



January 26, 2005

VIA ELECTRONIC TRANSMISSION;
CONFIRMATION BY OVERNIGHT MAIL

Mr. Jonathan G. Katz
Secretary, Office of the Secretary
Securities and Exchange Commission
450 Fifth Street, NW
Washington, DC 20549-0609

Re: Archipelago Comments in Response to Re-proposed Regulation NMS
Release No. 34-50870; File No. S7-10-04

Dear Mr. Katz:

Archipelago Holdings, Inc. (“Archipelago”) and its wholly-owned subsidiary, The Archipelago Exchange (“ArcaEx”), appreciate the opportunity to comment on the Securities and Exchange Commission’s (“Commission” or “SEC”) re-proposal of Regulation NMS (“Re-Proposal”).¹ While many parts of the Re-Proposal are a significant improvement over the original iteration of Regulation NMS, we believe that certain aspects of the Re-Proposal continue to move in the wrong direction. We previously submitted comments to the SEC on proposed Regulation NMS in the fall of last year,² and we will not repeat all of our prior comments in connection with this most recent proposal (though, as a matter of record, we incorporate that letter by reference herein). Due to the tremendous significance of Regulation NMS on the U.S.

¹ See Exchange Act Release No. 50870 (Dec. 16, 2004), 69 FR 77424 (Dec. 27, 2004) (the “Reproposing Release” or “Reproposal”). The Commission originally proposed Regulation NMS in February of last year in Exchange Act Release No. 49325 (Feb. 26, 2004), 69 FR 11126 (Mar. 9, 2004) (“Proposing Release”), and the Commission sought additional comments on proposed Regulation NMS in Exchange Act Release No. 49749 (May 20, 2004), 69 FR 30142 (May 26, 2004) (“Supplemental Release”).

² See Letter from Kevin J. P. O’Hara, Chief Administrative Officer and General Counsel, Archipelago, to Jonathan G. Katz, Commission, dated September 24, 2004.



trading markets, however, certain of those points are worth reemphasizing, especially in the context of the modifications to the regulation that the Commission has now proposed.

I. PREFACE

It is worth noting at this early juncture in our response that Regulation NMS has generated one of the great feeding frenzies (at least, where this industry has been involved) on Capitol Hill and at the SEC. The tassel-loafer crowd has been beating a worn path all over the nation's capital using strong-arm tactics to gain support for parochial positions and vested interests. In the end, we see the outcome of Regulation NMS as a bright-line decision of siding, on the one hand, with special interests or, on the other hand, with investor interests (through the protection of all limit orders, not just the so-called "best priced" limit orders). No amount of lobbying and selling and brokering and obfuscating should blur the sight of what is at stake here: the protection of the American investor.

Second, we cannot proceed without commenting up front on the very clever Madison Avenue propaganda being widely disseminated by reactionary forces. These forces have smeared those who support the Commission's Depth-Of-Book Alternative and tarred them as "CLOB-lovers" and central planners. Au contraire. It is apocryphal that the Depth-of-Book Alternative is a CLOB. This alternative is about as much a CLOB as there were CLOBS in the 1980s and 1990s when the ITS trade-through rule protected 12.5 and 6.25 cents when the minimum trading increments were 1/8 and 1/16, respectively. We heard no hue and cry of "CLOB" and central planners in those decades ... because in fact a CLOB did not exist. Now, suddenly, we enter the new millennium and the protection of even **2 cents** under the Depth-Of-Book Alternative somehow constitutes a CLOB? Even Comrade Lenin would be scratching his head trying to understand that dialectic. And we are left scratching our heads by those who argue in favor of limit order protection of only the first penny, but not a penny more. Penny wise and pound foolish.

Additionally, the Commission has not suggested "time priority" as a feature of this alternative, only "price priority." We would respectfully suggest that the forces that make the "this is a CLOB and the sky is falling" argument be called upon to explain these curious inconsistencies.

Let us finally preface that these same reactionary forces who are calling for the establishment of (a revolutionary!) "Market BBO" trade-through rule are the same folks who have literally been trampling over the current ITS trade-through rule that protects, yes, the BBO. Today's ITS trade-through rule serves as a traffic sign that unambiguously directs exchanges trading listed stocks to "yield" to a better BBO price at another exchange. According to our data



and the Commission's data, that "yield sign" has been ignored and bypassed and run over for years. That said, the same folks who have been committing these serial "traffic violations" are now pleading their case before the traffic judge claiming all that's needed is the erection of the same "yield sign" in the same location with a fresh coat of paint. To wit: another BBO trade through rule!

II. EXECUTIVE SUMMARY

A. The Trade-Through Imbroglia

1. Do not "fix" the OTC market with a trade-through rule because no "fix'n" is required.
2. Eliminate the ITS trade-through rule that applies to listed trading today because: (a) it isn't enforced; and (b) its anti-competitive. Further, allow competitive and entrepreneurial forces to shape solutions just like what occurred in the once-corrupt OTC market where all electronically-assessable limit orders are now essentially protected.
3. If it is not politically palatable to eliminate a trade-through construct in listed trading, adopt the "Depth-Of-Book" Alternative so that all electronically assessable limit orders are protected. Investor protection demands that if a rule requires protection of the first penny, then the second and third pennies ... should also be protected. After all, as noted above, 12.5 pennies were protected in the 1980s and 6.25 pennies in the 1990s. What makes today's world so different where only one penny (where very limited size is displayed) should be protected?
4. People of honor and good faith can disagree on the need for a trade-through rule. The data shows the competitive OTC marketplace – where no trade-through rule exists – with less trade-through events despite the fact there are multiple pools of liquidity trading with each other. (Fragmentation? Hopefully that boogeyman is put away in the closet for good.) On the other hand, the data shows that the listed marketplace – where the ITS trade-through rule exists today – has greater trade-through events despite the fact that one market center, the NYSE, has 80-85% market share. That said, if the Commission adopts a revised and enforced trade-through rule for the listed marketplace and permits the OTC marketplace to operate without one, a pilot could be put in place comparing trade-through statistics from the respective marketplaces. Then, and only then, will we have the data to make a true assessment. In the end, we'll have an empirical winner.



