order to any exchange that is posting the NBBO. Under the majority linkage plan -- regardless of the posted price on the exchange -- customer orders will be guaranteed to trade at the NBBO because the exchange will have an opportunity to step up and match the NBBO after it receives a customer order. The exchanges supporting the majority plan argue that by stepping up to match the NBBO once they have an order in hand, they are providing price improvement and guaranteeing best execution. As we have explained, however, if these step-up and match rules are permanently ensconced as part of a Commission-approved linkage plan, no market center will have any incentive to narrow the spread because that will not increase its market share as against other market centers (since those market centers will be pre-committed to match the same price). Quite the opposite, market makers will have an incentive to widen their quotes because if other exchanges follow suit, whichever exchange receives the next market order will trade at a larger profit (and if they don't, the market maker with the wide quote has lost nothing because it may simply step up and match the NBBO).

There is a far better model for competition, however, and it is very simple. Rather than internalizing orders or accepting payment for order flow or other troublesome incentives, broker-dealers should abide by their duty of best execution and route orders to the market showing the best price. As recently noted by Chairman Levitt, "systems for broker-dealers recently have emerged that include sophisticated algorithms for automatically routing investor orders in a security to the best market."[18] Broker-dealers should use these systems or, less ideally, manually route each order to the market displaying the best price. This will provide a powerful incentive for an exchange to narrow the spread and be at the best price before a broker-dealer makes its routing decision (so that the exchange gets the order). If an exchange is not at the best price but a broker-dealer nonetheless sends it an order (e.g, because of error or because the broker-dealer does not have systems sufficient to route each order to the best market), that exchange should be required immediately and automatically to send the order to any away market displaying the best price. The exchange thus would have no opportunity to step up and benefit from execution of an order if it did not post the best price before that order was received.

B. ***Within*** Each Market Center, Price/Time Priority Must Be Maintained.

Closely related to the foregoing, orders should be allocated to market makers within each exchange on a strict time/priority basis. The first member to post a better price should be rewarded with an execution. This should ensure intra-exchange price competition and result in narrowing the NBBO, which other exchanges will also have to display to compete for order flow in accordance with the discussion above. Exchange rules for preferential allocation of trades on grounds other than best price (e.g., because of special membership status or quote size) reduce any incentive market makers have to post narrower markets and have no place in the options markets of the future.[19]

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[18] Hearing Before the Senate Subcomm. on Securities, Comm. on Banking, Housing, And Urban Affairs Concerning Market Structure Issues Currently Facing the Commission (Oct. 27, 1999)(statement of Chairman Arthur Levitt).

[19] Technological advances have made quote attribution possible. The majority of exchange market makers now maintain what was once the exception, real-time theoretical values, on handheld computers. When connected to exchange systems, these real-time quotes provide the basis for quote attribution and thus, enhanced competition. Execution allocation based on quoting rather than entitlement would assure the best possible markets. Moreover, such competitive intra-market quoting will speed the retirement of the exchanges' current consensual autoquote systems, which are by definition anti-competitive.

C. All Quotes or Guarantees to Trade Must Be Posted as Firm, Automatically Executable Orders Accessible to All Market Participants.

With the advent of electronic exchanges, rules governing the trading process are translated into computer programs. Trading rules become crystal clear, no longer subject to interpretation and difficult to change. In a computer program, firm markets or guarantees to trade at the NBBO are functionally equivalent to orders with a stated size. In the interests of efficiency and transparency, such guarantees therefore should be displayed as firm, automatically executable orders.

Electronic order books should be accessible to customers and broker-dealers alike. Barring broker-dealers from accessing electronic order books on a proprietary basis reduces liquidity and competition and harms the price discovery process. First, if broker-dealers are excluded from entering orders that could better posted markets, public customers are denied the potential for true price improvement and narrower markets. Second, the exclusion of broker-dealers from accessing market centers enables participating market makers to tilt their quote away from the direction of public demand and take advantage of relative price insensitivity on the part of the public. Lastly, if broker-dealers may not access market centers that have drawn away liquidity, they may have difficulty hedging or liquidating positions. As a result they may withdraw from the business, further reducing liquidity.

In short, markets are most efficient and liquid when all quotes are firm, posted publicly, and openly accessible to everyone on an equal basis. Allowing a hodgepodge of exceptions to this principle to persist into the future is not consistent with the Commission's vision for the national options market.

Conclusion

We respectfully urge the Commission to judge any market linkage plan – including the one we offer herein -- according to the fundamental goals of the national market system: customer protection, transparency, competition, and accessibility. Any existing or proposed rule that is inconsistent with these fundamental principles should be viewed with skepticism by the Commission and should have no place in the national options market of the future. In the words of Chairman Levitt:

> "We cannot forget that it is the interests of investors that ultimately must guide the Commission's actions, not the interests of individual market centers or their participants…Any rules or practices that place the interests of intermediaries ahead of those of investors should not be part of the future of the securities markets."[20]

s/ Thomas Peterffy

Thomas Peterffy
Chairman

s/ David M. Battan

David M. Battan
Vice President and General Counsel

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20 Hearing Before the Senate Subcomm. on Securities, Comm. on Banking, Housing, And Urban Affairs Concerning Market Structure Issues Currently Facing the Commission (Oct. 27, 1999)(statement of Chairman Arthur Levitt)("10/27/99 Levitt Testimony").

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