5. It is worth noting that we have devoted much time to studying the Commission's trade-through analysis.³ As noted below in Annex A, we do take issue with some of its methodologies and conclusions.

B. Market Access and Related Fees

We applaud the Re-Proposal's approach on access (i.e., linkage) from one market to another through member relationships. That was the Archipelago ECN's model in the past and is ArcaEx's model today; and has been essentially adopted by the entire OTC marketplace. This model promotes fairness and equity in linkage, fees, and other material terms, and prohibits discrimination against competitors.

While we support the Commission's decision in the Re-Proposal to increase the cap on "access fees" from \$0.002 to \$0.003 per share for "protected" quotes, we continue to question why any such cap is necessary. The Commission provides scant evidence why it must rate-regulate "access fees" and even less evidence on how it arrived (at one time) at a \$0.002 cap and (now) at a \$0.003 cap.

C. Market Data Revenues and Allocation

The Re-Proposal establishes a market data formula that is still too complex, subject to gaming and, thus, ripe for abuse. Further, the proposed market data formula inappropriately subsidizes illiquid securities by taxing liquid securities. First, the formula utilizes a square root function in order to allocate revenues. It is not clear why the SEC believes this is an appropriate methodology for assessing the value of market data to individual securities. Second, the proposed calculation favors primary markets and transfers revenues from dis-intermediated markets to intermediated markets.

ArcaEx proposes adopting a competing consolidator model which allows the marketplace to decide the value of data. In the absence of such reform, dollar-value traded should be used as a simple and fair means of allocating market data revenue.

Importantly, the dollar value alternative eliminates so-called "tape shredding" with the stroke of a pen.

³ See Memorandum to File from the Commission's Office of Economic Analysis, dated December 15, 2004, Re: Analysis of Trade-throughs in Nasdaq and NYSE Issues, referenced in the Reproposing Release at 69 FR at 77433, n. 59 (the "Trade-Through Study").



D. Sub-Penny Quoting

We generally agree with the Commission's Re-Proposal to prohibit sub-penny quoting. While we support market-based initiatives, 30,000 foot regulatory standards are essential (e.g., driving on the right-hand side of the road), as long as these standards are equally applicable to everyone. Today, SROs are held to minimum quoting increments, while other market centers are not, and this arbitrage should be eliminated (lest accidents occur with folks driving on the left-hand side of the road!).

It is worth mentioning that for stocks priced over one dollar and, in particular, a select group of ETFs (e.g., QQQQ), the Commission may want to employ objective criteria in determining when it is appropriate to trade in sub-pennies.

III. ANALYSIS

A. The Trade-Through Rule

Before getting deep into our position on the Trade-Through rule, we have invested a great deal of time analyzing the data and conclusions set forth in the Commission's Trade-Through Study.⁴ The results of our analysis, which are set forth in detail in Annex A of this letter, question some of the methodologies employed and conclusions drawn by the Commission. For purposes of the discussion immediately below, however, we use and take at face value the information established in the Commission's Trade-Through Study.

We continue to believe that neither the OTC market nor the listed market should be subject to a trade-through rule because it will unnecessarily stifle innovation, currently a hallmark of the OTC market. Competitive forces and investor demand in the OTC marketplace have created a web of proprietary connectivity that is continually improving. Supplemented by sophisticated order types and extremely complex best-execution algorithms that govern outbound routing decisions, the OTC marketplace is a virtual marketplace where nearly every pool of liquidity is linked to every other pool – creating one large pool of liquidity – ensuring the best prices and transparent, sub-second executions for investors. Playing under the rules of the game established by the SEC, participants in the OTC markets have spent untold millions of dollars designing smart electronic trading and order routing systems that can mimic human interaction, but on a faster, anonymous (thereby precluding front-running and informational advantages), and

⁴ *Ibid.*



cheaper basis. The Re-Proposal, however, may destroy the incentives for OTC market participants to innovate, improve efficiency, and promote investor choice.

Moreover, the Commission's own Trade-Through Study indicates that the listed market – the market with a trade-through rule – experiences slightly more trade-throughs as the OTC market. The Study shows that the overall trade-through rate, when considered as a percentage of the number of trades, was 2.5% for NYSE and Nasdaq stocks.⁵ The number of trade-throughs in Nasdaq stocks falls to 1.9%, if trade-throughs are calculated on the basis of share volume limited to total displayed depth. The Study also showed that, in the 20 most active stocks in each market, trade-throughs in Nasdaq stocks occurred in 2.9% of trades, while trade-throughs of NYSE-listed occurred more than 5% of the time.⁶

The first reaction to this data is that the total number of trade-throughs is extremely low, indicating that trade-throughs do not constitute a significant problem especially in the OTC market. The second reaction to this data is that, if the market without a trade-through prohibition has less trade-throughs as one without such a stricture, the trade-through rule as currently formulated does not work in the listed market. If a problem exists, it is that the trade-through rule for listed stocks is an anachronism and should be removed, not that it should be modified and foisted on the Nasdaq market.

1. Depth-Of-Book Alternative

If doing away with the trade-through rule on the listed side is not palatable to the Commission, however, and it determines to adopt a Trade-Through Rule for the listed marketplace, it should extend the Rule's application to all displayed automated quotes by adopting the proposed Depth-of-Book Alternative ("DOB Alternative"). While we agree with the SEC that any trade-through protections should apply only to automated quotations, we believe that the Market BBO Alternative would only serve to perpetuate the current broken and un-enforced system existing in the listed market, and should be rejected. Given the less liquidity at the BBO as a result of decimalization, the Market BBO would allow manual markets to ignore better priced, but not the best priced, quotes of away markets. Moreover, there often is

⁵ See Trade-Through Study, at pp. 2, 3. We are especially gratified that the Commission has recognized that, in Nasdaq issues, ArcaEx had the least number of trade-throughs of any of the markets studied. See Trade-Through Study, at p. 3. As the SEC's economists recognized, this low rate of trade-throughs is a result of Arca-Ex's electronic systems that evaluate prices across markets and route or execute orders accordingly. It is the capacity for innovation, reflected in our smart-routing technology, that we fear will be lost under the Commission's proposals.

⁶ See Trade-Through Study at pp. 4, 5.



significantly more liquidity available through those displayed quotes on other markets that are away from the BBO. If a manual market can ignore the liquidity available just below the BBO of an away market, that market may cause, in effect, an increase in the spread on the trade, which is money that otherwise would (and should more properly) go to the investor.

As we have stated previously, in our view, all limit orders are created equal. Some markets, including ArcaEx, display the entire depth of book and make those quotes subject to automatic execution.⁷ The displayed quotes below the top of book are just as accessible by market participants as quotes at the top of book. There is no logical or practical reason to deny trade-through protection to any of those automated quotes that are displayed. If the premise of the Trade-Through Rule truly is to incentivize the placement of limit orders, then it makes little sense to protect some automatically-accessible limits orders but not others. Indeed, extending the protections to all displayed quotes is all the more important following the conversion to decimal pricing and penny increments. Pre-decimals, the top of book represented the best liquidity in a market, and, as a consequence, real size existed at the NBBO. With decimals spreading out liquidity at multiple price points below the NBBO, however, the NBBO is no longer the best measure of a market's liquidity. Indeed, with thinning depth at the inside market, and with firm liquidity available and displayed at numerous price points, the NBBO is far less meaningful today. Even the NYSE realizes this and has implemented a liquidity quote in order to provide more transparency at its true price.⁸ Because such a large part of any market's liquidity is away from the BBO, we believe that the DOB Alternative to the Trade-Through Rule must be included if any uniform Trade-Through Rule is to be adopted.

The following examples bear out why the Market BBO Alternative is ludicrous and does not protect investors. Shown below are snapshots taken over the last week of ArcaEx books in Lucent, Cisco, and Pfizer. Our BBOs show the following share sizes: LU-31,200; CSCO-48,200; and, PFE-2400. Our full books (within 10 pennies of the BBO, or less than the 1/8 increment) show the following share sizes: LU-609,090; CSCO-430,221; and, PFE-25,780. Orders of magnitude of difference! Additional examples are reflected in Annex B.

⁷ In this regard, we note that the SEC has ensured that Rule 610, its Access Rule, would apply to the entire depth of book of displayed orders of an SRO trading facility. If all of those quotes are subject to the Access Rule, there is no reason to exempt them from the Trade-Through Rule.

⁸ The NYSE's proposed hybrid system will allow automatic executions to prices below the best bid or above the best offer, up to so-called liquidity replenishment points.



LUCENT TECHNOLOGIES INC						
LU	3.31	+03	100	M	T	15:15
Bid	3.31	Ask	3.32	Vol	49230000	Close 3.28
High	3.39	Low	3.30	Spread	.01	
Size	Bid	Name	Name	Ask	Size	
300	3.31	ARCAX	ARCAX	3.32	30900	
44500	3.30	ARCAX	ARCAX	3.33	75000	
26700	3.29	ARCAX	ARCAX	3.34	61090	
17000	3.28	ARCAX	ARCAX	3.35	52500	
5000	3.27	ARCAX	ARCAX	3.36	128100	
2000	3.25	AOXPS	ARCAX	3.37	27400	
100000	3.25	ARCAX	ARCAX	3.38	14900	
100	3.24	ARCAX	ARCAX	3.39	14800	
1000	3.21	ARCAX	ARCAX	3.40	9800	
5000	3.20	ARCAX	ARCAX	3.46	2000	
10300	3.08	ARCAX	ARCAX	3.49	1000	
2500	2.98	ARCAX	ARCAX	3.50	500	

CISCO SYS INC						
CSCO	18.31	↑ +.16	1000	Ot	Q	14:17
Bid	18.31	Ask	18.31	Vol	56619883	Close 18.15
High	18.31	Low	17.91	Spread	.00	
Size	Bid	Name	Name	Ask	Size	
46200	18.30	ARCAX	ARCAX	18.31	2000	
40700	18.29	ARCAX	ARCAX	18.32	38988	
43454	18.28	ARCAX	ARCAX	18.33	47413	
44854	18.27	ARCAX	ARCAX	18.34	31700	
33824	18.26	ARCAX	ARCAX	18.35	29000	
26300	18.25	ARCAX	ARCAX	18.36	13298	
4300	18.24	ARCAX	ARCAX	18.37	11398	
4000	18.23	ARCAX	ARCAX	18.38	1500	
500	18.22	ARCAX	ARCAX	18.39	10800	



PFIZER INC						
PFE	24.90	+0.02	Vol:	25,076,300	+	
Bid:	24.89	Ask: 24.90	\$ Flow:	51,871,561	+	
Size	Bid	Name	Name	Ask	Size	
2200	24.89	ARCAX	ARCAX	24.90	200	
15880	24.88	ARCAX	ARCAX	24.91	100	
500	24.87	ARCAX	ARCAX	24.92	1100	
1000	24.85	ARCAX	ARCAX	24.93	100	
800	24.84	ARCAX	ARCAX	24.97	600	
1500	24.83	ARCAX	ARCAX	24.99	1200	
600	24.81	ARCAX	ARCAX	25.15	1500	
100	24.78	ARCAX	ARCAX	25.18	2000	
500	24.70	ARCAX	ARCAX	25.26	3000	
2000	24.60	ARCAX	ARCAX	25.45	2000	
1000	24.28	ARCAX	ARCAX	25.55	500	

There is no logical or practical reason to deny trade-through protection to these quotes. A trade-through rule predicated solely on top-of-book protection stifles competition, rewards markets that maintain as much manual order handling as possible, and leads to continuous trade-throughs.

B. Market Access and Related Fees

We applaud the Re-Proposal's approach on access (*i.e.*, linkage) from one market to another through member relationships. That was the Archipelago ECN's model in the past and is ArcaEx's model today; and has been essentially adopted by the entire OTC marketplace. This model promotes fairness and equity in linkage, fees, and other material terms, and prohibits discrimination against competitors.

While we support the Commission's decision in the Re-Proposal to increase the cap on "access fees" from \$0.002 to \$0.003 per share for "protected" quotes, we continue to question why any such cap is necessary. The Commission provides scant evidence why it must rate-regulate "access fees" and even less evidence on how it arrived (at one time) at a \$0.002 cap and (now) at a \$0.003 cap.

Generally speaking, the government sets rates where it believes there is a danger of monopoly pricing power, particularly with so-called "natural" monopolies. A natural monopoly occurs in an industry where barriers to entry are extraordinarily high and competition has



somehow failed.⁹ Government ratemaking is best left as a last resort. Indeed, Congress recognized this many years ago when it abolished fixed commission rates for broker-dealers in connection with the 1975 amendments to the Exchange Act. Among the concerns expressed by one Subcommittee of Congress for the abolition of fixed commission rates was “the length of time the SEC took in arriving at its decisions regarding rate structure and level.”¹⁰ At around the same time, another House Committee studying the issue “concluded that fixed rates of commission were not in the public interest and should be replaced by competitively determined rates for transactions of all sizes.”¹¹

As we previously noted, the problems caused by discriminatory access fees charged to non-members by certain trading centers are a thing of the past, and the SEC’s proposed “solution” goes further than necessary to address those problems. Furthermore, establishing a fee cap of any amount puts the SEC in the uncomfortable, and unnecessary, role of rate-maker. In essence, by setting maximum access fees for non-subscribers and subscribers alike, government views would be substituted for those of markets, something that should be avoided. Instead, we favor the setting of any such price “caps” through vigorous competition between markets.

C. Market Data Revenues and Allocation

The proposed market data formula is overly complex and inappropriately subsidizes illiquid securities by taxing liquid securities. First, the formula utilizes a square root function in order to allocate revenues. It is not clear why the SEC believes this is an appropriate methodology for assessing the value of market data to individual securities. Second, the proposed calculation favors primary markets and transfers revenues from dis-intermediated markets to intermediated markets. Third, the formula is complex and particularly game-able. Alternatively, ArcaEx proposes adopting a competing consolidator model which allows the market to decide the value of data. In the absence of such reform, dollar value traded should be used as a simple and fair means of allocating market data revenue. **Importantly, the dollar value alternative eliminates so-called “tape shredding” with the stroke of a pen.**

⁹ See George J. Stigler, “Monopoly.” The Concise Encyclopedia of Economics. Indianapolis: Liberty Fund, Inc., ed. David R. Henderson, 2002; *see also* Jerry Ellig and Sharon Brown-Hruska, Regulatory Studies Program, Mercatus Center, George Mason University, “The Securities and Exchange Commission’s Concept Release on Regulation of Market Information, Fees and Revenues,” March 30, 2000, page 12.

¹⁰ See Gordon v. New York Stock Exchange, et al., 422 U.S. 659, 678 (1975).

¹¹ *Id.*



Square Root Methodology. The SEC interprets that increased frequency of quotes and trades in a particular security reduces the information content of an incremental quote or trade¹². The economic value of information may be fundamentally different depending on the particular investors that are interested in the stock. For example, a \$50,000 trade in a stock with an average daily trading volume of \$500,000 is useful to the very small handful of investors who care about the stock. Conversely, a \$50,000 trade in a stock with an average daily trading volume of \$500 million is useful to many more investors. Consider the analogy that stock ticks are not like baseball cards. Rare baseball cards become more valuable as the aggregate interest in them increases. Rare stock ticks are not more valuable than other ticks just because they are rare. When a stock's tick and quote frequency increases, it is because more investors trade the stock and more investors are interested in its market data. The quote or tick is *more* valuable because more people are interested in it. Regulation NMS flips this logic on its head.

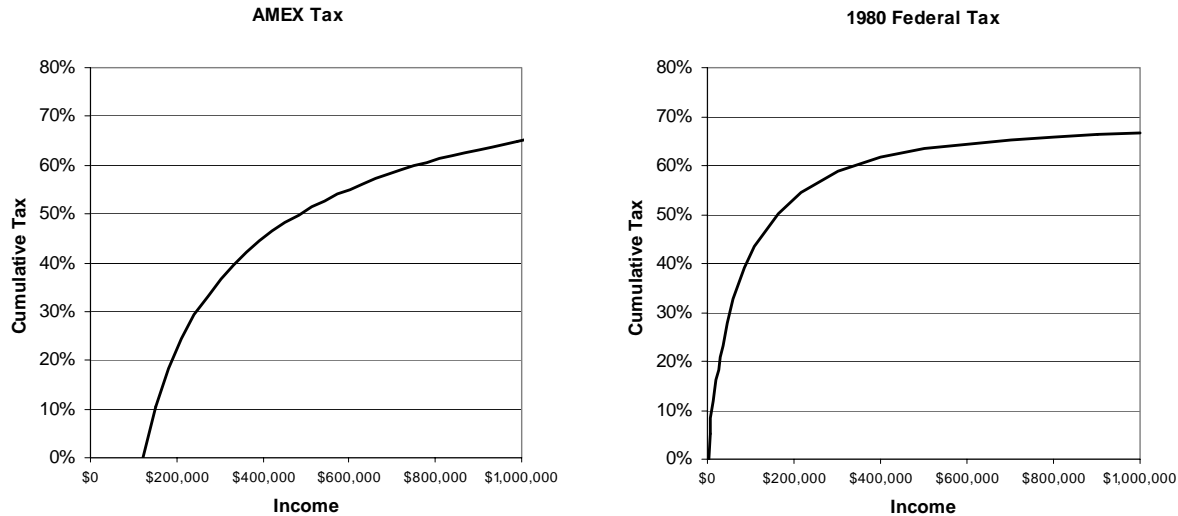
Further, the proposal offers no sound reason why the square root function was chosen. Aside from an obscure discussion of certain parametric statistics in a footnote in the original proposal,¹³ Regulation NMS never explains the rationale for the square root. ArcaEx respectfully submits that reallocating \$400 million amongst competitors demands a more sensible explanation than uncorroborated subjective representations.

On the other hand, there is an excellent reason to avoid a root function. Decreasing income from incremental trades will pervert behavior as surely as high tax rates pervert behavior. As income from active stocks artificially decreases, economic behavior will be distorted. By way of example, create a pool of about 1,000 stocks – roughly the number of AMEX-listed names traded in a week. Assume all of these stocks trade the same value, and then gradually increase the value-traded of one stock in the pool. Next, assume the net market data revenue pool is approximately \$96 million.¹⁴

¹² Regulation NMS proposes “The use of the square root function reflects the Commission's judgment that, on average and not necessarily in every particular case, a \$50,000 trade in a stock with an average daily trading volume of \$500,000 is marginally more useful to investors than a \$50,000 trade in a stock with an average daily trading volume of \$500 million.” See Re-Proposal at 77466.

¹³ Re-Proposal, see note 290, page 11180.

¹⁴ Tape B 2003 net revenue.



Current one-for-one market data revenue allocation plans are like a flat tax policy. The last trade counts the same as the first trade. A root function, however, creates a steeply progressive tax structure, and market centers will face diminishing returns. It is important to note that active stocks require massive infrastructure investments to support trade activity. That infrastructure might not be worth the additional cost if data revenue is taxed away. The end result: Regulation NMS could undercut the ability of market centers to handle active stocks.

Revenue Transfer. The Re-Proposal states that “Markets that provide price discovery in less active stocks serve an extremely important function for investors in those stocks”¹⁵ and accordingly the formula allocates a higher proportion of revenues to such markets. The primary listings exchanges – NYSE, AMEX, and Nasdaq – are paid hundreds of millions a year to list and quote thousands of illiquid stocks. In particular, as member-owned exchanges, issuers in effect pay AMEX and NYSE specialists to quote their stocks. But if the data revenue formula is changed to pay for quotes *and* to increase the data revenue allocated to illiquid stocks, the primary listings exchanges are unjustly and unreasonably paid twice for the same service. Moreover, the proposal implies listing fees are not enough for this service, the primary markets, should receive a significant premium for quoting illiquid stocks.

Regulation NMS proposes a massive wealth transfer from dis-intermediated markets to intermediated markets, without any proof of benefit. Ironically, those intermediaries –

¹⁵ Reproposal, page 77466.



specialists and market-makers – are the ones that have been recently sanctioned for not doing their jobs. This proposal seeks to subsidize the very structures that have been criticized and favors one market structure over another, in particular one that has had habitual problems at its core.

Easily Game-able. At best the allocation formula could encourage tighter spreads in illiquid stocks, but with no real investor interest or natural liquidity behind those quotes. Professionals will price the risk of gaming the formula and build that risk into their models. The proposal disagrees, saying “The potential cost of displaying such quotations, in the form of unprofitable trades, should not be underestimated.”¹⁶ It doesn’t estimate that cost, but does caution that “A market participant would need to think carefully about whether it is truly willing to trade at a price, particularly a price as attractive as the NBBO, before displaying accessible and automated quotations to earn market data revenues.”¹⁷ Of course, that’s exactly what some traders will do under the proposed formula.

Flat and Fair. ArcaEx advocates a competing consolidator model. Under this model, the market, not the plan cartels, will determine the value of the information provided and the appropriate cost for that data. However, in light of the SEC’s rejection of market-driven reform, market data revenue should be allocated on a flat, linear basis calculated on simple dollar value-traded. The benefits of such a model are that it is fair, provides no incentive for gaming, is transparent and easily implemented and audited. **The dollar value alternative eliminates so-called “tape shredding” with the stroke of a pen.**

Finally, we note that the Commission is currently in the process of reconsidering the appropriate structure and operation of SROs on a broad scale.¹⁸ As part of this effort, in its Concept Release on Self-Regulation, the Commission discusses various concerns relating to the appropriate amount and source of funding of the regulatory activities of an SRO, including whether market data fees should be earmarked for this activity. As part of this discussion, the SEC gives particular attention to the appropriate level of market data fees, including the question of whether a strict cost-based approach to setting market data fees should be adopted, and whether the Governance and Transparency Proposal, by requiring disclosure of money spent on

¹⁶ Re-proposal, page 77465.

¹⁷ *Ibid.*

¹⁸ See Exchange Act Release No. 50699 (Nov. 18, 2004), 69 FR 71126 (Dec. 8, 2004) (“SRO Governance and Transparency Proposal”); Exchange Act Release No. 50700 (Nov. 18, 2004), 69 FR 71256 (Dec. 8, 2004) (“Concept Release on Self-Regulation”).



regulation, would lead to more transparency with respect to appropriate level of market data fees. The SEC, in fact, solicits comment on a number of issues related to market data fees.

1. Governance

ArcaEx believes the unanimous voting structure of inter-market committees must be eliminated. Governance of inter-market committees is a critical aspect to maintaining progress and efficiency within the securities markets. Currently, such committees lack the ability to be progressive and innovative because of the burdensome unanimous voting structure. Two specific examples where the inability to reach unanimous consensus has been particularly problematic are the “Three Amigos” ITS reform proposal and the OTC-UTP Independent SIP.

We believe the current UTP Plan¹⁹ model for Advisory Committee involvement should be adopted. Regulation NMS proposes that Advisory Committee members have the right to attend all Operating Committee meetings. While ArcaEx views Advisory Committee representation as important for gaining additional perspective on Operating Committee matters, as the number of participants on these committees increase, the ability for forward-progress is impeded because of increased divergent positions as represented by differing constituencies. Moreover, there would be a substantial learning curve on certain issues that are under consideration by the Operating Committee in order to provide Advisory Committee members with the background necessary to comment on such issues.

There is currently a model in place within the UTP Plan that is workable and has allowed the UTP Operating Committee to seek guidance from a broader audience without hampering progress within the Operating Committee²⁰. Accordingly, we recommend that the Commission adopt the structure that is currently in place for the UTP Plan. Specifically, this model requires, at a minimum, bi-annual meetings with the Advisory Committee. At any time, Advisory Committee members have the right to present written comments or inquiries to the Operating Committee and may respond to written inquiries from the Operating Committee seeking comment from the Advisory Committee on matters related to the operation of the Plan. We also

¹⁹ Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation, and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privilege Basis

²⁰ As Co-Chair of the UTP Operating Committee, ArcaEx is uniquely positioned to provide insight on the efficacy of the Advisory Committee structure. The Operating Committee received very favorable feedback from the Advisory Committee members after its first meeting held in September 2004. The Operating Committee is working towards addressing a number of topics that were discussed at that meeting and will provide specific responses to the Advisory Committee at its next meeting to be held in April 2005.



believe the Advisory Committee should possess a level of voting authority. Such a model allows involvement from industry representatives in Committee matters without making the Operating Committee more inefficient and without burdening Advisory members with the minutia of administrative Operating Committee issues.

D. Sub-Penny Quoting

We generally agree with the Commission's Re-Proposal to prohibit sub-penny quoting. While we support market-based initiatives, 30,000 foot regulatory standards are essential (e.g., driving on the right-hand side of the road), as long as these standards are equally applicable to everyone. Today, SROs are held to minimum quoting increments, while other market centers are not, and this arbitrage should be eliminated (lest accidents occur with folks driving on the left-hand side of the road!).

It is worth mentioning that for stocks priced over one dollar and, in particular, a select group of ETFs (e.g., QQQQ), the Commission may want to employ objective criteria in determining when it is appropriate to trade in sub-pennies.

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We thank the Commission for giving us the opportunity to provide further comments on Regulation NMS, and appreciate the staff's hard work on these matters. If you have any questions concerning our views on proposed Regulation NMS, please contact me at (312) 442-7146. We look forward to continuing to work with the Commission on these important investor and market structure issues.

Very truly yours,

Kevin J. P. O'Hara
Chief Administrative Officer &
General Counsel



cc: William H. Donaldson, Chairman
Paul S. Atkins, Commissioner
Roel C. Campos, Commissioner
Cynthia A. Glassman, Commissioner
Harvey J. Goldschmid, Commissioner

Annette L. Nazareth, Director, Division of Market Regulation
Robert L. D. Colby, Deputy Director, Division of Market Regulation
Larry E. Bergmann, Sr. Associate Director, Office of Risk Management and Control
Elizabeth K. King, Associate Director, Office of Market Supervision
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Stephen L. Williams, Special Senior Counsel, Division of Market Regulation
Daniel Gray, Special Senior Counsel, Division of Market Regulation

ANNEX A

We believe the Office of Economic Analysis ("OEA") trade-through study has several flaws worth highlighting. First, the OEA's methodology to determine trade-throughs was inaccurate because the OEA ignored the practices marketplaces use to avoid trade-throughs. Second, the OEA did not follow sound statistical sampling techniques.

Flawed Methodology. As we understand the OEA analysis, OEA compared market center prints with the NBBO to determine how often trade-throughs occur. A market center has not created a trade-through if that market center has routed to the away market prior to printing a trade outside the then-displayed NBBO. If the OEA data did not account for the number of times the market routed to another market center prior to printing a trade outside the NBBO, the OEA data is seriously flawed. Common practice in today's listed trading environment is that when a market center would otherwise trade-through an away market, contemporaneous with the execution of that order, they will send a commitment to the away market in satisfaction of the away market's displayed quote in order to avoid trading through. What's more, depending on network, SIP, and marketplace latencies, a trade could print before the recipient processes the routed order, fills or rejects it, or updates its quote.²¹ All of these issues could overstate the trade-through data.

The study is also flawed because OEA included the entire size of the order that traded through when calculating the size of a trade-through, rather than the size of the displayed quote that was traded through. For example, if a 200,000 share block on ArcaEx traded through a 500 share quote on the NYSE, the OEA study reflects that ArcaEx traded through 199,500 shares on the NYSE. In truth, this scenario results in ArcaEx trading through 500 shares, not 199,500 shares. The OEA writes that while those 199,500 shares on the NYSE don't actually exist, they *would* exist if Regulation NMS was in place. The OEA offered a justification for this distortion saying "[t]his method is useful in assessing the potential benefits of increased limit order display and liquidity that the proposed rule intends to promote."²² Adjusting the analysis for current practice based upon the size of the quote that was traded through, the OEA analysis finds that more than 98% of volume in both markets is not traded through.

Sampling Bias. Each of the four trading days OEA chose for its study has characteristics that could easily skew the study results. Specifically, the sample dates: (i) directly precede options expiration days; (ii) are days in which unprecedented events occurred at the NYSE; and (iii) are days in which important weekly and monthly economic statistics were released.²³ Trade-

²¹ The OEA attempts to adjust for this with a moving three-second window analysis, but because endogenous orders and trades are much faster than routes and exogenous quote updates, it is not clear whether the three-second window is large enough to account for these latencies.

²² *Ibid.*, page 1.

²³ Following is a summary of the specific events on each of the sample days:

° September 18, 2003 was the day before triple-witching and a significant news day as Richard Grasso had resigned on September 17th. Further, the bad weather created by Hurracain Isabel forced parts of Washington, D.C. to close

throughs are likely much more common with extreme price volatility and this was no ordinary sample of days. OEA picked one of NYSE's most volatile and most active days for block trades.²⁴ In fact, no similar daily pattern ("third Tuesday," "second Monday," etc.) for September through December 2003 is both as volatile and active in NYSE-listed issues as the four days the OEA chose for its sample. In order to be a statistically valid sample, representative of 2003, the OEA should randomly sample as many as 170 trading days in that year. Four days is an extremely limited and, therefore, statistically biased sample.

In summary, the OEA's study has deficiencies which undermine the conclusion that the trade-through problem is significant. The sampling bias and questionable methodology of determining what constitutes a trade-through skew the results. If the Commission intends to rely upon this data in order to make a determination about a future trade-through rule, ArcaEx respectfully submits that an independent study with a more extensive and representative sample size should be conducted.

(including the SEC). In addition, several critical economic reports were released, including jobless claims data, August leading economic indicators, and the Federal Reserve's FOMC minutes.

° October 16, 2003 was the day before an options expiration. Significant news included the NYSE charging five specialist firms with improper trading and announcing it would seek huge fines against them. In addition, many monthly statistics were released on this date including the September CPI and real earnings, August business inventories, the Philadelphia Fed manufacturing index, industrial production figures, and jobless claims data.

° November 20, 2003 was the day before an options expiration. Significant news included SEC Chairman William Donaldson testifying before the Senate Committee on Banking, Housing, and Urban Affairs with his comments that there was a "pressing need" to review the NYSE and its governance because of "troubling questions." Leading economic indicators for October, the Philadelphia Fed manufacturing index, and jobless claims data were released.

° December 18, 2003 was a day before triple witching. In significant news, John Thain was named to head the NYSE and the leading economic indicators for November were released.

²⁴ The OEA's results are also extremely sensitive to block trade activity. In fact, the OEA's Tables 4 and 11 show almost no effect *except* when it included block trades in its analysis.

ANNEX B

MICROSOFT CORP							
MSFT							
25.93 ↓ -.05 500 Ot P 14:27							
Bid	25.93	Ask	25.93	Vol	42245677	Close	25.98
High	26.10	Low	25.82	Spread	.00		
Size	Bid	Name	Name	Ask	Size		
400	25.93	ARCAX	ARCAX	25.94	56300		
67092	25.92	ARCAX	ARCAX	25.95	50047		
72692	25.91	ARCAX	ARCAX	25.96	59105		
64900	25.90	ARCAX	ARCAX	25.97	48100		
56600	25.89	ARCAX	ARCAX	25.98	36400		
44255	25.88	ARCAX	ARCAX	25.99	27150		
29800	25.87	ARCAX	ARCAX	26.00	34870		
28600	25.86	ARCAX	ARCAX	26.01	11500		
20268	25.85	ARCAX	ARCAX	26.02	10600		
15300	25.84	ARCAX	ARCAX	26.03	13500		
14000	25.83	ARCAX	ARCAX	26.04	12600		
19300	25.82	ARCAX	ARCAX	26.05	8100		
13600	25.81	ARCAX	ARCAX	26.06	10600		
14500	25.80	ARCAX	ARCAX	26.07	7800		
100	25.79	ARCAX	ARCAX	26.08	500		
5100	25.78	ARCAX	ARCAX	26.09	15400		
2300	25.77	ARCAX	ARCAX	26.10	5800		
12100	25.76	ARCAX	ARCAX	26.11	5400		
66500	25.75	ARCAX	ARCAX	26.12	6500		

GENERAL MTRS CORP						
GM	36.35	-0.36	Vol:	9,357,400		
Bid:	36.34	Ask: 36.35	\$ Flow:	123,620,639		
Size	Bid	Name	Name	Ask	Size	
500	36.33	ARCAX	ARCAX	36.36	500	
300	36.32	ARCAX	ARCAX	36.37	1000	
1600	36.31	ARCAX	ARCAX	36.42	800	
1000	36.30	ARCAX	ARCAX	36.88	2000	
1000	36.22	ARCAX	ARCAX	37.11	100	
500	36.20	ARCAX	ARCAX	37.50	1000	
200	36.10	ARCAX	ARCAX	37.75	750	
1000	36.07	ARCAX	ARCAX	73.42	100	
1000	35.90	ARCAX				
2000	35.78	ARCAX				
1000	35.74	ARCAX				

E M C CORP MASS						
EMC	13.28	↓ -0.08	100 M N	14:20		
Bid	13.28	Ask	13.29	Vol	12283900	Close 13.36
High	13.43	Low	12.80	Spread	.01	
Size	Bid	Name	Name	Ask	Size	
300	13.28	ARCAX	ARCAX	13.29	400	
3900	13.27	ARCAX	ARCAX	13.30	7000	
600	13.26	ARCAX	ARCAX	13.50	1000	
2000	12.69	ARCAX	ARCAX	13.88	2000	
100	.01	ARCAX	ARCAX	15.00	200	
			ARCAX	16.00	100	
			ARCAX	21.70	2000	
			ARCAX	26.72	100	

CISCO SYS INC						
CSCO	18.31	↑ +0.16	1000 Ot Q	14:17		
Bid	18.31	Ask	18.31	Vol	56619883	Close 18.15
High	18.31	Low	17.91	Spread	.00	
Size	Bid	Name	Name	Ask	Size	
46200	18.30	ARCAX	ARCAX	18.31	2000	
40700	18.29	ARCAX	ARCAX	18.32	38988	
43454	18.28	ARCAX	ARCAX	18.33	47413	
44854	18.27	ARCAX	ARCAX	18.34	31700	
33824	18.26	ARCAX	ARCAX	18.35	29000	
26300	18.25	ARCAX	ARCAX	18.36	13298	
4300	18.24	ARCAX	ARCAX	18.37	11398	
4000	18.23	ARCAX	ARCAX	18.38	1500	
500	18.22	ARCAX	ARCAX	18.39	10800	

QUALCOMM INC						
QCOM		37.89	+ .11	Vol: 25,123,994		↑
Bid:	37.88	Ask:	37.89	\$ Flow: -5,282,101		
Size	Bid	Name	Name	Ask	Size	
100	37.88	ARCAX	ARCAX	37.89	2700	
1600	37.87	ARCAX	ARCAX	37.90	1200	
3400	37.86	ARCAX	ARCAX	37.91	4068	
3200	37.85	ARCAX	ARCAX	37.92	2900	
400	37.84	ARCAX	ARCAX	37.93	1400	
900	37.83	ARCAX	ARCAX	37.94	1800	
1245	37.81	ARCAX	ARCAX	37.95	300	
1300	37.80	ARCAX	ARCAX	37.96	500	
1000	37.79	ARCAX	ARCAX	37.97	200	
300	37.78	ARCAX	ARCAX	37.99	1000	
200	37.77	ARCAX	ARCAX	38.00	600	

GENERAL ELEC CO						
GE		35.41	+ .04	400 M T	14:52	
Bid	35.40	Ask	35.41	Vol	19702000	Close 35.37
High	35.83	Low	35.39	Spread	.01	
Size	Bid	Name	Name	Ask	Size	
300	35.40	ARCAX	ARCAX	35.42	600	
2000	35.39	ARCAX	ARCAX	35.43	900	
1100	35.38	ARCAX	ARCAX	35.44	900	
1200	35.36	ARCAX	ARCAX	35.45	800	
2000	35.05	ARCAX	ARCAX	35.92	1000	
2300	35.00	ARCAX	ARCAX	35.96	1000	
8500	34.95	ARCAX	ARCAX	36.00	2200	
2000	34.87	ARCAX	ARCAX	36.08	1000	
7900	34.53	ARCAX	ARCAX	36.15	200	

NEWMONT MINING CORP						
NEM		42.48	↑ +.72	1300 M N	15:11	
Bid	42.47	Ask	42.49	Vol	4192700	Close 41.76
High	42.83	Low	41.90	Spread	.02	
Size	Bid	Name	Name	Ask	Size	
400	42.47	ARCAX	ARCAX	42.51	400	
1300	42.45	ARCAX	ARCAX	42.52	1300	
600	42.43	ARCAX	ARCAX	42.53	1000	
200	42.42	ARCAX	ARCAX	42.58	100	
1000	42.35	ARCAX	ARCAX	42.78	1000	
600	42.14	ARCAX	ARCAX	42.83	1500	
200	42.06	ARCAX	ARCAX	43.00	5000	
2000	41.94	ARCAX	ARCAX	43.02	2000	
1000	41.77	ARCAX	ARCAX	43.17	22800	